Saving R&D Tax Credits

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STARTUP
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About Startup Coalition

Startup Coalition, formerly the Coalition for a Digital Economy (Coadec), is an independent advocacy group that serves as the policy voice for Britain's technology-led startups and scale ups.

Startup Coalition was founded in 2010 by Mike Butcher, Editor-at-Large of technology news publisher TechCrunch, and Jeff Lynn, Chairman and Co-Founder of online investment platform Seedrs. Startup Coalition works across a broad range of policy areas that matter the most to startups and scale ups: Access to Talent, Access to Finance & Regulation.

Executive Summary

R&D Tax Credits aren't working for startups

UK startups are sailing into a perfect storm – reduced levels of private sector capital, the proposed reduction in R&D tax credits relief and widely held frustrations with HMRC's administration of the current R&D tax credit scheme - together represent a slow-motion extinction level event for the ecosystem. Startup Coalition has spent the year talking to over 250 founders and investors. We have heard that:

- Under current plans, the average sum a startup will see their R&D tax credit receipt reduced by £100,000, amounting to a 30-40% cut compared to what they were previously entitled to.
- The enhanced credit, introduced this year, will impact only a limited number of tech startups as the 40% spend threshold is set too high.
- HMRC is failing to administer the scheme effectively - hard-stretched founders face uncertainty, inconsistency and, in some concerning cases, incompetence.

The potential impact of the current plans is stark: startups will leave the UK; jobs will be lost; new products won't be created; there will be less R&D by small innovative businesses in the UK.

A blueprint for a truly simplified R&D tax credit that powers real R&D

Startup Coalition proposes a plan to truly simplify the tax credits scheme, reward real R&D, reduce error and fraud, and help HMRC successfully administer the scheme for startups – all while accommodating the fiscal restraints facing the Exchequer. In this report we also propose steps to reduce the cowboy behaviours of some R&D tax credit agencies.

Our seven point plan is as follows:

A merged scheme that supports real R&D

1. Introduce a £30,000 de minimis qualifying claim size threshold for the R&D tax credits scheme, reducing HMRC caseload by 25% and removing nearly half of the wholly non-compliant claims.
2. Introduce a fully merged scheme for non-intensive companies to simplify the credit.
3. Change the enhanced allowance to an RDEC credit of 33% for SMEs, reducing the R&D intensity threshold as low as possible to capture innovative startups from all sectors.

A fit for purpose HMRC

4. Reform the Standard Industrial Classification used to target firms in HMRC Nudge Letters to fit the modern economy.
5. Create units in HMRC that are structured around sector specific verticals.
6. Modernise the examples used in the guidelines and increase general clarity, consistent with global standards and UK case law.

Curtail Cowboy R&D Agencies

7. Introduce a voluntary standards body to create a set of commitments and guidelines that R&D agents agree to follow.

Introduction

To tackle the biggest challenges facing our country, we must grow the economy. Enabling more research and development (R&D) is critical to achieving economic growth. Startup Coalition exists to advocate for policies that enable the UK's most innovative firms to thrive, and few policy interventions of the last decade have been as successful in enabling more R&D as the R&D tax credit. But this successful intervention is now in jeopardy.

In simplest terms, the R&D tax credit enables firms to get money off their tax bill, or a cash payment, for spending on qualifying research and development. The credit, first introduced under Tony Blair at the turn of the millennium, was created to stimulate innovation across the economy through incentivising businesses with under 250 employees. A separate scheme was introduced in 2002 for larger firms. These two schemes have operated in parallel since: an "SME scheme" for small businesses and one for large firms called the R&D expenditure credit (RDEC).

The credit enables startups to get to market faster, helps de-risk innovation and is often a crucial source of cash flow when startups are just getting started. The scheme is hugely popular and is one of the foundational pillars for understanding how the UK has managed to rapidly build such a thriving startup ecosystem. In the tax year 2020 to 2021, 89,300 R&D tax credit claims were submitted to HMRC, an increase of 7% from the previous year.[1] In a survey of over 250 startup founders conducted by the Startup Coalition in the Winter of 2022/23, 87% of respondents agreed that it would not have been possible to build their firm to where it is today without R&D tax credits.[2]

But over the last twelve months things have changed.

