SCIENCE BUSINESS®

Horizon Europe

The first assessment

As the first year of Horizon Europe draws to a close, Science|Business gathered feedback on the new €95.5 R&D programme from an online survey and meetings with its memberorganisations. The result: recommendations on how to make the next six years of Horizon Europe even better

About this report

This report is a publication of Science|Business and does not necessarily represent views of members of its Network of universities, companies and research organisations.

Contributors:

Goda Naujokaitytė, Roy Pennings, Sara Crepaldi, Richard L. Hudson

Science|Business is a registered trademark of Science Business Publishing Ltd.

© 2022 Science Business Publishing Ltd. Avenue des Nerviens 79 1040 Brussels, Belgium tsb@sciencebusiness.net

Executive Summary

In 2021 the European Commission launched its €95.5 billion Horizon Europe research and innovation programme, and now thousands of researchers and entrepreneurs across Europe and beyond are grappling with its procedures and requirements. Following the first rounds of applications, Science|Business asked applicants for their first impressions of the programme – a first assessment. We ran two workshops, interviewed people from around the research community, collected written feedback from Science|Business Network members and conducted an online survey in December and January. This report summarises the results, and offers recommendations.

The reviews are mixed, but most believe the programme will have a big impact on the European R&D landscape. Almost half of the survey respondents say it's an improvement compared with Horizon 2020. But once the talk turns to paperwork, application forms and the unpredictable participants portal, the grumbling begins. Some say the calls are difficult to interpret, and impact-driven to a point where no one project can meet all the demands. Many also struggle with understanding the policy context in which some of the calls are grounded. Next year, applicants hope for a better balance of project impacts and better supporting documentation to make the demands clearer. In the application form, researchers hope to see more space for science and fewer pages on the project's open science policy, climate-friendliness and data management principles. With a better balance between the administrative content and the science, most seem to be fine with the new 45-page proposal limit.

Beyond the paperwork, not all are convinced Horizon Europe is as open to newcomers and third countries as it should be. In 2021, researchers struggled with the uncertainty of the UK's and Switzerland's association to the programme, and could not wrap their heads around the rules for third-country participants. Next year, they hope to see better guidelines and more stability. Then, there's the issue of equal access to the programme within Europe. There are many specific barriers to newcomers, east Europeans or others – but one is transparency. A simple suggestion often heard: the Commission could help by publishing, early and noisily, its Horizon work programmes in their successive draft forms rather than allowing leaked copies to circulate unevenly among insiders. This point, though seemingly minor, is a good example of how small changes in administration can have a big, and positive, effect on the success of the programme.

Some specific recommendations that emerged from our research, most applicable only to the biggest piece of the programme, collaborative projects in Pillar 2:

- > Explain better. To help researchers understand the policy context, the Commission should publish the relevant policy documents alongside the call text. Better guidance from the Commission on third-country participation who's welcome and who isn't would also help. And instructions on how to fill out the application form should be supplemented with many examples to make the lives of first-time applicants easier.
- > Narrow some objectives. Many calls are too broad and demanding. High impactdriven calls are welcome, but they should not ask for the impossible.
- > Be more transparent. The Commission should organise a timely and transparent distribution of draft work programmes if it wants to provide equal opportunities for all applicants.
- > Be nicer on deadlines, IT and other technical aspects. The Commission should give some consideration to the timing of its deadlines preferably not announcing a call in June with a deadline closing in September, and thereby making it harder for applicants to build consortia and file applications over the summer. A more friendly user interface on the Funding and Tenders Portal is also needed.

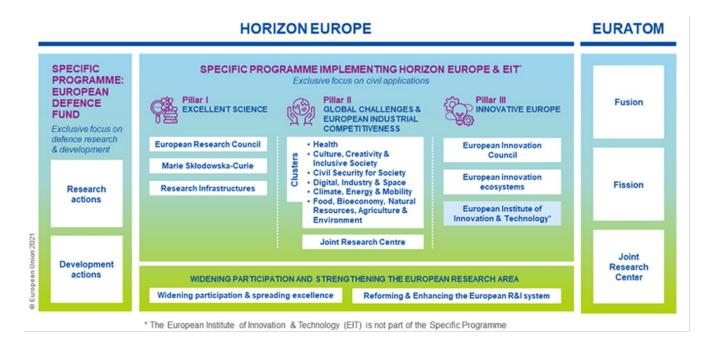
> Evaluators: be patient, expert and interactive. At least in the first years of the new programme, evaluators should be somewhat forgiving with applicants struggling to tick all the boxes on ethics, data privacy, open science and other "horizontal" requirements not directly related to the research topic. Evaluators should come from the same field as the projects they are evaluating, if possible. And their feedback should be more exhaustive. Consider extending the so-far well appreciated "right to react" of the EIC Pathfinder programme, giving researchers a chance to explain themselves before they are given the final mark.

