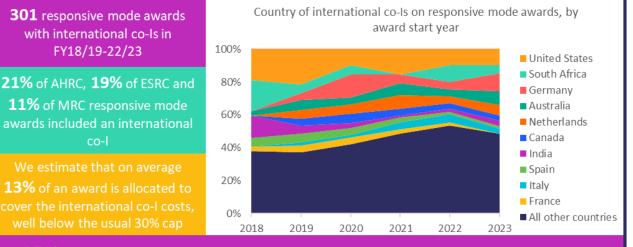


Review of the International Co-Investigator Policy

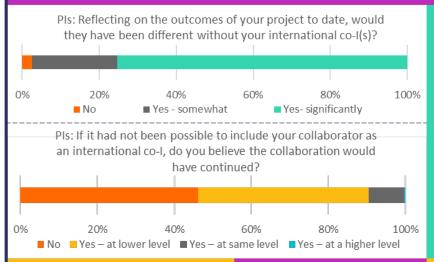
August 2023

A review of the UKRI international co-Investigator policy: summary of key findings

The international co-investigator (co-I) policy allows overseas collaborators to be included as coinvestigators on applications to UKRI. Eligible international co-I costs may be requested. The policy is currently operated by AHRC, ESRC and MRC and applies to responsive mode and selected directed calls.



97% of UK principal investigators (PIs) said that the unique knowledge / expertise of their collaborator was a very or critically important factor in selecting them as a Co-I.



International co-Is complement project partners and other collaborators

"Having both international Cols and partners was a critical part of the project, ensuring that while the Cols focused on academic development of the project, partners were able to deliver on other dimensions."

"Our project includes a combination of in-country Co-Is (for their academic expertise) and non-academic/ practitioner Project Partners (for their practitioner expertise)." Over **80%** of international co-Is said they were likely to collaborate with UK researchers in future.

75% of PIs from high income countries had another source of support for their project

Lack of harmonisation across councils, due diligence and confusion around eligibility of co-l institutions and costs pose challenges within the implementation of the policy.

The inclusion of international co-ls enables impactful research.

"The project simply would not have been possible without receiving joint funding."

"[International co-Is] were instrumental in delivering impact through local contacts and roles"

"Without the International Co-I, we would have struggled to access relevant communities and networks, and to collect data."

The international co-I policy supports equitable partnerships

..by allowing researchers from Low and Middle Income Countries (LMICs) to be included on an equal footing. But the 30% funding cap, and due diligence processes, are cited as potential barriers.

58% of Co-Is from LMICs had another source of support for their project, meaning that over 40% were wholly reliant on funding from UKRI for their participation.

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Background and Context

International co-investigator policy

The international co-investigator (Co-I) policy allows overseas collaborators to be included as co-investigators¹ on applications. Eligible international Co-I costs may be requested, with a cap of 30% FEC (there are some exceptions to this, e.g. in ODA calls or calls with a specific international focus where this cap may be raised to 50% or removed entirely).

At the time of this review, versions of this policy were operated by UKRI Arts and Humanities Research Council (AHRC), Economic and Social Research Council (ESRC) and Medical Research Council (MRC) and applied to responsive mode and selected directed calls.² The MRC policy is the most long-standing; the ESRC policy was introduced in 2007; and AHRC's policy began with a pilot in 2012 and was formally adopted in January 2017.

The rationale for these councils introducing the international co-I policy is that international collaboration is seen as inherently important within their communities and this policy serves as a fundamental underpinning of a wider international offer. It provides a sustained and ever-present mechanism to allow UK-based researchers to collaborate with their peers, wherever they may be in the world, to enhance the quality and impact of their research.

This rationale is driven by the needs of the disciplines supported by each of these councils. For example, there is an intrinsic geographic element to social science research with an interest in populations who may not be UK-based; in the health space, there is often a need to work globally to understand global health, diseases not present in the UK, or rare conditions with few patients in any one country; likewise, the arts and humanities often study global history, languages and culture.

Context and purpose of the review

The <u>UKRI International Strategic Framework</u>, published in 2023, outlined our commitment to reducing barriers to international collaboration in order to advance the frontiers of human knowledge. This included use of the international co-investigator mechanism where appropriate. The framework further commits us to expand our knowledge of 'what works' in international research and innovation (R&I) collaboration to ensure we can continuously increase the efficiency and effectiveness of our international work.