Firstly, the macro-economic environment has led investment in startups to decrease as inflation drives up the cost of capital across the globe. Atomico, a major VC fund, has predicted that funding in startups across the whole of Europe will drop to $51bn in 2023, down from $83bn in 2022, and $106bn in 2021.[3] Startups are some of the most economically vulnerable firms in the economy, and are now competing for a decreasing pool of investor funds.

Against this backdrop, the R&D tax credits scheme has been a core incentive driving startups to invest in cutting edge innovation. But in 2022, the Government announced it would cut R&D tax credits available on the SME R&D scheme with limited warning or consultation. At the time, the Government said the cuts were due to concerns over fraudulent claims. Now, the Government is planning on merging the RDEC and SME schemes. If changes proceed as planned, it means a further cut in the effective rate for loss-making tech startups from 18.6p in the £ to 15p - another 20% cut.

Allegations of misuse of the system have been widely reported in the press, including investigations alleging that firms like restaurants were claiming R&D tax credits to, amongst other questionable claims,

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1 https://www.gov.uk/government/statistics/corporate-tax-research-and-development-tax-credit/research-and-development-tax-credits-statistics-september-2022#:~:text=5.-,Research%20and%20Development%20expenditure,claiming%20under%20the%20RDEC%20scheme

2 https://coadec.com/wp-content/uploads/2023/01/R-and-D-Survey-Results-January-2023-Final.pdf

3 State of European Tech - Atomico 2023

develop new menu items such as 'blueberry flavoured croissants'.[4] There have also been concerns raised about a number of tax agencies facilitating spurious applications, driven by the lure of a cut of the claim.

Fraud in the schemes exists and should be addressed - but the way it has been traditionally estimated by HMRC is sub-optimal. HMRC data on fraud includes cases of mistake and "error", as well as cases where firms did not follow due process. This risks throwing the baby out with the bathwater: a deeptech AI startup missing an email from HMRC is a world away from having the taxpayer subsidise pastries.

It is within this context that the Government announced that it would combat fraud within the R&D tax credit scheme by reducing the amounts that can be claimed and merging both the SME and RDEC schemes.

While the cut to the overall generosity of the scheme will cost startups an average of £100,000, we also hear regular and wide-ranging frustrations with the way the scheme is currently administered. The problems abound. HMRC is slow to process applications, makes poor decisions, and has started 'clawing back' funds years after they have been allocated. One founder accused HMRC of "going rogue". This is a public service no longer fit for purpose. At one roundtable that we ran, we heard that applications were consistently taking over 18 months to process, whilst one founder told us they had already relocated their entire R&D work workforce out of the UK as the changes to scheme administration made their UK-based activity economically unviable.

Instead of being a conduit for a government policy designed to promote growth, HMRC is now actively hampering the ability of startups to operate in the UK.

At the Startup Coalition, we believe that this perfect storm of economic headwinds, policy change, and maladministration from HMRC have converged to present a huge threat to the UK's startup ecosystem.

This storm risks being an extinction event. We've heard from deeptech and fintech firms that they are moving employees out of the UK now, and will relocate their entire business operations if necessary in order to survive. Many more do not have that option and will fail.

This report outlines a blueprint to mitigate the damage on the horizon. We believe that there is a way of reforming the R&D tax credits scheme that will reduce truly fraudulent claims and the cost to the exchequer, but safeguards the UK's most innovative firms who we rely upon to be the lifeblood of economic growth.

It is not too late to fix the R&D tax credits scheme for UK startups.

[4] https://www.thetimes.co.uk/article/more-action-needed-to-prevent-r-d-tax-credit-scams-mz7dxz0hk

The Perfect Storm

The story so far…

The R&D tax credits scheme has become a catalyst for UK startups, to accelerate their product development and route to market. It has successfully supported the birth and growth of hundreds of UK startups, cementing its position as the second largest global tech hub, but has increased in cost as a result.

Since 2014-15, the cost of the scheme has just over doubled from £3bn to £6.5bn, reflecting an increasing level of innovation across the economy at large. The proportion of credits dedicated to the SME scheme has increased from 43% to 64% during the same period, as startups have become the key drivers of iterative growth and experimentation.

Despite this growing cost, until last year the Government was seeking to increase the scheme's reach as a means to becoming a "science and tech superpower", introducing cloud computing and data costs as eligible expenditure in early 2022. This demonstrated a commitment to the credit as a core enabler of innovation.