Our research suggests there's much to like, and much to improve, in the programme. We asked those who had applied whether they were likely to do so again: 81% said yes, despite whatever their other sentiments might be. So it is clear that the programme matters greatly to a great many people. And we hope that now, as the Commission implements the programme set by legislators, it can take some of our recommendations on board to make it even more relevant.

We believe Horizon Europe is a critically important programme, for the future of Europe and the world. After nearly 40 years of operation, the Commission has honed one important model of how to manage multi-country, multi-sector research and innovation. Our hope is that it become a template for a world struggling – in the grip of pandemic and climate change – for a better way to collaborate on research and innovation.

Introduction

The long-awaited Horizon Europe programme launched with great fanfare in February 2020. Made up of three pillars – one for fundamental science, one for big collaborative research calls, and one for innovation – it promised to be more impact-driven and inclusive than its predecessors. Its novelties include the new innovation fund of the European Innovation Council, which promises to make the European Commission a big-shot tech investor, and "missions" that aim to tackle five big societal challenges in health and climate. It pledges 35% of its budget to climate-related R&I, enlarged and streamlined industrial research partnerships, and an expansive effort to involve researchers from eastern Europe and the rest of the world. And it promises to be simpler, become more consistent with other EU programmes, and have a bigger impact in helping solve the world's mounting problems.



Such are the programme's ambitions, as codified in the Horizon Europe legislation over three years of difficult negotiations. Then comes the reality. Because the legislating took too long, the programme got started much later than planned – leaving the Commission scrambling to get all the legal, financial and technical details bolted down. The February launch was in name more than fact: many calls for grant applications got published weeks or months later. The annotated grant agreement – the contractual template that grantees' lawyers need to study – didn't get published until June, and even then only in "draft" form. Then the Commission's IT platform, which processes the applications, was initially overwhelmed and riddled with peculiarities and glitches that frustrated many. A new, 45-page limit to applications flummoxed many. And to this day, due to diplomatic disputes, the status of Swiss and UK researchers – among the top science powers in Europe – remains uncertain. In short, not the way anyone would wish so ambitious a programme to begin.

But the show has begun, the money is starting to roll, and vital research and innovation are now underway. Nearly a year on, Science|Business has collected feedback on the programme from around the research world. Through interviews, written statements, workshops and a survey conducted online in December and January, we gathered views of researchers and staff at universities, companies. research institutions, consultancies, associations and government bodies across Europe. A total of 260 people respondent to the survey, of whom 69% had actually begun or completed the application process. The survey – an early indicator rather than a scientific sampling of opinion - was supplemented by feedback in two Science|Business workshops in January with its network of more than 70 universities, and public-sector organisations. Many of the participants in these meetings were research-support officers, with long experience in EU R&D programmes. Their feedback was further supplemented by calls and emails with individual grant officers and researchers, as we sought to understand the issues in more detail.

Inevitably, given the programme's delayed and rocky start, many of these first reviews lean towards the critical. Mostly, in gathering this feedback, we heard from people involved in the programme's biggest section, Pillar 2, for collaborative R&I projects – the historic heart of all EU research programmes. We

they're happy? It's always the problems that get aired first.

historic heart of all EU research programmes. We heard some feedback on the crown jewel of Pillar 3, the European Innovation Council. And we heard little at all about other parts of the programme, such as the European Research Council in Pillar 1 or the European Institute of Innovation and Technology in Pillar 3. In those cases, silence may be golden. After all, who fills out surveys or chats in group meetings when

Our objective in publishing this report isn't to carp. It is to flag to the Commission – at this very early stage of the programme when much can be changed in the details of implementation – where people think improvement is needed. We at Science|Business have been following EU R&D programmes collectively since 2005 (and some of us, individually, since the very start of those programmes in 1984.) We believe the programme is a great contribution to European and global science and technology. It could be a template for how future, international R&D programmes might operate – for instance, if world leaders at the next COP meeting decide that they want to formalise their currently ad hoc collaborations on climate technologies. So we offer this report as a form of constructive criticism for an EU effort vital to our common future.

