HM Treasury

HM Revenue & Customs

The scope of qualifying expenditures for R&D Tax Credits:

2020 consultation – summary of responses

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Introduction

1.1 Research and Development (R&D) tax reliefs ("tax credits") incentivise business investment in R&D. The tax credits support innovative businesses as they invest, driving productivity and growth across the UK. Given the scientific and economic importance of R&D to the United Kingdom, since 2017, the government has been committed to an ambitious target for economy-wide R&D investment to constitute 2.4% of Gross Domestic Product by 2027.

1.2 Spring Budget 2020 announced that the government would consult on what costs companies can include in R&D tax credit claims, and whether these should be updated to include the costs of accessing datasets ("data") and payments for cloud computing services ("cloud") to ensure the credits remain well-targeted and reflect modern R&D processes. The consultation also considered costs that it might be appropriate to exclude from relief.

1.3 On 21 July 2020, the government launched the formal consultation on the scope of qualifying expenditures with the publication of a consultation document, "The scope of qualifying expenditures for R&D Tax Credits". The consultation closed on 13 October 2020.

1.4 The government received 50 responses. Those responding included individuals, industry groups, businesses across several sectors, individual accountants and agents and accountancy professional bodies.

1.5 Officials also met virtually with several stakeholders, including trade bodies, businesses and accountants. Their views have been considered and expressed in this document. A summary of responses is set out in Chapter 2, and next steps outlined in Chapter 3.

Chapter 2

Consultation responses

2.1 Respondents welcomed the government exploring modernisation of the reliefs. Overall, there appears to be significant stakeholder appetite for bringing data and cloud computing costs into the scope of the reliefs.

2.2 There were mixed responses on the potential exclusion or restriction of Qualifying Indirect Activities ("QIAs"). Some respondents suggested that restricting QIAs could be reasonable in order to refocus the relief on activities that genuinely advance R&D; while others were concerned that this would unfairly and undesirably disadvantage 'traditional' R&D sectors like manufacturing.

2.3 The government is grateful to all those who took the time to respond to the consultation and who gave their valuable input.

Question 1

A) Are there uses of data that contribute to R&D but which do not currently attract relief through the RDEC and SME schemes? Please provide examples to support your response.

2.4 There was a broad consensus amongst respondents that data costs, particularly the cost of data acquisition, should be brought within the scope of qualifying expenditure for R&D tax credits.

2.5 Reasons given for this centred around the growing importance of the use of data in R&D, which has led to a fundamental shift in the way in which R&D is carried out, at least in some sectors. Respondents highlight functional genomics and machine learning amongst 'modern' R&D areas where this shift is particularly noticeable.

2.6 The cost of data acquisition varies greatly. For example, publicly available datasets can be free to access. However, datasets for midrange projects can be costly, and datasets from specialist providers such as genomics information from medical samples and seismic data for earth subsurface modelling can be very expensive.

2.7 Some respondents suggested that data acquisition costs can be prohibitively expensive for SMEs. However, one respondent noted that there are sometimes different options for start-ups where cash might not be available at

outset. For example, data may be provided in exchange for equity or later royalties.

2.8 Some respondents emphasised that, for data-heavy R&D activities like genome sequencing and machine learning, both the quantity and quality of data acquired are important for good R&D outcomes. They argue that if data costs were qualifying expenditures, researchers could more affordably acquire more or better-quality data, which could lead to better and faster R&D outcomes.

2.9 Many respondents also made it clear that any costs attributable to the necessary cleansing and manipulation of data for its R&D use should qualify. However, there was a mix of views regarding whether such costs would qualify under the current rules.

B) To what extent are data sets employed in the R&D process consumed? To what extent do they retain value? Please provide examples to support your response.

2.10 There was no consensus on whether data is 'consumed' in the R&D process. Some argued that data is consumed. Many said that data is not consumed in the traditional sense, where a good or service is destroyed through its use, but that despite this, it should qualify.

2.11 Many respondents said that the value of the data lies within the R&D process, and can be seen to be 'extracted' or 'transformed' over the course of the R&D. Whilst the initial dataset purchased can hold commercial value, after it has been processed and analysed, it holds little to no residual value, because the company has already transformed it into the useful output it needed It was also noted that most companies licence data rather than purchasing it, so they are not left with anything of value once they have used it - it is neither theirs to use again nor to sell on.

2.12 Some respondents noted that data tends to become obsolete quite quickly. This is either because its value has been fully extracted, or because any residual value it has declines over time as more up-to-date data becomes available.

2.13 One respondent suggested that even if data is not consumed in the same way as physical materials, it "does the same work" as physical materials in the R&D process. In this sense, data is equivalent to physical materials and products that are required to undertake research.

