

BIA submission: Subsidy control

March 2021



Summary

The UK is leading the world into a new age of technological advances that address humankind's greatest challenges, from a vaccine to free us from COVID-19 to biological fuels that will deliver net-zero carbon. The UK life sciences industry also provides well paid and rewarding jobs, employing over a quarter of a million people, two-thirds outside London and the South East, and invests more in R&D than any other sector.

The UK is not alone in recognising life sciences as an industry of the future; both the United States and China, among many others, are committing considerable public investment to support their life sciences sectors. Subsidies to address market failures and incentivise investment in the form of tax reliefs, grants and finance products are a key part of the Government's policy toolkit to maintain the UK's international competitive edge in life sciences. The BIA therefore strongly welcomes this consultation, which is an opportunity to tailor a new regime to the business models and needs of R&D-intensive, innovative companies, whilst correctly identifying companies that should not receive subsidies.

Our response addresses the consultation's questions relevant to our role as the trade association for the UK's innovative life science sector. We support subsidies awarded in an open and transparent way. Subsidies awarded in this way are by design low-risk for distorting the market, especially when awarded for R&D purposes, and so enabling delivery with minimal bureaucracy should be a key objective of the new regime. The new freedom from EU rules also allows the UK to remove poorly designed rules and definitions, most notably the Undertaking in Difficulty definition, which is not appropriate for identifying ailing or insolvent enterprises in the R&D-intensive industries. We recommend the new regime uses the "going concern" test already used for some UK subsidies; it allows for a subjective assessment to be made by an expert, who is able to apply their understanding of the particular characteristics of different sectors to determine the viability of a company.

Introduction and overview of the UK life sciences sector

The UK's R&D-intensive life sciences sector is universally recognised as world-leading, and it delivers great benefits to the economy, the health of the nation, and it is key to the Government's net-zero agenda. From improving patients' lives through new treatments and digital healthcare, to the development of environmentally-sustainable technologies, such as biological fossil fuel substitutes and biodegradable bioplastics, our deep understanding of biology is helping to address humankind's greatest challenges.

It is as a result of having a vibrant UK life science ecosystem that the UK has been able to play a leading role in the global response to the pandemic, putting the UK in a strong position to benefit rapidly from vaccines, diagnostics and therapies. The Oxford/AstraZeneca vaccine encapsulates this: the science came from one of our many world-leading universities, the technology was further developed by Oxford spin-out Vaccitech, the regulatory and global distribution capability was provided by the UK-based multinational giant AZ, and Oxford Biomedica and Cobra Biologics provided their existing UK-based manufacturing capabilities to rapidly scale up domestic production. This has been achieved through a public-private partnership that demonstrates the uniqueness of the UK life sciences ecosystem.

This is a growing sector of the future that poses a unique opportunity. The UK life sciences industry employs 256,100 people, with two-thirds of these jobs outside London and the South East.¹ High-value medicines manufacture is spread across the UK, a fact illustrated by the sites of COVID-19 vaccine production² (figure 1). There are over 6,300 life sciences businesses in the UK, 82% of which are SMEs, and combined they generate a turnover of £80.7bn. The average GVA per employee is over twice the UK average at £104,000³ and the sector consistently invests more in R&D than any other (£4.8bn in 2019).⁴ The sector is also attracting record levels of investment and overseas investors.⁵

Figure 1: UK sites of COVID-19 vaccine manufacture



The UK is not alone in recognising life sciences as an industry of the future; both the United States and China, among many others, are committing considerable public investment to grow their life sciences sectors. Subsidies to address market failures and incentivise investment in the form of grants, tax reliefs and loans are a key part of the Government’s policy toolkit to maintain the UK’s international competitive edge in life sciences. In doing so great economic, environmental and societal benefits can be captured, including high-value job creation across the country, new industries of the future and the continuation of the UK’s standing as a research and innovation superpower.