About the research

Survey conducted from 14 December 2021 to 24 January 2022, online at sciencebusiness.net.

Respondents: 260, of whom 180 were applying or had already done so.

Of that experienced group, 142 were dealing with collaborative projects (Pillar 2), and 59 actually won awards.

By profession, 37% worked at a university, 12% at a public-sector research institute, 12% at a government body, 11% at a consultancy and 10% were with a small company.

By country, 12% were based in Belgium, 11% in Spain, 10% in France, 8% in Germany, 6% in Italy and 5% in the Netherlands. In all, 10% were based in eastern Europe (Romania, Hungary and Czech Republic topped the list.) Among non-EU countries whose participation in Horizon isn't yet confirmed, 6% were from Switzerland and 3% from the UK.

The survey results were supplemented by two Science Business workshops with its members, on 26 and 31 January 2022.

A downloadable PDF of the entire survey is available at sciencebusiness.net.

The assessment

Samples: Submitting a proposal for the EU's big collaborative research calls has always been seen as time-consuming and bureaucratic. And that is inevitable, given that 27 governments have to agree that the Commission isn't wasting their money as it hands out their cash. And constantly, the Commission promises simplification – with decidedly mixed results.

So applying is not for the faint of heart. Based on the work programmes that outline the forthcoming subject-specific calls, their scope and available budgets, researchers must often form international consortia; multi-country partnerships are a prerequisite for much of Horizon Europe. Then they write up their project proposals to fit the Commission's online template. Proposals are then evaluated, often by panels of hired "experts" working remotely but sometimes (with the ERC and parts of the EIC) with interviews. The verdict is often disappointing: the Commission always gets far more applicants than it gets budget. In Horizon 2020, the prior programme, the average odds of winning a grant were around 12% (though the success rate varies wildly between different parts of the programme.) Researchers apply for a range of reasons: they want to strengthen partnerships with others, expand into new research domains, get on the inside track for Commission policy development for emerging technologies, get a foothold in new markets in other countries, develop a product that they couldn't afford on their own, or simply boost their reputations: an ERC grant is widely considered a badge of honour, and an EIC commitment can attract private investors who would otherwise ignore a venture. And many just want the cash: how are professors to keep their post-docs fed, or a company to start a risky new project, without a grant to help balance the books – especially as, in many EU member-states, national R&I funding has shrivelled up since the 2008 crash and the current pandemic? For a Greek or Romanian start-up, an EU grant may be the only option.

So the programme has many fans. And our survey confirmed that – at least when we're talking about the broad ambitions and general ideas of Horizon Europe.

Of the 260 people who completed the online survey, 88% say they like the objectives of Horizon Europe, which include helping to meet the challenges of climate change, healthcare in a pandemic, and European technology competitiveness. Will it strengthen Europe's R&D capacity? Yes, say 71%. Overall, nearly half – 45% - said the programme is generally an improvement on Horizon 2020. And 41% say it will make international research collaborations easier (32% disagree.) Some new aspects, like the requirement for large organisations to include gender-equality plans in their applications, are praised. One person's overall view, in an anonymous write-in question on the survey form:

Generally quite positive. Too early to say how it stacks up to H2020, both in terms of implementation and eventual results (impact, excellence.) – The new instruments are exciting but successful implementation is a challenge. E.g. missions – quite a lot (to) determine still.

So that's the good news: many people think the programme's planners did a good job. But when people start talking about the details of applying, getting evaluated and contracting, the grumbling begins.

In all, 52% believe the application process is too bureaucratic; 70% say the odds of winning are too low; 38% say the programme won't do enough to involve east European R&D players. On one controversial point, industry influence, views are split: 37% say there's too much industry influence, and 40% say there isn't.

In the written comments, there's lots of grousing – though without knowing the circumstances of each individual (the survey was anonymous), it's hard to judge the outcome. A few colourful

Destinations, clusters, missions, etc. - wtf?

66

The programme is too focused on political agendas rather than true science and innovation.