2.14 There was some discussion around leasing of data. Much data (especially genetic or medical data) is subject to strict protocols and regulation, so the data is leased for a specific task. If access is not granted, companies may request that the data holder perform certain analysis. Either way, the value lies with the analysis, not with the data itself. Data could also be seen to be consumed in the sense that it is leased for only a single project or use.

Question 2

A) Do you already claim for software costs under the current definition? If so, what was your experience of separating out the R&D specific costs for the purposes of the claim?

2.15 Respondents made the distinction between 'traditional' or 'licenced' software, where the user purchases a licence for the software and runs that software locally on their computer; and Software as a Service (SaaS), where users access third-party software, provided through a cloud service provider's hosted infrastructure.

2.16 Many respondents or their clients claim for 'traditional' software costs under the current definition. However, respondents also said that usage has significantly declined due to the general shift away from 'traditional' software stored on on-premises physical servers and towards software leased and accessed via the cloud.

2.17 There were mixed perceptions regarding whether businesses are permitted to claim for SaaS under the category of software under the current rules. Some had been advised by HMRC that such expenditure would not qualify or had interpreted the definition of software as not covering SaaS. Many respondents requested further clarity in the guidance and definitions.

2.18 Others have claimed SaaS expenditure, but said it was often difficult to apportion where SaaS is bundled with other cloud services such as hosting and storage, which clearly do not qualify for relief.

2.19 Some respondents commented on the general ease of apportioning software costs. Many reported that apportioning costs is simple, as there are well-established apportioning methods that can be employed effectively to find an appropriate apportionment even where there is ambiguity or complexity. Others responded that it is difficult or arbitrary, particularly where software is used across businesses for non-R&D activities as well as for R&D. Several respondents noted that they only apportion costs where the software is used predominantly for R&D. However, some advisors noted that they had seen numerous cases where businesses are claiming for general business software with questionable links to R&D.

2.20 One respondent commented that many of their clients do not have enough information or resources for making judgements on reasonable apportionment, where invoices do not readily separate the various components of overall cost. Clients often exclude costs as it would be too time consuming or difficult to quantify qualifying vs non-qualifying with any certainty.

2.21 Many respondents also discussed the anticipated ease of apportioning cloud computing costs. Some predicted it would be easier for larger companies who are likely to have more complete information, as service providers are already used to splitting up invoices by department for accounting and tax purposes. Others expected it would be relatively easy as the usual apportionment methods could be employed.

B) Are there any software costs that currently qualify for R&D tax credits, that could be limited or excluded from relief without materially affecting R&D projects? Please provide examples to support your response.

2.22 Some respondents said that restricting software claims would materially affect R&D. They were of the view that software costs which currently qualify for R&D relief are usually essential to the R&D.

2.23 Others said that software costs which currently qualify for R&D tax credits typically make up an immaterial amount in most R&D claims because permitted software categories are out-of-date. As such, the current expenditure should be limited or excluded from relief, it seems unlikely to have a material effect on R&D projects undertaken by current claimants.

2.24 Some respondents commented that claimants were incorrectly including expenditure on 'standard' office software with no or little link to R&D, and suggested further information is provided on the types of costs which are excluded.

C) Are there any software costs, partially or wholly for R&D purposes, that do not currently qualify for R&D tax credits, that should be if the regime is to better reflect the nature of modern R&D? Please provide examples to support your response on whether these costs could be separated out straightforwardly.

2.25 Respondents noted that cloud services can be broadly split into:

- Infrastructure as a service (IaaS) – user accesses instant computing infrastructure, hosted on the cloud, managed over the Internet (e.g. AWS, Google Cloud Platform, Microsoft Azure)
- Platform as a service (PaaS) - user manages a software application running on the platform.
- Software as a service (SaaS) - users access third-party software, provided through a cloud service provider's hosted infrastructure.

2.26 Respondents report that cloud services are an essential modern form of computational R&D. As such, cloud computing costs should qualify by the same rationale as software costs.

2.27 Many responses centred around the idea that there has been a general shift away from software stored on on-premises servers owned or leased by the company, and towards software leased and accessed via the cloud. This is paid for as an ongoing expense, usually as part of a managed service, rather than a one-off purchase.

2.28 Respondents noted that accessing services via the cloud is often more efficient than owning traditional software on servers owned or leased by the company. Where a company's needs vary greatly depending on product and stage, cloud computing allows companies to flex storage and computing capacity according to need. This is more efficient than investing in large (underutilised) physical servers. Respondents argue that the relief should incentivise efficiency in R&D, so cloud services should be in scope.