The BIA therefore strongly welcomes this consultation and firmly supports the sentiments of the Secretary of State in his foreword. The Government’s investment in research and development alongside industry’s is crucial to maintaining the UK’s position as a global centre for science and innovation. We look forward to working with Government on the design of a subsidy control regime that is tailored to the business models and needs of R&D-intensive, innovative companies, whilst correctly identifying companies that should not

¹ UK Government (2019), *Bioscience and health technology sector statistics 2019*: <https://www.gov.uk/government/statistics/bioscience-and-health-technology-sector-statistics-2019>

² BEIS (2020), *UK Vaccine Taskforce 2020 Achievements and Future Strategy*: <https://www.gov.uk/government/publications/uk-government-vaccines-taskforce-vtf-2020-achievements-and-future-strategy>

³ PwC (2017), *The economic contribution of the UK life sciences sector*: <https://www.abpi.org.uk/media/1371/the-economic-contribution-of-the-uk-life-sciences-industry.pdf>

⁴ ONS (2020), *Business enterprise research and development, UK: 2019*: <https://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/researchanddevelopmentexpenditure/bulletins/businessenterprisesearchanddevelopment/2019>

⁵ Radnor Capital Partners, commissioned by BIA (2021), *UK quoted biotech performance and investor base in 2020*: <https://www.bioindustry.org/resource-listing/rcp-bia-2020-review-january-2021-final-pdf.html>

receive subsidies. Our response addresses the consultation's questions relevant to our role as the trade association for the UK's innovative life science sector.

Increasing access to finance for start-ups and scale-ups

Question 1: What type of subsidies are beneficial to the UK economy?

From a life sciences perspective, subsidies provide two functions beneficial to the UK economy.

The first is addressing R&D market failures, which, as the consultation recognises, result from:

1. the high risk nature of early-stage R&D; and
2. the inability of private companies to capture 100% of the benefits of their own investment in R&D.

Projects often fail, and this is more likely the further from market they are. Investors and businesses are therefore less likely to invest in projects that might fail and provide no financial return. That R&D project may however have wide ranging benefits for the UK's economy and/or society, and is therefore desirable to do from a public policy perspective. Linked to this are benefits that cannot be fully captured and monetized by the private investor/company. Whether successful or not, R&D projects create benefits known as spill-over effects, such as increased knowledge and skills among those that perform the R&D that can then be transferred throughout the economy, and unexpected discoveries with as yet unknown applications that go on to be developed by others. As companies cannot capture all of these benefits, there can be differing degrees of disincentive for them to invest. Subsidies can help address these imbalances and incentivise private investment. It is important to note that the imbalance can exist regardless of the size of the company, but is arguably more likely to be present in SMEs than larger companies due to the relative power of larger companies to capture benefits. Market failures unrelated to R&D also exist for other reasons, such as the weaker spending power of SMEs or high-entry costs for monopolised markets.

The second beneficial function is in attracting R&D and capital investment to the UK (or maintaining investment already within the UK). Countries across the world provide subsidies for this purpose, and the UK has historically been relatively uncompetitive compared to countries such as France, Belgium and Ireland (this is especially true for capital investments such as in manufacturing facilities). Whilst the EU-UK Trade and Cooperation Agreement states that R&D subsidies should not "primarily be designed to attract investment from trading partners", it does not prohibit it, in recognition that it is an important function of subsidies. It is therefore important that the UK's new subsidy control regime permits subsidies for this purpose.

Subsidies commonly accessed by or beneficial to the life sciences sector include:

- **Tax reliefs:** The small and large business R&D Tax Credit schemes are often cited by BIA members as the most valuable form of innovation support. Tax credits provide a minimal-bureaucracy system that rewards and amplifies, and therefore incentivizes, companies' own investment in R&D. They are proven to be effective in raising R&D investment in recipient firms.⁶

Other valuable subsidies in the form of tax relief are: the Enterprise Management Incentive (EMI), which enables SMEs with lower spending power to compete with larger firms for talented staff (at

⁶ Irem Gucer and Li Liu, Effectiveness of Fiscal Incentives for R&D: Quasi-experimental Evidence, American Economic Journal: Economic Policy 2019, 11(1): 266–291 <https://pubs.aeaweb.org/doi/pdf/10.1257/pol.20170403>

all seniority levels⁷) by providing special terms for employee-owned shares; and the Enterprise Investment Scheme (EIS) and Venture Capital Trusts (VCTs), which provide tax relief to investors in eligible businesses to offset the additional risk of early-stage and R&D-intensive businesses.

- **Grants:** These subsidise R&D by covering some or all of an R&D project's cost, depending on the company size and judged chances of success of the project. R&D grants in the UK are administered by a range of public bodies, with Innovate UK the major provider. They are awarded in open competitions through a process of expert peer review, which not only judges the scientific quality of proposals but also the commercial value and societal benefits. This process is highly competitive, with applicants to recent competitions of the Biomedical Catalyst having a success rate of below 5%.⁸ As such, R&D grants provided by the UK Government and devolved administrations are highly targeted and represent excellent value for the tax payer.