Whilst the international co-I policy is long-standing within AHRC, ESRC and MRC, reviews of the policy to date have mainly been confined to an individual council context. More recently, the roll-out of the <u>UKRI Simpler</u> <u>Better Funding programme</u> provides an opportunity to review the policies operated by individual councils, and explore whether and how this policy might be harmonised and expanded within the new funding system.

In this context, this project aims to provide a cross-council evidence base on the (positive and negative) impacts of an international Co-I policy.

¹ Throughout, we use the term 'international co-investigator' (international Co-I) as per usage at the time of the review. The terminology has now been updated in The Funding Service (TFS) to 'Project co-Lead international' (PcL (I)).

² UKRI Engineering and Physical Sciences Research Council (EPSRC) and Natural Environment Research Council (NERC), alongside AHRC, ESRC and MRC, are part of a <u>reciprocal Co-I agreement with the Research Council of Norway</u>; given the recent introduction of this agreement (November 2022), it was not considered within the scope of this review.

Approach

This project set out to gather views from a range of stakeholders with experience of, and interest in, the coinvestigator policy. There were five elements within the review:

- 1. Analysis of **applications and awards data** from across AHRC, ESRC and MRC to understand historic international Co-I application and award patterns.
- 2. A survey of Principal Investigators (PIs) on international Co-I awards and of their international Co-Is to gain insight into the value of the policy for UK researchers, how the policy is used, and the contribution the international Co-I makes to UK R&I; response rates were 34% (262 PIs) and 19% (458 Co-Is) respectively.
- 3. A workshop, hosted in collaboration with Universities UK international (UUKi), with ten Research Organisations to understand their views on the value and challenges of implementing the policy for their researchers.
- 4. **Semi-structured interviews with the three councils** which currently operate the policy to understand the rationale behind the policy and how it fits into the council's wider strategy, as well as gain insight into the practical impact of implementing the policy.
- 5. **Engagement with other sources of evidence**, including seeking views from overseas funders, and building on previous internal reviews and evidence gathering.

For a range of pragmatic reasons, these stakeholders were, for the most part, individuals who had some experience of engaging with the international Co-I policy: the inherent bias this creates needs to be acknowledged when considering the results below. Further details on data collection, and caveats and limitations on the findings can be found in the <u>Methodology section</u>.

International Co-I: what are we funding?

Note: the analysis in this section is restricted to awards funded through calls identified by AHRC, ESRC and MRC as 'responsive mode'.³ This is to avoid skewing the data by including calls which mandate or actively encourage the inclusion of international Co-Is. It includes awards with a decision date in financial years 2018/19 – 2022/23.

Prevalence of international Co-Is in responsive mode

In the five-year period from 2018/19 to 2022/23, there were a total of 9,421 applications to AHRC, ESRC and MRC of which 1,598 (17%) included an international co-investigator. In terms of successful applications in this period, **301 awards were funded which included an international Co-I**, representing 16% of all awards.

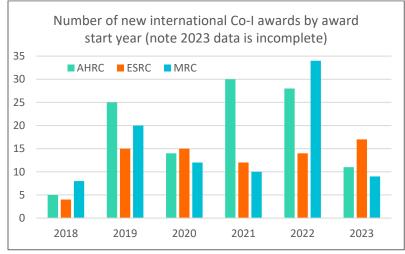


Figure 1 International Co-I awards by start year and council

Prevalence of international Co-Is varies somewhat across councils, with AHRC having the highest rate (22% of applications and 21% of awards) and MRC the lowest (11% of both awards and applications). Insights from MRC suggest that this prevalence also varies considerably across Boards depending on their disciplinary focus.

Given the long-standing nature of the policies within all three councils, it is challenging to estimate the impact that the introduction of the policy had on driving demand: do international Co-I applications add to or replace existing applications? However, all three councils suggested that the volume of international co-I applications is in a 'steady-state' and was not seen as overly significant in light of other pressures on demand.