2.29 Some respondents noted that cloud services are essential for storing and analysing large amounts of data needed for modern R&D methods, which should strengthen the case for bringing cloud services into scope if the government wants to attract cutting edge research. One respondent commented on the differing tax treatment of the old and new digital models. Physical servers and in-house digital infrastructure might attract relief via capital allowances (the Annual Investment Allowance or Research & Development Allowance), and software counts as qualifying expenditure for R&D. Whereas cloud computing services, which arguably do the same work for the R&D only more efficiently, do not attract any relief.

Question 3

A) What experience do you have of claiming R&D tax credits in other jurisdictions, where expenditures pertain to data or cloud computing?

2.30 Some respondents had experiences of claiming data and cloud costs in other jurisdictions. These included the US, Canada, Belgium, Ireland and Australia.

2.31 Some respondents noted that though data and cloud costs are in scope of other regimes, these regimes are often restricted in some way. For example, they are capped, provided as a percentage of fixed costs, or as a loan system linked to expenditure. Some respondents highlighted that (amongst non-cost-related factors) it is the overall cost implication that matters for decision making on location, not specific features of the system.

B) What evidence can you provide that a scope expansion in these areas would drive you to make additional investments in research and development.

2.32 Some note that it is difficult to provide evidence before a policy change is defined.

2.33 One respondent asked clients in a survey "how do you plan to utilise your benefit". Most of these responses said that R&D tax relief benefits are either spent on further R&D or on working capital. This would suggest that any increase in scope will stimulate business investment further. Another respondent who

engaged with start-ups reported that savings brought by a scope expansion would likely be spent on accelerating commercialisation as well as more R&D.

2.34 Several other respondents made similar arguments, that savings from R&D tax credits under the current scope are generally reinvested, so expect savings from the increase in scope to be reinvested too.

2.35 Specific to cloud computing, one respondent noted that additional R&D investment could occur where companies require significant server power at a substantial cost, which was previously prohibitive to start-ups.

2.36 One respondent noted that the ability to claim data and cloud computing costs would make R&D projects that involve very large datasets (e.g., machine learning projects) more appealing. Where data and cloud costs are significant to a project, the impact of a tax credit could be significant in determining whether a project is viable.

2.37 Similarly, one respondent said that data storage can be a limiting factor, meaning that projects are restricted due to high hosting costs. If hosting costs qualified, the respondent expects companies to invest more in development-related hosting, increasing R&D investment in the short term. This extra funding would allow companies to expand their commercial hosting activities, thereby improving their revenue, some of which would be channelled into further R&D. As evidence, the respondent often sees companies directing money from recently completed private equity fundraisers straight into additional development and commercial hosting capacity.

2.38 Some responses noted that R&D tax credits are part of wider fiscal and other incentives to attract investment, and multinational organisations will take this into account when deciding whether to invest in UK compared to other territories.

2.39 Conversely, multiple respondents suggested that expansion is unlikely to drive additional spend because costs incurred on cloud computing would be incurred anyway.

2.40 Some suggest that even if additional investment is unlikely, the change is still important because: (1) Without the change, the regime could become outdated. (2) The pace of the R&D process could accelerate as a result of the change, due to the faster adoption of more efficient technology. (3) The most important reason to change the legislation to include data and cloud costs is to level the playing field between technology and more traditional manufacturing type claims.

Question 4

Would changes to the R&D tax relief rules in the areas outlined above lead to any change in the commercial relationships between companies, insofar as expenditure is outsourced to a third-party provider?

2.41 There was some confusion about the meaning of the question. The government aimed to understand the extent to which, for example, including data and cloud costs could simply mean providers raising their prices, or the extent to which it might adversely impact the position of more traditional sectors of the R&D community.

2.42 Regarding cloud computing, many responded that the outlined changes to the R&D tax relief rules were unlikely to lead to any changes in the commercial relationships between companies, insofar as expenditure is outsourced to a third-party provider. This is because there is already a limited number of providers who provide services at some level to most companies engaged in R&D. The commercial trend towards the use of their cloud services may by slightly accelerated, but not fundamentally changed as uptake is already significant.

Question 5

A) Are there expenditures on indirect activities which should be limited or excluded from eligibility for relief? Please provide examples to support your response.

2.43 This section relates to qualifying indirect activities (QIAs), costs which do not contribute to genuine innovation but are currently eligible for relief.

2.44 Many respondents warned against cutting any indirect activities and routine work, arguing that QIAs are essential enablers of R&D and hence legitimate R&D expenditure that should attract relief. Several referenced the 2.4% of GDP spend on R&D target, saying that restricting the scope of relief would not help the government to achieve this.

2.45 Several respondents raised the concern that some R&D intensive industries might be disproportionally affected by the restriction of QIAs, particularly those who rely on facilities, maintenance and support staff. Some were concerned that if data and cloud computing costs were introduced at the expense of QIAs, that the government would effectively be supporting modern, tech-heavy R&D at the expense of traditional R&D intensive industries.