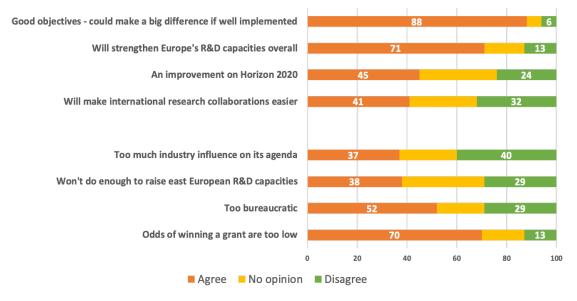
"

Applications are incredibly complex and time-consuming.

Too large projects. Topics are whimsical and suspiciously close to the interests of large groups.

So much for the generalities. What are the specific issues raised in the survey, and in the workshops that Science|Business conducted with its own members? And most importantly, what do those who actually have applied, or are in the process of applying, think about it? Of the 260 respondents to the survey, 180 already had experience of the programme and 59 had actually won awards. Forthwith, a summary of the key points that emerged from those with programme experience – whether polled in the survey or in our workshops.

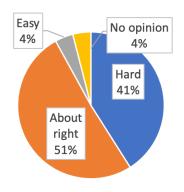
The assessment (%)



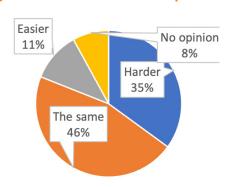
1. The applications: OK for many, hard for some

The survey results echo many of the concerns about paperwork and rules that were raised publicly from 2018 to 2021, when European legislators and member states were arguing over the legislation for the programme. But now that the programme has begun – surprise – 51% of the survey respondents applying or having applied say they thought the application is "about right" when it comes to difficulty. Another 41% said it was hard, and 4% called it easy.

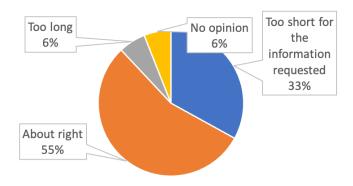
How do you find the application?



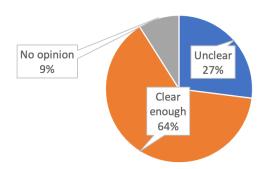
Compared to a Horizon 2020 application, you find Horizon Europe's one..



The maximum page lengths of an Horizon Europe application are...



The instructions were..



Compared with Horizon 2020, 46% of the experienced applicants said the difficulty of the Horizon Europe forms was about the same, 35% reported it being harder and 11% said it was easier.

This mixed impression was echoed in the Science|Business workshops: Some thought the process is OK, and others thought it added new complexities. One such issue, we were told, is simply finding the right calls to which to apply, in the ever-more complicated mix of missions, partnerships and general Pillar 2 work programmes. "It's good we are trying to remove silos but now we have to look pretty much everywhere to find suitable calls," one Science|Business Network member said.

In social media and online conferences, one frequent cause for complaint is about the Commission setting a tight page limit for most applications, of 45 pages. The argument is that with bigger research consortia and more-demanding assessments, it's too hard to distil the genius of an application into 45 pages. In the survey, 33% of people experienced with Horizon Europe echoed that point. But the majority, 55%, said the page length was about right. And some respondents complained about those complaining. "Reduced page limit is great - those complaining are bad writers," one person wrote.

Others welcomed the new page limit, but said the Commission is requiring too much of the application be devoted to the administrative details rather than the core research proposal. "Data management, open science and the impact sections are too long. This does not leave enough space for the description of the actual project," said one respondent. Several said the list of partners, which can be very long with big consortia, shouldn't count towards the page limit.

In workshops and online comments, a frequent demand is for clearer instructions. In the survey, 64% of experienced applicants said the instructions are OK, and 27% disagreed. But even among those who were generally content, there were some struggles to understand how an applicant can possibly tick off all the boxes, from proving that a project qualifies as environmentally sustainable to assuring the evaluators of its sound open data management. In this vein, a requirement to define the "Key Impact Pathways" puzzles many, with different research groups having very different interpretations of what this section should look like and what would work. The requirement overall is welcome, but applicants hope evaluators are well instructed, taking into account the fact there could be different interpretations of what counts as a key impact pathway.

2. Project goals: too broad for some

Horizon Europe is more impact-driven and bigger than any of its predecessors, especially in Pillar 2, through which big collaborative projects are funded. "It marks a paradigm change in the design of the EU research and innovation framework programmes from an activity-driven to an impact-driven programme" according to the Commission's programme guide. Much of the push for greater impact is tied to the EU's green and digital transformation plans, and the European Commission wants to know how each project will deliver.