In the Autumn of last year, however, this changed. Driven by increasing concerns about fraud and error, dozens of founders told us HMRC became more "aggressive" in its scrutiny of claims.[5] Then, in the 2022 Autumn Statement, the Government announced a policy paper on reform of the R&D tax relief setting out reductions to the rates of relief. This was followed in July 2023 by confirmation of plans to merge the two relief schemes into one.

The impact of the current plans is simple: startups will vacate the UK or go bust; jobs will be lost; new products won't be created; fraud will still remain a problem. There will be less R&D by small businesses in the UK.

Critically, merging the two schemes to simplify tax rules is right but comes with cuts to rates that would see startups lose out. This leaves startups unable to forecast cash flows, leaving CFOs up in the air on jobs and growth. With this looming cliff edge, startups and investors are awaiting stability on the outcome of the scheme, or may be hastening plans to reshore jobs.

[5] https://www.ft.com/content/6fcb9ada-b9b8-40d4-8e66-9344e0effe1f#comments-anchor

The Impact to Startups: Lost Jobs, Lost Growth

To understand how the proposed changes to the scheme would impact startups, we spoke to founders in the Winter of 2022/23. Responding to our survey, 74% of founders we spoke to strongly agreed with the statement: “I expect the cuts to severely impact my startup,” while 66% strongly agreed that they were concerned they will have to raise investment earlier and potentially at worse terms.

We calculated that the average sum a startup will lose out upon is £100,000, which amounts to a 30-40% cut compared to what they were previously entitled to.

For an early stage, loss-making startup, this is huge.

Following concerns expressed by the Startup Coalition and others, the Government announced a new “R&D intensive relief” in the 2023 Spring Budget, offering a higher payable credit rate of 14.5%, but this will only apply to firms where qualifying R&D expenditure is at least 40% of total spend.

Very few startups spend 40% of their total spend on R&D.

Our research looked at a sample of successful applications for the 23/24 year from a selection of R&D tax credit agencies working specifically with tech startups and found that only 7% of those applications were for above 40% intensity.[6] Much of this is about the style of business and their growth journeys. Outside biotech, very few businesses would be viable, both commercially and to investors, at 40% R&D intensity. Since the return on investment on R&D is often long-term, an early-stage company could not sustain a 40% R&D intensity without significant capital raising. In short, the enhanced credit as currently structured is not helpful to the vast majority of startups who will instead only qualify for the reduced merged scheme rate.

If the current policy state continues - there’s a real risk that

In our survey, 73% of respondents at least somewhat agreed that the changes meant they were concerned that they would be unable to pay their staff/business costs, whilst 93% at least somewhat agreed that they were concerned that the cuts would impact the growth trajectory of their business.

97% of the respondents to our survey at least somewhat agreed that if the cuts go ahead, they believe the UK will be made significantly less attractive to startups and investors.

[6] Startup Coalition analysis based on a sample of successful anonymised R&D tax credit applications from multiple agencies

Taking the Tax: HMRC

Despite all of the above, there is an even greater threat to UK startups in the short term: the inability of HMRC to effectively administer the scheme.

HMRC is an essential public service that needs to be operating efficiently to ensure startups have a predictable business environment to scale and attract investment. Venture capital investors expect HMRC to be able to identify genuine R&D, while running an open and accessible service that allows founders to forecast costs and plan R&D projects.

HMRC is currently failing on all counts.

Over the last twelve months, we have seen HMRC's approach to administering the R&D tax credits scheme change. Driving this change of tack is the additional press and political scrutiny of the scheme over the last twelve months, which was itself the product of updating their error and fraud methodology to include a random enquiry programme which revised up their estimates of scheme abuse. In their 2023 Annual Accounts, published in July 2023, the rate of error and fraud of the total value of cases on the scheme was estimated 16.7%, at a value of £1.13bn, up from 4.9% under the previous methodology.[7] Even worse, the level of error and fraud on the SME scheme was estimated at 24.4%, or just over £1bn, up from 7.3% under the old methodology.

