

IOP submission to HM Treasury and HM Revenue & Customs' R&D tax reliefs review: Consultation on a single scheme

Crucial to the science superpower agenda and to the Chancellor's ambition to make the UK the world's next Silicon Valley, investment in physics is a catalyst for innovation and growth through the development of new technologies and applications.

Across every part of the UK, physics-based businesses are actively investing in R&D, driven by the desire to develop new products and services, grow their company, and meet evolving customer needs. According to research commissioned by the IOP in 2021, those businesses that rely most strongly on physics research were responsible for a third (or £8.9bn) of total private R&D expenditure in the UK in 2019.¹ Their innovative nature makes physics-based businesses a significant and highly productive contributor to the UK economy, generating £230 billion in gross value added – equivalent to 11% of UK GDP – and employing 2.7 million FTE employees.

Despite the disruption caused by the Covid-19 pandemic, physics-based businesses are renewing efforts to boost growth through innovation, with two thirds of physics innovators expecting to increase their R&D spending over the next five years² and recruitment at record levels.³ Given the right support, physics-based businesses can deliver a step change in R&D activity, and boost growth, employment and competitiveness across the UK. Changes to the R&D tax reliefs system can help achieve this step change.

Proposed consolidation

R&D tax reliefs are a vital element of public support for private-sector R&D and an essential complement to grant funding, providing much needed certainty to businesses making investment decisions. They are also a major contributor to the UK's attractiveness as a place to invest in R&D. According to research conducted by CBI Economics on behalf of the IOP, **a more attractive tax rate for R&D activity would enable the majority of physics innovators surveyed to undertake more R&D activity in the next five years.** We therefore welcome the increase in the Research and Development Expenditure Credit (RDEC) rate announced in the 2022 Autumn Statement.

Consulted IOP members support a move to consolidate the two current schemes into a streamlined and simplified system, which should be available to all those carrying out R&D and reflect the full scope of modern innovation activities. If the schemes are combined, it is important that the new scheme maintains the benefits each currently affords, and no organisation completing R&D becomes ineligible.

Impact on SMEs

The ONS has indicated that SMEs are investing more in R&D than previously reflected in the national statistics; methodological improvements introduced to better represent the small business population have led to an increase in total business R&D expenditure of around 60%.⁴ Given the crucial role they play in securing the UK's position as a science superpower and innovation nation, a

¹ Cebr (2021). Physics and the Economy: Measuring the value of physics-based industries in the UK <https://www.iop.org/strategy/productivity-programme/physics-and-economy>

² CBI Economics (2021). Paradigm Shift: Unlocking the power of physics innovation for a new industrial era <https://www.iop.org/strategy/productivity-programme/innovation-survey>

³ Emsi Burning Glass (2022). Physics in Demand: The labour market for physics skills in the UK and Ireland <https://www.iop.org/strategy/productivity-programme/workforce-skills-project>

⁴ Office for National Statistics (2022). Comparison of ONS business enterprise research and development statistics with HMRC research and development tax credit statistics <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/articles/comparisonofonsbusinessenterpriseresearchanddevelopmentstatisticswithhmrcresearchanddevelopmenttaxcreditstatistics/2022-09-29>

reduction in the overall level of support for smaller businesses must be avoided in what is already an economically challenging period (and with the upcoming increase in the main rate of Corporation Tax). The CBI has reported that SMEs are already looking to either cut back or offshore R&D investment because of the reduction in the SME R&D tax credit rate. **The Government should clarify, as a matter of priority, what additional support it intends to put in place for R&D-intensive SMEs** to mitigate the impact of the upcoming reduction in generosity of the SME scheme, as indicated in the 2022 Autumn Statement.

Many smaller businesses – which account for 99% of all physics-based businesses¹ – find the tax environment complex to navigate and are less likely to employ specialists in tax, law or accounting, leading them to appoint specialist agencies to complete R&D tax relief claims on their behalf. The use of agencies still requires businesses' time, while also effectively reducing the proportion of relief available to be reinvested in R&D. **Greater clarity regarding which types of expenditure are eligible for tax relief and simplification of the language used would be welcome** for businesses of all sizes in any consolidated scheme. We welcome HMRC's intention to make its guidance more accessible and user friendly; a timely revision, and additional supporting guidance regarding any consolidated scheme, is of critical importance if SMEs are to be expected to successfully transition to an RDEC-like scheme.

Broader vision and reforms

Given the significant level of public investment in R&D tax reliefs, it is essential that they are effectively targeted to deliver the greatest impact. **The Government should clearly articulate the vision of private sector R&D it intends R&D tax reliefs to support**, to enable effective targeting. As stressed in the IOP's R&D blueprint⁵, businesses need stability and confidence in the policy environment to make investment decisions now that will boost their level of innovation in the coming years; **the Government should confirm the nature and level of support it intends to provide through R&D tax reliefs beyond 2024 as a matter of priority.**

Many of those consulted during the development of the IOP's R&D blueprint expressed support for widening the scope of qualifying expenditure to include, for example, capital expenditure (such as equipment and patenting), as well as staff training and development costs. **We recommend the Government consider broader reforms as part of the next phase of its review – for example, those aimed at incentivising capital expenditure and investment in skills** – in line with the scale of its ambition for the UK to become a science superpower and innovation nation.

About the Institute of Physics

The Institute of Physics (IOP) is the professional body and learned society for physics in the UK and Ireland, inspiring people to develop their knowledge, understanding and enjoyment of physics. We work with a range of partners to support and develop the teaching of physics in schools; we encourage innovation, growth and productivity in business, including addressing significant skills shortages; and we provide evidence-based advice and support to governments in the UK and Ireland. Our 21,000 members come from across the physics community, whether in industry, academia, the classroom, technician roles or in training programmes as an apprentice or a student. However, our reach goes well beyond our membership to all who have an interest in physics and the contribution it makes to our culture, our society and the economy. We are a world-leading science publisher and we are proud to be a trusted and valued voice for the physics community.

⁵ IOP (2022). Physics: investing in our future <https://www.iop.org/policy/physics-research-and-development-blueprint/initial-report>