Success rates for awards with international Co-Is (19% overall) were roughly in line with awards that did not include an international Co-I (20% overall), with the exception of ESRC where the international Co-I success rate (14%) was a few percentage points below the success rate of awards which do not include an international Co-I (18%). This suggests that there are no significant differences in how these awards are considered in the peer review process.

³ Responsive Mode calls included are: AHRC Research Grants, Research Networking and Follow-on Funding; ESRC Research Grants, New Investigator and Large Grants; and MRC Research Boards, New Investigator Research Grant, Applied Global Health Research Board, Better Methods Better Research panel, Developmental pathway funding scheme (DPFS), Biomedical Catalyst Funding: DPFS.

The maximum number of international Co-Is on any one award is 10 for MRC and 6 for ESRC and AHRC. The average number of international Co-Is across all three councils is 1.7, with the highest average for MRC (2.2), followed by ESRC (1.6) and then AHRC (1.3).

Countries of collaboration

Across the five years, the top five countries in terms of number of international Co-Is were: the United States, South Africa, Germany, Australia and the Netherlands. This is a slight variation from country prevalence in terms of project partners on Research Council awards – whilst the United States and Germany feature on both lists, Canada, France and Switzerland all rank in the top five for project partners.

Looking at trends over years (see Figure 2) suggests that there has been a slight increase in the diversity of international Co-Is, with the top 10 countries accounting for over 60% of all international Co-Is in 2018 and 2019, and only around 50% in 2022 and 2023. However, given the relatively small number of awards and short timeframe, this trend is not yet significant and should be monitored over time.

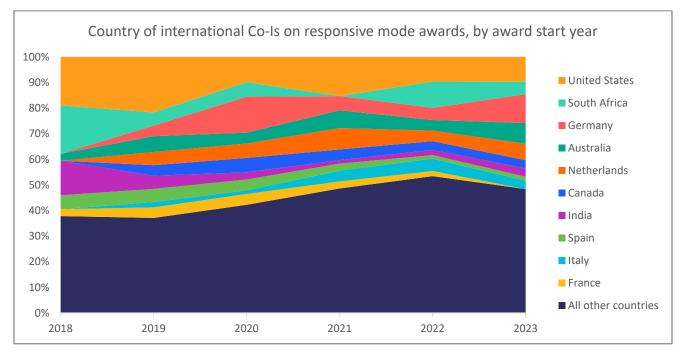


Figure 2 Country of international Co-Is by award start year

Funding on international Co-I awards

International Co-Is may request funding on their grant, subject to certain conditions and (usually) with a funding cap of 30% of the Full Economic Cost (FEC) of the grant. This may therefore be expected to impact on the overall value of international Co-I awards, and potentially to have knock-on effects on council funding commitments and success rates.

We firstly compared the average total value of international Co-I awards against the average value of awards without international Co-Is (see Figure 3). This was done on a council and call basis to account for differences between call funding limits. Funding calls that included no international Co-I awards were excluded, as were those that only included international Co-I awards (this affected MRC global health activities). The value of international Co-I awards are closely (and significantly) correlated with the value of non-international Co-I

awards. Whilst AHRC and ESRC are close to parity, the data suggests that MRC international Co-I awards tend to be slightly more expensive, especially within higher value calls. However, the small amount of data points included mean that this analysis needs to be treated with caution.

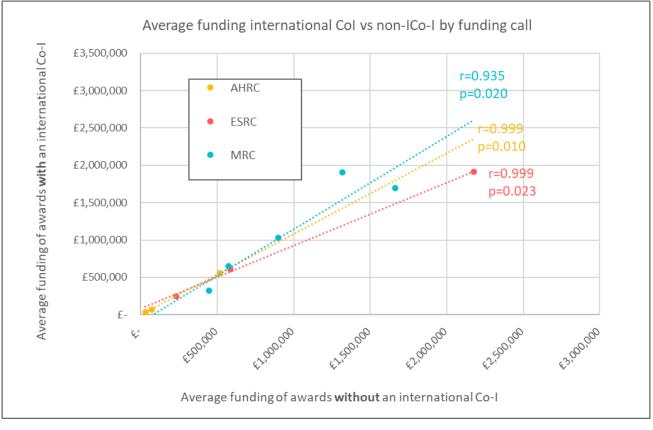


Figure 3 Average funding of international Co-I vs non-Co-I awards by call

Another way to consider the cost of international Co-Is is to look at costs categorised under the 'Exceptions' cost category. As costs related to international Co-Is are paid at 100% (rather than 80% FEC as per usual UKRI funding rules), these would normally be categorised as 'Exceptions'. By definition, there are few other costs allowed under this category so we can take this cost heading as a reasonable (although not perfect) indication of the costs allocated to the international Co-I.