We have no reason to challenge these figures. However, we believe that by grouping error and fraud together, this presents a misleading picture. According to HMRC's own report:

> "To be classified as fraud, a caseworker needs to have found evidence that the claimant deliberately set out to misrepresent their circumstances to get money to which they were not entitled. *This indicates that the majority of non-compliance is down to other behaviours.* As with other regimes, the term 'error and fraud' encapsulates this full range of behaviours, from mistakes and failure to take reasonable care through to deliberate non-compliance."[8]

In a written statement to the Chair of the Finance Bill Sub-Committee in November 2022, the then Financial Secretary to the Treasury Victoria Atkins said that 1,685 letters had been issued to claimants after triggering an HMRC fraud alert between June and September 2022, of which 80% received no response within the specified 30-day response window.[9] A further 15% warranted further investigation after applicant response. Speaking to many R&D tax credit agencies, and indeed in written evidence provided by the firms themselves, we noted that they believed that a significant number of these claims were genuine, arguing that a claim was marked an 'error' if the letter wasn't responded to at their

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[7] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1125182/HMRC_Annual_Report_and_Accounts_2021_to_2022_Print.pdf

[8] Our emphasis. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1179615/HMRC_annual_report_and_accounts_2022_to_2023.pdf

[9] https://committees.parliament.uk/publications/31759/documents/178686/default/ - Letter from Victoria Atkins MP to Lord Leigh of Hurley, Chair of the Economic Affairs Finance Bill Sub-Committee

business address.[10] Given that many people don't check their post frequently, nor work at one business premise, this doesn't seem the most reliable indicator of fraud.

It is ludicrous to combine instances of error *and* fraud.

"Error" includes any number of issues in the application process: from an incorrectly filled out form, to a missed communication from HMRC. With applications dragging out for months, there is plenty of opportunity for firms to make minor mistakes. High volumes of error cannot be pinned on applicants alone: it points to a poorly designed and operated scheme too.

We have heard time and time again that HMRC is failing to effectively administer this scheme.

Founders and investors have told us that HMRC lacks the human capital and data strategy to deal with the volume and substance of R&D cases in an era of rapid technological advancement. It is absurd a founder should have to spend hours on the phone trying to convince a newly-hired humanities graduate that the activities they claimed for should count as R&D. There is an inherent technical mismatch between bureaucrat and engineer that cannot be overcome by a Google search on whether a machine learning technique has been done before.

Worse still, R&D agencies familiar with the process have told us that claims relating to software have been referred to HMRC's internal Chief Digital and Information (CDIO) team, who makes a decision on whether an activity is R&D. There is simply no way that HMRC's legacy IT staff who work on internal government software should, or could, have the capacity to decide if a Data Science PhD has performed R&D. Even if they had the technical acumen to make such a decision, there is no way of contacting them to ask about or challenge their reasoning.

Many others whose claims were accepted in the past told us they have had their claims rejected altogether since the change of approach.

The system is a dysfunctional black box.

If this continues, there will be significant capital flight and reallocation of jobs to other countries with schemes that work. Below we include two tales from the R&D coalface capturing the dire, and sometimes farcical, state of affairs. Worse still, if HMRC pursues legal action to clawback previous claims, this could bankrupt these companies, despite the fact that they have significant revenues and are net contributors of tax receipts.

We hear startups loud and clear, but are not content to complain from the sidelines. Below is our blueprint to stem the tide, before it's too late.

[10] Written evidence from EmpowerRD (DFG0018), Ayming UK (DFG0019), the R&D Community Ltd (DFG0 026), Crowe U.K. LLP (DFG0028), Wobbegong Technology Ltd (DFG0029), Terry Toms and Partners Limited (DFG0032), ABGi-UK Limited (DFG0033) and Plan it Tax (DFG0044) - Research and development tax relief and expenditure credit (parliament.uk)

Our Alternative Scheme

A De Minimis Threshold

HMRC does not currently have the capacity to face the volume of small claims it currently experiences, particularly given the higher rates of error and fraud within them. However, HMRC's data shows a significant drop off in the error and fraud rate as an estimated percentage of the value of claims at £30,000, as shown in the table below, demonstrating that a glut of the erroneous submissions are high frequency, low volume.[11]

Table 1, Analysis of claims received in 2020 to 2021 by size of expenditure on the SME research and development tax relief