Many say this has translated into overly broad calls that deal with several dimensions of a given problem at the same time. While it's important to take interdisciplinary approaches, grants officers in the workshops say, there's a danger of losing focus. Some tasks are simply too big for a single project – and the calls demand them.

A call for a health project, for example, may ask researchers to develop new methods and approaches to a given problem, while at the same time asking for ideas for their implementation in the healthcare sector – an impossible task, some Network members say, for a project running only for a few years.



It's a complete level harder to build the consortium, to organise the partners, to understand the call and try to put [in place] the right pieces.

Cruz Enrique Borges Hernández, University of Deusto, Bilbao Many calls have to fit with the Commission's policy agenda, a fact of which some researchers are unaware. To understand what the call is asking, beginners need help from translators, that is, staff at National Contact Points and in-house experts in their own organisations. Without help, grant officers report, researchers tend to take a cherry-picking approach: they choose one topic that they like and that is mentioned in the call and try to develop a proposal around it, ignoring the rest of the call text. This may end up losing them the grant.

Some argue that excessive broadness in the calls leaves those responsible for coordinating a project with a lot more on their plate. "It's a complete level harder to build the consortium, to organise the partners, to understand the call and try to put [in place] the right pieces. This has increased the complexity to a huge level," said Cruz Enrique Borges Hernández, a researcher at the University of Deusto, in Bilbao. "You have to do a lot of more things with less budget."

In the end, if the process is more complicated, it's likely to be first-time applicants who are most affected. That could make Horizon Europe an exclusive club for big research players, some argue. Many seek the help of professional proposal writers. Lamented one university grant officer:

We had so much interest in the calls.... But as soon as they see the proposal template with Open Science, Data [Management] Plan, [do no significant harm principles], Impact table etc., they all decide not to apply. It is a shame. Only consultancies are prepared to do that work as it is impossible for a scientist, even with support from an experienced EU Office, to prepare a proposal.

3. Gender plans

Despite some initial pushback against a new requirement for applicant organisations to have gender plans in place when applying for calls starting in 2022, most surveyed organisations appear to be prepared. And aside from a few voices, most are very supportive of the new requirement, hoping the emphasis on gender plans will bring to light and upend persisting inequalities in applicant organisations.

In a workshop, one Science|Business network organisation that has a well-established gender plan said smaller organisations have been flocking to it for advice on how to put theirs in place. There's a gap in knowledge, and it's the Commission's duty to fill it, workshop attendees said.

One question that remains unanswered is whether organisations will be held accountable for sticking to these plans. How will it be monitored? How should organisations behave beyond the gender plans? And it isn't entirely without risk. Some in central and eastern Europe fear the gender plan requirement could further deepen the East-West inequalities. Said one:



It may well be another barrier for institutions which are already disadvantaged by their lack of [research management and administration] capacities. In other words, this will further weaken the weakest, because they will be reluctant to introduce new policy / practice because of some marginal possible profit.





'It would be very useful if there are examples of good practice on how to fill out the forms and what is expected in references sections.

Taivo Raud, University of Tartu

4. Who's in, who's out? It's confusing

One unusual feature of Horizon Europe is that researchers in many countries outside the region are actively welcomed. In Horizon 2020, 16 EU neighbours from Tunisia to Iceland formally joined as "associated countries", contributing funds to the central Horizon pot so their researchers could compete for grants on equal footing with native EU researchers. With Horizon Europe, the Commission wanted to do even better, inviting Canada, Japan, Korea and other developed countries to join the programme formally (Such "third-country" researchers are already allowed to join projects without pay, and in special circumstances can also collect grant money. But with association status, their involvement would be much broader and easier.)

With Horizon Europe, the late start knocked the Commission's diplomatic schedule sideways. Only this winter has the Commission been wrapping up its routine association deals. Discussions with developed countries have barely begun. And the cases of Britain and Switzerland are still-raging diplomatic wildfires, with the former's status uncertain due to Brexit arguments and the latter's curtailed due to broader trade disputes with the EU. Wrote one respondent:



For us based in Switzerland, our lives have become very complicated administratively.

We also feel like belonging to a kind of second zone partners with very low visibility.

99

This is tough enough for researchers in those countries, but it is also causing confusion among EU researchers: Should they invite a Brit or not? Should they stay away from the Swiss? And the answer may depend on the topic: the Commission has said it will restrict participation by third-country researchers in some hyper-sensitive quantum or space projects, for instance. Clearer guidance from the Commission is sought by many respondents. Some grant officers recommend adding extra partners to a project consortium to be sure to meet the eligibility criteria – just in case UK and Swiss partners end up being out of the game. Some EU universities have added UK researchers as "associates" on their own staffs, so they will qualify whatever happens diplomatically.