2.46 However, many respondents note that with the exception of certain 'traditional' industries such as manufacturing, the inclusion of QIAs provides relatively minor additional value to claims. Accordingly, whether they are within the scope of relief or not is unlikely to significantly affect investment decisions.

2.47 One respondent noted that by nature, QIAs are not directly linked to the advancements and uncertainties of the R&D projects and as a result it is difficult to determine when indirect activity is 'too indirect'.

2.48 Some respondents suggested that certain types of QIAs which are too far removed from the R&D should be restricted. Internal recruitment, finance and administration were highlighted as areas that do not directly contribute to the innovation and arguably should be excluded from the regime. Another said that the inclusion of heat, light and water consumable costs should be excluded. Some respondents also commented on boundary pushing and abuse, for

example claiming for services used business-wide such as telephone and general business software.

2.49 Some respondents suggested that other perceived issues with R&D tax credits, such as abuse and boundary pushing by non-specialist advisers, should be tackled before any such restrictions are made. Several respondents also urged a wholesale reform of R&D tax credits.

2.50 A couple of respondents said it could make sense to restrict QIAs if it meant that cloud computing and data costs could be brought into scope, as this would better focus the relief on activities closest to the R&D.

B) Are there other expenditures on routine work which should be limited or excluded from eligibility for relief? Please provide examples to support your response.

2.51 Responses were generally very similar to those on indirect activities.

2.52 Several respondents commented that R&D inevitably involves activities which could be considered "routine" when looked at in isolation and outside of the broader context of a project's technological advance and uncertainties, but which are vital to realising the innovation which the R&D tax incentives are intended to support. Although work may be viewed as 'routine' in that it is repeatable across various R&D projects within a company, it is often critical to the R&D project itself. It can also be difficult to identify what part of an R&D project is defined as 'routine'.

Chapter 3

Next steps

3.1 The government notes that many respondents report that there has been a shift in the way in which R&D has been carried out, and that data and cloud computing are key components of modern R&D.

3.2 Following consideration of the consultation responses summarised in this document, the government agrees there is a strong case to consider bringing data and cloud costs into the scope of the reliefs.

3.3 However, any expansion of the scope of qualifying expenditures increases the cost to the Exchequer and could add complexity to the R&D schemes. The more categories of costs there are, the more rules are needed to define them, which can make the schemes more complicated and may create additional scope for abuse.

3.4 Whilst the government recognises the case to include data and cloud computing as eligible costs for relief, enhancements must be delivered in a cost-efficient manner that maximises the additionality of relief by driving decisions to make new investments.

3.5 Respondents also made clear that there is a strong case for a wider review to ensure that the reliefs remain fit-for-purpose in a rapidly changing R&D environment, that the UK remains a competitive location for cutting edge research, and that the effectiveness of the reliefs is maximised.

3.6 The government agrees it is essential to ensure that the reliefs remain up-to-date, competitive and well-targeted. It is therefore now consulting more widely on the R&D tax reliefs and will address the case for widening qualifying expenditures as part of that review.

3.7 The government will now consider bringing data and cloud computing costs into the scope of relief alongside a number of other policy options and priorities. This will allow the government to ensure that any policy changes provide support to businesses across the economy in a fair way and that taxpayer money is effectively targeted towards activities that drive the best outcomes for the UK economy.

Annex A

List of respondents

Arm Limited

Association of Accounting Technicians (AAT)

Association of the British Pharmaceutical Industry (ABPI)

AstraZeneca

Ayming UK

BCVA (British Private Equity and Venture Capital Association)

BDO

Beauhurst

BIA (UK BioIndustry Association)

Bright R&D

British Telecommuincations PLC

British Universities Finance Directors Group

CaSE (Sampaign for Science and Engineering)

Catax

CBI (Confederation of British Industry)

Chartered Accountants Ireland

Coadec (Coalition for a Digital Economy)

Cooper Parry

Creative Industries Policy & Evidence Centre

Crowe UK LLP

Deloitte

Edwards Chartered Accountants

ela8

EmpowerRD

EY

F Initiatives Group

Federation of Small Businesses

Forrest Brown

FTI Consulting

Grant Thornton

GrantTree

GSK

Institute of Physics

Insurtech

IoD

James Cowper Kreston

Kingsley Brookes

Leyton UK

MMP

Moore Kingston Smith

National Centre for Universities and Business (NCUB)

PWC

RSM UK Tax and Accounting Ltd

Russell Group

Smith & Williamson

Tech UK

The Royal Society

UKIE

Wilson Wright LLP

Xero

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