Claim by size of expenditure in £000's	# of claims received 2020-21	Value of claims (£m)	% compliant claims	% wholly non-compliant claims	% partially non-compliant claims	Est. value of non-compliance (£m)	Estimated % non-compliance by value of claims
0-<10	8,300	30	47%	27%	27%	20	78%
10-<20	7,100	30	38%	21%	40%	20	63%
20-<30	6,400	40	37%	29%	34%	30	65%
30-<40	3,700	40	45%	9%	45%	10	34%
40-<50	3,700	40	64%	9%	27%	10	38%
50-<75	7,800	100	35%	20%	46%	60	55%
75-<100	8,500	160	42%	12%	46%	70	44%
100-<250	19,700	680	59%	9%	32%	220	33%
250-<500	9,200	690	52%	13%	35%	210	30%
500-<1,000	6,400	930	53%	3%	45%	230	25%
1000+	3,900	1,870	74%	9%	17%	240	13%
Total	**84,800**	**4,600**	**50%**	**14%**	**36%**	**1,120**	**24%**

At £30,000, we see a sharp drop off in the percentage of wholly non-compliant claims and the percentage of non-compliance by the value of the claims.

Indeed, an application valued at under £30,000 in claim size is more than twice as likely to be wholly non-compliant than an application valued at over £30,000 in claim size.

We suspect the reason for this is that in many cases, little R&D happens below £30,000: startups told us this level of qualifying expenditure barely covers payroll and prototype testing costs. Although there are a

[11] HMRC's approach to Research and Development tax reliefs - GOV.UK (www.gov.uk)

minority of legitimate micro claims, this is not enough to bring value to the taxpayer, as it diverts resources away from the rest of the scheme.

When the R&D tax credits were introduced in 2000, there was a minimum R&D threshold of £25,000, designed to, "keep administrative and Exchequer costs down, to encourage businesses to increase R&D expenditure and to target businesses carrying out significant R&D."[12] This was subsequently reduced to £10,000 to encourage SMEs to do smaller amounts of R&D, and in 2012 it was cut completely. Yet by 2019-20, claims below £25,000 consisted of 50% of the total number of claims.[13] This is an unsustainable volume.

We believe that a de minimis threshold should be re-introduced at a claim size of £30,000 per claim, reducing HMRC's caseload by over 25%, and removing nearly half of the wholly non-compliant claims.

To illustrate the impact this would have on HMRC agent capacity, assuming all 245 HMRC staff working on R&D tax credits work 40 hour weeks, in 20/21 each worker had to deal with 1.7 cases per hour. If the £30,000 threshold was introduced, eliminating over 20,000 cases, the average case per hour reduces to less than 1.3. With this reduction of over a quarter of the caseload, HMRC would have greater capacity to target fraud where the value is higher, while maintaining effective functioning for legitimate cases.

A Truly Merged Scheme

The Government's plans for the merged scheme are the right step forward to advance tax simplification, making modelling and forecasting easier for both firms and HMRC. We also believe that the Government is right to shift to a single scheme based around the scheme for larger firms, the RDEC. The RDEC has a simple taxable credit mechanism, compared to a complex SME mechanism where there is a deduction rate and payable credit.

The current plans for the merged scheme from 2024, however, will create two schemes: one RDEC scheme for all profitable and loss making companies receiving an above-the-line, taxable credit and a retained SME enhanced credit scheme for companies with an R&D intensity 40% and above. This defeats the purpose of the scheme, as it is likely that a company may reach the threshold one year, and not make it the next. Oscillating between the two schemes would be an operational nightmare for any company trying to forecast. Since the way the credit is calculated is so different, a disparate set of rules would have to be retained and operationalised by firms and HMRC.

Instead, we propose a single merged scheme that has an RDEC-style credit - but we are deeply concerned that the presented plans will represent further cuts for startups. This must be addressed to bring certainty to startups.

Aside from the calculation mechanism, we think the Government has made more positive suggestions in other elements of the design of the future scheme:

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12 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128970/20230113_R_D_Consultation.pdf

13 Research and Development Tax Credits Statistics: September 2021 - GOV.UK (www.gov.uk)

Subcontracting

We welcome the Government's intention to adopt SME rules for subcontractors, since RDEC only permits subcontracted R&D in limited circumstances.

PAYE Cap

We also support the adoption of the SME PAYE cap of £20,000 + 3x PAYE and NIC liabilities for all applicants under the merged scheme.

Making the Enhanced Credit Work

Capturing the most R&D intensive firms with a higher rate is an effective way of supporting those performing significant amounts of R&D. Firms committing a higher amount of expenditure to R&D are likely to be working on cutting-edge solutions to problems with wide reaching social consequences, from carbon capture to software solutions to helping parents receive childcare. At the Spring 2023 Budget, the Chancellor introduced the enhanced R&D credit to offer additional support for the most R&D intensive small businesses.