Then there's the problem of inclusion of thousands of researchers in eastern Europe. In Horizon 2020, just $\underline{5.1\%}$ of the grant money went to so-called EU-13 countries. For Horizon Europe, the legislation mandates a $\underbrace{<3.3}$ billion fund for "widening" the programme to attract more applicants from these countries – but, again, the slow start of the programme has delayed much of that work. In the survey, 38% of respondents say they are not convinced Horizon Europe will do enough to raise R&D capacities in the EU's newest member states (29% disagree.)

Many highlighted the need for guidance on how to write a better application, especially for researchers who are not based in those EU countries that have typically won the larger share of grants. Officials at the University of Tartu, which submitted 98 Horizon Europe proposals in 2021, hope to see clearer explanations on the requirements for open science and the intellectual property section of the application, as well as the letters of support. The request for more information was echoed by many survey respondents, especially those based in central and eastern Europe. Wrote one:



Instructions are clear, but there is a lack of information about how to write a competitive application. This know-how is available in the west which can rely on a large number of successful applications, while it is much harder to access such know-how in central and eastern European countries thus leading to unequal access to all the information that would be necessary for successful applications.

At one of the Science|Business workshops, there was near-unanimity that the Commission could go a long way to reducing this problem simply by being more transparent. The work programmes, which set the goals and schedules for the specific grant calls that follow, take the Commission months to draft, and months to discuss with member-state representatives. At various stages of the process, these drafts get circulated in growing numbers. Some recipients distribute the drafts, but with little consistency on when or how. Others regard the documents as secret, until the Commission publishes them on its vast Web site. As a result, some applicants get the call text months ahead of others and have more time to prepare their application.

In 2021, the differences were especially acute as those who were forced to wait for the official work programmes only had little time to prepare their proposals. "We say to our researchers to start preparing for a call a year in advance, especially in coordinator position, and now we only had a few months," one Science|Business Network member complained.

This is not a new problem. For the start of both Horizon 2020 and Horizon Europe, Science|Business took the matter into its own hands, and published every draft it could get from any sources – free, online, and accessible to anybody. But the Commission, while now making a greater effort to publish late-stage drafts, still resists release of early versions on the grounds that they aren't yet fully cooked, and could mislead potential applicants. And even when they are published, they aren't easy to find unless you happen to be checking the appropriate site repeatedly and randomly.

The solution? Strike a compromise. In the Science|Business workshop, many university representatives suggested picking a clear date, mid-way through the drafting process, when all documents will be published, draft or not. Some suggested that date be as soon as a call's publication date and budget is decided inside the Commission, which typically happens around six months before the formal launch of a call. From then on, workshop participants argued, the Commission is only fine-tuning the topic descriptions and negotiating the final wording with sometimes-touchy member states or internal colleagues, so no harm would be done by early publication. And they should also be uploaded in one spot and made easier to find.

5. A messy, untimely start

As mentioned earlier, the programme got rolling very late – due to deep conflicts among the member states from 2018 into 2021 over how much to spend and how to spend it. As a result, many calls for grant proposals didn't get published until June 2021, and had deadlines just a few months later. That meant that many applicants were on summer holiday, which some universities said made it difficult to coordinate the drafting of proposals. This was particularly difficult for researchers with family responsibilities: what post-doc or associate professor has the time to draft grant proposals while tending children over the holidays? Layered on top of this was the pandemic. As calls opened, researchers were struggling under continuing COVID-19 restrictions and pandemic fatigue, and many needed more time to deal with their workload.

"From my point of view, [the delay] had an impact on the quality and the quantity. Many participants haven't had the possibility to set up in proper due time," said Massimo Busuoli, head of the Norwegian University of Science and Technology Brussels office. Drawing on feedback from a network of Brussels university liaison offices, he stressed that universities needed longer.

The same applies for the European Innovation Council, and especially its new top-down, challenge-driven calls. With just a few months between the announcement of the specific challenges that the EIC wants innovators to address and the deadline, few can come up with a funding-worthy proposal. This was the case in 2021; and now there are fears history is about to repeat itself. With preliminary deadlines for some of the challenges in October and the EIC work programme for 2022 still in the works in early February, innovators will likely be strapped for time.