188 international Co-I awards made through responsive mode calls included at least some 'Exceptions' costs.⁴ The proportion of funding that is 'Exceptions' varies from less than 1% to 73%, with an **average of 13%**,⁵ well below the usual funding cap of 30%⁶. The vast majority (82%) of awards have less than 20% allocated to 'Exceptions', with a third (34%) coming in at under 5% (see Figure 4).

⁴ Of 301 awards made during this period.

⁵ Note that this sample excludes awards that have **no** exceptions costs allocated, so the average % going to international Co-Is may be lower than this analysis suggests.

⁶ Note that in some instances, notably where collaboration with Low and Middle Income Countries is involved, this cap may be lifted or removed entirely, explaining why some awards have exception costs well in excess of the usual 30% cap.

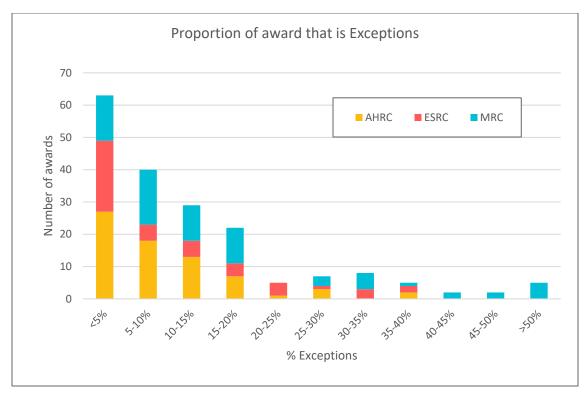
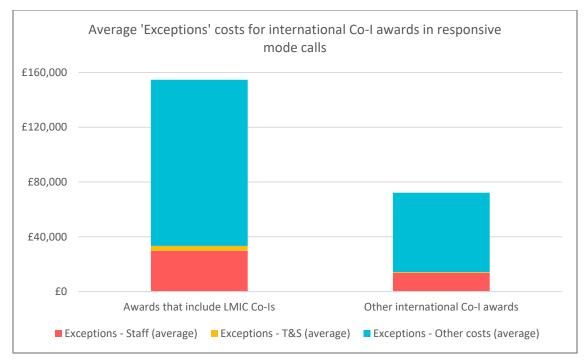


Figure 4 Exceptions costs as a proportion of total award

There is also a notable difference between awards which include a Co-I from a Low and Middle Income Country (LMIC)⁷ and those that only include Co-Is from higher income countries. The average percentage of the value of the awards classed as 'exceptions' is 19% for the former, and only 10% for the latter. The absolute value of exceptions costs for awards without an LMIC Co-I is less than half of that with an LMIC Co-I (see Figure 5).

⁷ Here defined as a country on the OECD DAC list of ODA recipients as of 2023: <u>https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/daclist.htm</u>



5 Exceptions cost comparison across LMIC and non-LMIC countries

If we take all costs tagged as 'exceptions' on international Co-I awards as representing the funding flowing to the international Co-I, then the total funding going to international Co-Is amounted to 1.43% of the total value of all AHRC responsive mode awards made during the time period. This figure stands at 1.63% for MRC, and 1.73% for ESRC. This suggests that **less than 1.8% of responsive mode budgets are allocated to cover the costs of international Co-Is**.

It is also worth noting that costs which are allocated for the international Co-I are not necessarily in addition to funding which might be requested under other forms of collaboration, most notably if the collaborator is included as a sub-contractor. This was alluded to by some PIs in their survey responses:

This was financially the most suitable arrangement for all parties. They needed funds for postdocs. Contractor would have been too expensive.