Under the current plans, however, there are two things wrong with the "enhanced credit". The first issue is captured above - retaining the SME mechanism would be an operational nightmare for HMRC and startups. The second issue is that the 40% threshold is far too high, and only benefits a handful of life sciences firms.

The life sciences sector operates at an unusually high level of R&D intensity due to the costs of developing healthcare-focused IP by running clinical trials and using lab space. In other sectors, businesses deploying technological advances would be likely to have a significant proportion of costs focused on the product, but not enough to reach 40% of total spend on R&D. In life sciences, a company will not pursue commercialisation until it has secured significant IP protection, having to raise large amounts in the process, meaning it could, in theory, operate with 40% R&D intensity.

Furthermore, to incentivise R&D in other sectors beyond life sciences, the enhanced threshold should be lowered to capture as many startups as possible.

As outlined earlier in the report, our research on a sample of successful applications for the 23/24 year from a selection of R&D tax credit agencies found that only 7% of those applications were above 40% intensity. In contrast, the data found that 36% were between 20%-40% intensity, while 14% were between 30%-40%, capturing a much broader diversity of firms and sectors. Lowering the enhanced credit threshold to capture more innovation would mean many more innovative startups benefit from an enhanced level of relief, though still at a level lower than the scheme before the changes made in the Autumn of 2022 to mitigate the cost to the Exchequer.

A Public Service that Works

How to fix HMRC

The policy proposal outlined above will support the improvement of the service through freeing up caseworker time, and creating certainty for firms of all sizes. But change is required by the service itself to ensure the effective functioning of the R&D tax credit system.

Reforming the Standard Industrial Classification to fit the modern economy

As part of efforts to combat error and fraud, HMRC performs randomly selected enquiries, as well as targeted compliance checks. It also uses one-to-many letters that take two forms: nudge letters sent to targeted sectors where HMRC has identified common errors, and Fraud Investigation Service letters triggered by an alert on their systems inviting further evidence to be submitted else the claim will be terminated.

The nudge letter approach has practical weaknesses grounded in outdated classifications of sectors.

Today, sectoral analysis that underpins the nudge letter approach is based upon 'The Standard Industrial Classification', which does not accurately categorise the sectors in the modern economy. Given the breadth of each classification, it is difficult to discern between sectors with higher rates of innovation and those where few advances in science and technology are possible. For example, the "education" taxonomy had a remarkable 87% error and fraud rate in 2020/2021. Yet it is equally possible that an Edtech startup such as Multiverse or Quench AI would be caught up in a sample for a nudge letter. Furthermore, "information and communication" encompasses both book publishers and software development. The classification with the greatest volume and amount of claims is "professional, technical and scientific," which includes activities as diverse as accounting, advertising and biotechnology all under one umbrella.

This is plainly ridiculous and reflects classification distinctions that have failed to keep up with the pace of change in the modern economy. HMRC should use a more granular sectoral analysis for their risk triage, so they can track sectors with higher rates of error and fraud.

Re-introduce Sector Specific Expert Teams

HMRC's R&D tax credit unit needs an overhaul, with an emphasis on quality over quantity. Considering the technical complexity of many submissions, employing generalist case workers just doesn't work. HMRC should arrange the R&D units into sector specific verticals, to enable caseworkers intimately familiar with the workings of a specific technology to administer relevant claims.

Indeed, once upon a time in 2006, HMRC had specialist R&D units across different verticals, but as the scheme has grown these were disbanded, with the organisation going in the opposite, generalist direction. Indeed, the technical deficit in HMRC has turned the scheme's administration into a box-ticking exercise reviewed en masse by call centres.

While we do not expect HMRC to hire engineers and scientists, it should be possible for staff to have at least a working level of knowledge of the domains and respective levels of progress within them.

As part of the updated guidance published in October 2023, HMRC explicitly requested that small businesses applying to the SME scheme name a "competent professional" attached to their claim for them to liaise with. It is only fair that small businesses expect their claim to be serviced by a similarly competent professional at HMRC.