So, you may ask, does this really matter? The problem is, Science|Business workshop participants said, cramming application deadlines around holidays has been a recurring problem with the Commission. Their plea, for the sake of the programme if not the mental health of applicants: give everybody plenty of time to apply, and don't set the deadlines too close to a major holiday period.

The timing difficulties added another problem in 2021: A buggy Commission Web site. Some applicants weren't able to save online forms, others were unable to submit proposals or change the order in which they listed project partners (a surprisingly sensitive issue for big consortia.) As one researcher put it, "the user interface is very unfriendly there." Of course, such issues aren't unusual in any big government programme. This time around, some grants officers approvingly noted, the Commission staff was light-touch and willing to help those affected. It also extended some deadlines to ensure all applicants managed to submit their proposals.

As with all technical complaints, the details can sound picky. But, workshop participants said, when you add them all together it amounts to an unnecessary burden of time and effort. Some proposed changes to the platform include:

- > The option of shifting the order of partners should be reintroduced. Some complained that, if they wanted to change the order in the middle of filling out the online applications, they had to start the entire application over again from the start.
- > Those partners who don't receive funding a common occurrence for researchers from outside the EU and its neighbourhood, but who still want to be in the group to share data and results should have access to the proposal site, and be able to complete their part of the application for themselves
- > On the organisation data page, the character limitations for description of infrastructure should be increased to the same limit as for publications and projects

6. Evaluators, be patient please

As the programme is so young, only a portion of the survey respondents had yet gotten the final verdict from the Commission. But those who had gone through the evaluation process left some comments in our survey.

Some pointed to unclear evaluation criteria. Others were unsure if evaluators had been properly briefed about the Horizon Europe novelties such as impact and gender plans. A few questioned how carefully the evaluators read their proposal, while others noted inconsistencies between the information on a call and the evaluator reviews they eventually received. One repeated problem was that some evaluators don't seem to be in the same field as the projects they are assessing. A respondent called the feedback a mixed bag: "some comments were useful, some were not, some made us scratch our head."

Some university representatives with experience of US grant systems urged the Commission to follow the practice of the National Institutes of Health, and designate an individual on staff who will speak directly to a would-be applicant and tell them frankly if they're wasting their time. There was also a request for more in-depth feedback distributed per section to help applicants improve their next proposal.

That all concerns Pillar 2, the standard Horizon collaborative projects. But respondents said they had more to say about the European Innovation Council, which launched its calls in 2021 earlier than most of the rest of Horizon Europe. One common comment was that researchers welcome a pilot effort at the EIC to give applicants a "right to react" – that is, to defend their proposal after the individual evaluators give their opinion and before the proposal goes to the evaluation committee. Many appreciated the pilot and called for it to be extended to other

parts of Horizon Europe. But one respondent noted that while being a good addition, the low success rates mean only the best of the best get the chance to defend their proposals. At that stage, most have close to the maximum score, leaving "no room for improvements."

Recommendations

The research world is happy that Horizon Europe is finally up and running, and it's positive about the potential impact of the €95.5 billion programme and its capacity to strengthen European R&D. Almost half the survey respondents see the programme as an improvement compared to its predecessor, Horizon 2020. But the devil is in the details. Once researchers start talking about the call texts, application forms and administrative requirements, a laundry list of requested improvements appears. The severity of the problems is open to debate: among those who have actually applied, or are in the process of doing so, a large share say it's about the level of difficulty they expected and is manageable. But many disagree, and find it too hard or complicated.

While one could dismiss such concerns as to-be-expected (who enjoys filling out forms?), they become a policy problem when they inequitably hit some groups of applicants more than others: newbie applicants vs. old-timers, or east Europeans vs. west.