Unlike tax reliefs, grants can be targeted to certain sectors that the Government deems a priority, or to specific technological goals to address challenges important to the UK's economy or society. Developing rapid manufacturing techniques for vaccines is a recent example.

- **Sub-commercial equity stakes and loans terms:** The Government is an important player in the UK's under-developed venture capital markets. The British Business Bank plays a crucial role in nurturing first-time fund managers or those in regions where equity capital is less prevalent by investing when the commercial merits of doing so are well recognised. This helps ensure that the UK has a healthy pipeline of specialist investors to support our innovative businesses, and those outside London and the South East can access capital.

Alternatively, taking equity stakes in venture capital firms, or potentially directly in companies, alongside private investors, the Government can leverage private investment by adjusting the risk profile for private investors by shouldering more of the downside (loss) or forfeiting some of the upside (profit). This is done in Australia at present but we are not aware of it in the UK.

The Government can also provide loans on terms that would not be found in the commercial market, including repayment holidays and debt cancellation in the event of R&D projects failing, for instance. Like grants, these can subsidise activity that is not 100% commercially viable, but the impact of debt on companies' balance sheet and the need for repayment can make loans less powerful in addressing market failures. They can be useful in some circumstances, however, especially where the activity being stimulated is closer to market than traditional grant-funded R&D projects.

The above mix of subsidies has been instrumental in building the UK's world-leading life sciences sector. Investment in UK biotech SMEs has increased over 1000% since 2012⁹, when the Strategy for UK Life Sciences was published¹⁰. The UK Government should ensure it can maintain this important set of policy levels through its new subsidy control regime.

⁷ Confluence Tax (2020), *Biotech Employee Equity Survey 2020* <https://www.confluencetax.com/the-employee-equity-survey-webinar-was-run-for-biotech-companies/>

⁸ UKRI (2020) Freedom of Information request: FOI2020/00278: <https://www.bioindustry.org/uploads/assets/3514223d-1fe4-463c-9ee752d83762cec4/FOIResponseLetterFOI202000278-002.pdf>

¹⁰ BEIS (2011) *Strategy for UK life sciences*: <https://www.gov.uk/government/publications/uk-life-sciences-strategy>

Question 13: Should the threshold for the exemption for small amounts of financial assistance to a single recipient replicate the threshold in the UK-EU Trade and Cooperation Agreement at 325,000 Special Drawing Rights over a three-year period? If not, what lower threshold would you suggest and why?

We believe this to be an appropriate threshold that balances the need to reduce bureaucracy for public bodies and businesses where the subsidy is not likely to have material distortion in any of the areas the subsidy control regime aims to protect.

Question 14: If you consider the small amounts of financial assistance threshold should replicate the UK-EU Trade and Cooperation Agreement, should it be fixed at an amount of pound sterling (GBP)?

Yes, this would provide greater clarity and certainty to public bodies and businesses.

Question 15: Do you agree that subsidies under the proposed small amounts of financial assistance threshold be exempt from all obligations under the domestic regime, except for the WTO prohibitions? If not, why?

Yes, this would to reduce bureaucracy for public bodies and businesses where the subsidy is not likely to have material distortion in any of the areas the subsidy control regime aims to protect.

Question 21: Would more detailed definitions of any of the terms set out in this section, including the definition of “ailing or insolvent enterprises” be useful to ensure a consistent and proportionate approach to compliance? If so, what should these be?

The EU’s *Undertaking in Difficulty* definition was poorly designed, resulting in R&D-intensive companies in the UK and many other European countries being unable to access national innovation grant funding schemes and other subsidies. This is because it was based on a simplistic calculation that equated R&D or other essential investment with financial loss. The business model for most innovative early-stage and high-growth businesses, regardless of sector, is to raise venture capital and invest that capital in R&D. In biotech, where the time to develop a medicinal product can be between 10 and 20 years, successive rounds of financing are required, and in between each one, the company invests its capital. During this time, companies generally have little or no revenue, meaning balance sheet losses are rapidly accumulated.