Modernise the Scheme Guidelines

The R&D tax credits regime must be accessible to small businesses of all kinds, and enable them to quickly and efficiently identify which activities qualify as R&D and which do not. In October 2023, positive changes were made to the HMRC scheme guidelines, which helped better align the UK definition of R&D with best practice.[14]

The OECD Frascati Manual provides an internationally recognised definition of R&D. It is deliberately abstract so that it encompasses a wide range of activities into one economic framework. R&D must be aimed at new findings based on original concepts or hypotheses, with some uncertainty regarding the outcome, or the resources to get there. It must be novel, creative, systematic, uncertain, transferable and reproducible. The term R&D encompasses basic research (theoretical), applied research (investigative) and experimental development (product or process).

In contrast, before the October 2023 update, the UK guidelines blurred the boundaries between proprietary product development and R&D across a field. This scheme should target the latter. Specifically, confusion arose from the phrase that R&D involves "making an appreciable improvement to an existing process, material, device, product and service." Crucially, making an improvement in your own product or service may not, and indeed often does not, represent a novel technological or scientific advance in the field as a whole. After the changes, however, HMRC have explicitly stated that applicants:

> *"must be able to show that [their]... project sought to advance a qualifying field of science or technology. This must be an advance in the knowledge of the entire field, not just an advance in the knowledge or abilities of [their]... company."*[15]

While this is a positive step forward, the scheme guidelines have failed to modernise in line with the proliferation of software based R&D. This simply does not reflect the reality of technical innovation today. At the extreme end, we have heard evidence from startups that they are having submissions rejected by HMRC because all software based activities are ineligible. This is plainly at odds with the modern world.

The last substantive update to the specific guidelines on software was in 2018, and the examples listed in the October 2023 updated guidelines are far and away disproportionately hardware based. We feel further work is needed to ensure that a large number of startups are not left in the lurch, potentially also

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14 https://www.gov.uk/government/publications/help-to-see-if-your-work-qualifies-as-research-and-development-for-tax-purposes-gfc3

15 https://www.gov.uk/government/publications/help-to-see-if-your-work-qualifies-as-research-and-development-for-tax-purposes-gfc3/how-to-identify-qualifying-rd-activities-part-4

including outreach and education activities, particularly if the approach of HMRC has materially changed, as stories from those applying suggest it has.

In sum, the HMRC guideline update in October 2023 was a positive step in aligning the overarching definition of R&D with international best practice, but guidance for software R&D in particular remains convoluted and lacking.

Tales from the R&D Coalface

An Anonymous UK Deeptech AI Company

One UK startup is building a deeptech AI platform for optimising complex and variable processes across an industrial value chain, as well as directly improving the global value chain itself. They help high throughput industrial processing operations critical to national interests to increase production, and minimise waste, energy and water use with their AI platform. The company employs 42 PhDs in the UK and holds four patents, five pending, and three new submissions are expected in 2023.

When this company presented their case, HMRC argued that the company had made no advances in AI or science, attempting to shoehorn the company's activities into "data gathering" and application of AI into a specific non-relevant sector. HMRC said this optimisation had been achieved in aircraft logistics - needless to say we would be interested to know what expertise His Majesty's Revenue and Customs have in the logistics of aircraft that allow them to make such a judgement.

This view misses the specific advances in scientific AI that the startup was delivering, including a combination of, for example, Bayesian deep learning techniques combined with the underlying scientific principles of industrial processes (such as surface tension, adsorption and dispersion) fundamentally altering the underlying physics and chemistry formulas involved.

The company felt that HMRC were trying to catch them out and box them into categories that fit HMRC's knowledge of technology, isolating their activities to the field of AI alone, despite various other sciences being advanced.

The company has so far spent 138 days from the date of submission engaging with HMRC, with the situation yet to be resolved with no clarity. The length of time taken, and the uncertainty created, are adding undue stress to the business; including a lack of cash injection which would have been used to hire more staff and grow the business.

"We are already incredibly busy just trying to organically grow our revenues as a young technology company. None of this is conducive to scaling the business."

Trade Ledger

Trade Ledger is a Fintech that provides software to large financial institutions to streamline the banks' processes for different types of lending to businesses. Trade Ledger has claimed R&D tax credits since 2019 for its innovation in automating the process of deploying and managing complex working capital solutions that help with business cash flow. The credits have been an important source of income that

has enabled them to grow and employ R&D staff in the UK. They recently secured a further £6m in funding, including investment from Barclays.