From the foregoing, we distil the following recommendations – mostly about Pillar 2 collaborative projects:

- > Explain better. To help researchers understand the policy context, the Commission should publish the relevant policy documents alongside the call text. At present, it's sometimes difficult for an applicant to find and understand that context to their own pain, when rejected. Another problem: applicants can struggle to understand the rules of third-country participation. Better guidance from the Commission would help especially if promptly updated to reflect the oft-changing diplomatic scene in which Horizon operates. That includes making it explicit for each call, rather than forcing applicants to hunt and seek through related documents. And a third issue: instructions on how to fill out the application form should be supplemented with many examples to make the lives of first-time applicants easier. Some suggest publishing successful applications, if possible. If not possible, at the least the promulgation of many model applications tailored to each part of the programme would help newcomers, in particular.
- > Narrow some objectives. Many calls are too broad and demanding. High impactdriven calls are welcome, but they should not ask for the impossible. They should be clear and focused enough for a researcher or entrepreneur to construct the project consortium efficiently, and not discover too late that a crucial type of partner was omitted, or a project objective overlooked.
- > Be more transparent. The Commission should organise a timely and transparent distribution of draft work programmes if it wants to provide equal opportunities for all applicants. It creates an unequal playing field if some applicants can get drafts months early, while others have to wait for publication on the Commission's web site. The Commission has started to respond, but its draft publications remain late and hard to find.
- > Be nicer on deadlines, IT and other technical aspects. The Commission should give some consideration to the timing of its deadlines preferably not announcing, for instance, a call in June with a deadline closing in September, and thereby making it harder for applicants to build consortia and file applications over the summer. Also helpful: a more friendly user interface on the Funding and Tenders

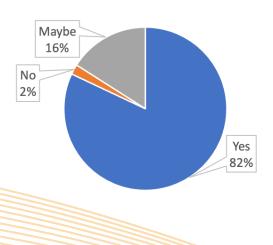
Portal is needed. While the crush of problems at the programme's late launch is understandable, efforts should be made now to keep testing and improving the site based on feedback such as this report.

> Evaluators: be patient, expert and interactive. At least in the first years of the new programme, evaluators should be somewhat forgiving with applicants struggling to tick all the boxes on ethics, data privacy, open science and other "horizontal" requirements not directly related to the research topic. While many praise these requirements – especially gender policies – as good governance, the Commission should recognise that it will take some time for everybody to get accustomed to them. Another suggestion for evaluators: they should come from the same field as the projects they are evaluating, if possible. Feedback from them should be more exhaustive. And consider extending the so-far well appreciated "right to react" of the EIC Pathfinder programme, giving researchers a chance to explain themselves before they are given the final mark.

These are recommendations for improvement, not tabloid-headline attacks. In the survey, perhaps the most important question was one of the last.

We asked those who were applying or had applied whether, based on their experience, they would do so again. The answer: 82% of those responding ticked the "Yes" box. Only 2% said no. That is, to us, a pretty clear indication that whatever the problems, the programme is serving a purpose that should be celebrated.







Bringing together industry, research and policy

Industry

Novo Nordisk Elsevier/ RELX

> Huawei Pfizer Avio Aero Sanofi Microsoft Toyota

Novartis

Academia

Aalto University Trinity College Dublin

Amsterdam University of Applied Sciences TU Berlin École Polytechnique Fédérale de Lausanne TU Eindhoven

> Erasmus University Rotterdam University College London

> > ETH Zurich University of Amsterdam

Imperial College London University of Bergen Karolinska Institutet University of Birmingham

KTH Royal Institute of Technology University of Bologna

University of Eastern Finland KU Leuven

Norwegian University of Science and Technology (NTNU) University of Luxembourg

Politecnico di Milano University of Pisa Polytechnique Montréal University of Tartu Sorbonne University University of Twente Stockholm University University of Warwick **Utrecht University**

Tallinn University of Technology

Public organisations

ART-ER Innovate UK

Barcelona Supercomputing Center **Innovation Norway**

Bundesanstalt für Materialforschung und -prüfung (BAM) Israel – Europe Research & Innovation Directorate (ISERD)

> **Business Finland** Japan Science and Technology Agency (JST)

CERN Centre Max Planck Society (MPG)

National de la Recherche Scientifique (CNRS) National Centre for Research and Development in Poland (NCBR)

> **COST Association** Quebec Research Fund

CSC - IT Center for Science Research Council of Norway

> FURFKA RIKFN

European Investment Bank South African Department of Science and Innovation

> Fraunhofer Spanish National Research Council (CSIC)

GEANT

Associations and Partnerships

Federation of European Microbiological Societies (FEMS) ATTRACT

CAROTS League of European Accelerator-based Photon Sources (LEAPS)

Deutsches Elektronen-Synchrotron (DESY) Photonics 21

> **European University Association** The Guild of European Research-Intensive Universities

> > EIT Health

Group members

Deusto International Research School (DIRS) Simon Fraser University

Contact: Simon Pickard **Network Director** simon.pickard@sciencebusiness.net