The BIA is aware of very established UK biotech businesses that have been unable to receive R&D grants due to the UiD test. This is despite them being quoted on a stock market, with proof of revenue and being capable of raising fresh capital from private investors, indicating that expert investors consider the company a going concern. Many other smaller and earlier-stage companies have also had problems due to the definition. These companies have either not been able to receive such funding or had to raise further private equity funds or restructure finances to avoid being deemed an undertaking in difficulty. It is also well known that the Government’s own Coronavirus Business Interruption Loan Scheme was unable to support many businesses it was designed to support due to the need to adhere to the EU’s UiD definition. It is therefore highly welcome that the consultation confirms the UK does not need to follow EU rules in this area and acknowledges the problems associated with UiD.

It is clearly desirable for the Government to be able to determine the viability of a business, and for that test to be able to distinguish between a company that is accumulating losses because it is inefficient and has

lost all its customers to a competitor, or because it is investing in R&D or business growth, which is economically desirable to the UK as a whole.

The UK already has an established system for confirming that a company is viable and suitable for a subsidy – the “going concern” statement required from auditors in order to sign off on a company’s financial statements. This concept has been used successfully for many years as an acceptable EU state aid surrogate test for SME R&D tax credit claims¹¹. It provides a subjective assessment to be made by an expert, who is able to apply their understanding of the particular characteristics of different sectors. This has been in operation for over ten years without evidence of problems. It is also easy for public bodies to confirm and does not subject companies to additional work in proving that they meet the test. The BIA therefore recommends that the new subsidy regime adopts this approach.

Question 27: Could additional measures help ensure that lower risk subsidies are able to proceed with maximum legal certainty and minimum bureaucracy? What should be included within the definition of ‘low-risk’ subsidies?

Guidance on subsidies that are presumed to be in compliance with the UK’s regime would provide clarity and legal certainty for businesses and public bodies. These should include common types of subsidy listed in our answer to question 1, with the specification that they should not be concentrated in a small number of businesses, provide equal opportunity for applicable businesses to apply and be awarded in an open and transparent way. Subsidies awarded in this way are by design low-risk for distorting the market, especially when awarded for R&D purposes.

For example, R&D grant competition should be advertised through appropriate channels and applications be subject to peer review. These should be able to be targeted to address certain policy objectives (such as developing cancer diagnostics), so long as all companies with a realistic capacity to participate would have the opportunity to do so. The same should be true for tax reliefs and sub-commercial finance, although different assessment procedures (other than peer review) would be appropriate.

Any guidance or list produced for this purpose should not be considered exhaustive however, as this would be too restrictive on public bodies’ ability to innovate and respond to changing circumstances.

Question 35: Do you agree that the obligation should be to upload information within six months of the commitment to award a subsidy?

Yes. It is appropriate to provide this level of transparency in the use of public funds. We also agree that this should be subject to any proportionate restrictions which pursue a legitimate objective, such as commercial sensitivity, confidentiality or legal privilege.

Innovate UK currently publishes information on all grants awarded, including the project details, value and recipient¹². This supports policy development as well as providing investors and industry with valuable information (open to all) about the areas of research and development being supported in the UK.

¹¹ Section 1046, Corporation Tax Act 2009

¹² <https://www.gov.uk/government/publications/innovate-uk-funded-projects>

For broader and less specific subsidies such as tax reliefs, aggregated data that does not identify recipients or uses is more appropriate. This is currently done for R&D tax credits by the Office for National Statistics¹³. This is again valuable for policy makers. However, the sector breakdowns using the Standard Industrial Classification (SIC) system used in these statistics are outdated and lack any granularity to be of use.

¹³ <https://www.gov.uk/government/statistics/corporate-tax-research-and-development-tax-credit>

About the BIA

The BIA is the trade association for innovative life sciences in the UK. Our goal is to secure the UK's position as a global hub and as the best location for innovative research and commercialisation, enabling our world-leading research base to deliver healthcare solutions that can truly make a difference to people's lives.

Our members include:

- Start-ups, biotechnology and innovative life science companies
- Pharmaceutical and technological companies
- Universities, research centres, tech transfer offices, incubators and accelerators
- A wide range of life science service providers: investors, lawyers, IP consultants, IR agencies

We promote an ecosystem that enables innovative life science companies to start and grow successfully and sustainably.

For any further information on the contents of this submission please contact Dr Martin Turner, Head of Policy and Public Affairs, by emailing mturner@bioindustry.org