Last year, their HMRC R&D tax credit application was subject to an enquiry that is still open. The case officer has stated in a letter to them that “software development is not R&D”. This is categorically untrue. If Trade Ledger's software engineering is not R&D, that implies Fintech as a sector doesn’t conduct R&D.

The company's experience is that their case officer had limited understanding of the software development process in general and doesn't seem to have requisite expert support. After submitting an application, plus several rounds of responses to queries, the case officer suggested they start their application process again.

The company has experienced further delays and confusing communications with the case still open 18 months later. The guidelines are open to interpretation which is part of the problem, but in the opinion of Trade Ledger's CEO, no general business operator could easily decipher how HMRC is likely to apply them in an enquiry. "We're confused and would like clear guidance as to what qualifies and what doesn't", he stated.

Trade Ledger was originally invited to domicile in the UK from Australia by the Department for International Trade, with the generous, and reliable, R&D tax credits being considered “the jewel in the crown.” Since the change in approach by HMRC, they have already decided to offshore future software development and they are currently considering moving more of their resources overseas.

“The uncertainty is killing early stage fintechs in the UK,” they told us.

Curtailing Cowboy R&D Tax Credit Agencies

We have heard evidence from startups that another issue perpetuating instances of error and fraud in the R&D tax credits regime is behaviour of the R&D tax credit agencies.

The lack of any clear rules governing the sector means tech startups (and other small businesses) find it hard to differentiate between bad and good actors, and HMRC cannot identify rogue firms.

Specialist R&D tax credits agencies are involved in a large number of applications, with a random sample from 2020/21 showing they were part of 50% of applications. The agent market is a spectrum: from large accountancies with an R&D department, to specialist agents and smaller agents. A common fee structure is no-win no fee, with an industry average fee of 16% of the successful claim, ranging to 25% in some cases.

Only recently was a rule introduced requiring an application to include a named agent where they are involved. This is despite HMRC having an "Agent ID" system in place for accountants and solicitors. Instead of looking at common errors, it would be far easier to look at agents with poor records. Indeed, first time claims showed a higher error and fraud rate (57%) than those who had claimed before (48%), indicating that some agents were targeting non-tech businesses at the lower end to submit claims.

HMRC must now use this data to weed out bad actors and take a structured approach to looking at who is producing spurious claims. The simple answer would be to create a database, ranking agents on success rate. They could use the indicators that they currently use: wholly non-compliant and partially non-compliant to ban certain agents with low performance.

In any adversarial, rules-based system with light policing, the incentive structure means that many agents will test the boundaries of the generosity, without risk to their bottom line and reputation. This is despite many agents and accountants being members of professional bodies such as the ICAEW and the ATT, both of which require them to adhere to a code of conduct or risk ostracism.

83% of startup respondents to our survey from earlier in 2023 said that a regulatory mechanism to assess R&D tax advisors would be a good thing.

In 2021 the Government consulted on raising standards in the wider tax advice market, concluding that compulsory professional indemnity insurance was a solution. However, the recommendation eventually faded into obscurity. With HMRCs clampdown it seems unlikely that insurers would underwrite with such a risk at a low price, given the likelihood of an R&D tax credit agency receiving an investigation.

The Finance Act Spring 2023 mandated that claimants and firms that had not applied for R&D tax credits for three years must notify HMRC before 6-months past the end of the accounting period.[16] The intention is clear: to stop non-tech business receiving impromptu approaches from agents, filling quick, spurious

[16] Finance (No. 2) Act 2023 (legislation.gov.uk)

claims. Yet this measure adds an operational burden that is passed to the companies rather than the agencies.

Such measures paper over the cracks.

Many established players in the R&D industry told us they would like to see mandatory membership of a professional body. However, this would exclude non-accountants or even in-house staff from submitting, which should be the end-goal of the simplification of the scheme. We are wary of licensing regimes being used for consolidation and anti-competition, due to the administrative burden required to comply.

Instead, we propose the creation of a voluntary standards body to create and oversee a set of commitments and guidelines that R&D agents agree to follow.

This body would also create a professional code of conduct and R&D-specific commitments on the nature of claims. It would liaise with HMRC on an annual basis, with feedback on agent behaviour and records using the new data attached to applications. This voluntary standards body would help sift out bad actors since the committee is R&D industry exclusive rather than taxation or accountancy as a whole.