Institutions abroad typically expect to have the costs of their staff covered, hence the intl. co-I set-up was the closest we could find to what they expected. We did in one case end up with a contracting situation, but that was less than ideal due to its complexity.

Other sources of support

Within the survey responses, 63% of Co-Is indicated that they had another source of support for their involvement in the project funded through the international Co-I award. There was again a notable distinction in responses between Co-Is based in LMICs and those from higher income countries. Amongst the latter, 75% had another source of support, with their institution being the most common source (63%), followed by a funder in their country (15%) (see Figure 6). On the other hand, over 40% of LMIC Co-Is had no other source of support.

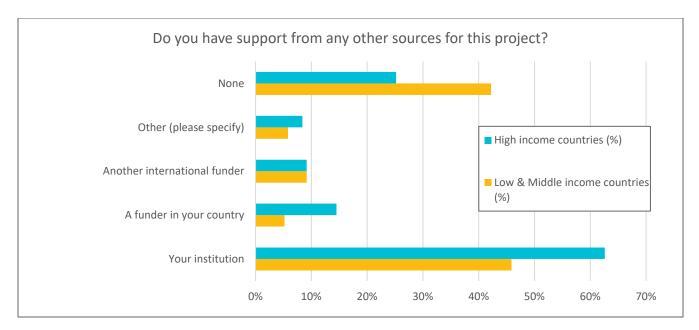


Figure 6 Other sources of support

Whilst PIs were asked to estimate the value of the in-kind and monetary contributions made by the international Co-I to the project, the data submitted was too messy to allow for robust analysis (for scale, 65% of PIs indicated at least some level of contribution in response to this question). However, it is possible to use this data to gain insights into the types of contributions made by Co-Is. The most common contribution cited was the **time the Co-I dedicated to the project which was either not funded through the UKRI award at all, or only partially funded** (59 responses referenced Co-I's time as an in-kind contribution):

My Co-I has foregone her time dedication being charged to the grant - she is working entirely for free on my grant. I cannot estimate the figure due to confidentiality reasons, but this would have been a small percentage of an Australian professorial salary. We will not pay any estates costs in [city], where we will stage some of our events.

[Co-I]'s time was contributed. Access to facilities at [University in South Africa] and [Hospital]. Contributions of time from other research personnel not funded by the award (e.g., PhD students)

Additional research time from their home institution (0.2 funded by UKRI, 0.1 from [university])

International Co-I in mainland Europe co-funded the project work. International Co-I in the developing countries provided staff time, facilities and some admin support

PIs also alluded to facilities, data, and other support provided in-kind or funded through other sources:

Access to facilities for the study, access to laboratory and data services and data archiving. Estimated value is £300,000 for one international Co-I and £200,000 or the other international Co-I.

Co-Is time, working, rehearsal & performance spaces, tech support for 3-day symposium) and live performance events (3 x 2 internal)

very difficult to say but access to facilities/populations if fully costed would likely have value of 100s of thousands of pounds

Enabling excellent research

Views from Research Organisations

One of the key rationales for adopting an international Co-I policy is to support research excellence by enabling UK researchers to work with the best in their fields, wherever they may be based in the world. This was supported by comments made in the Research Organisation (RO) workshop:

The international Co-I policy supports mutually beneficial knowledge exchange, and provides UK researchers with access to key resources, facilities and expertise:

Allows knowledge exchange and capacity building on both sides

Access to facilities, populations and datasets that we wouldn't have access to otherwise

Unique international knowledge and experience brought into the system

One participant suggested that the inclusion of international Co-Is can improve the quality of a research application and hence its chances of being funded:

Collaborate to bring in expertise that makes the application more competitive - thereby benefiting both organisations

The international expertise brought in through the international Co-I can lead to improved research outcomes:

Allows us to collaborate with the best researchers around the world - leading to globally leading research outputs

Helps sustain collaborations and also great for co-authored publications and citations to indicate wider value of research to institution

Enhances the reach/impact of the research

In mid to long term helps with HEI rankings and is part of research effort to support promotion of education offer

Direct link between these awards and international co-authored publications for UK contribution to global knowledge base

Supports impact where it's needed globally

Whilst the group of respondents we spoke to in the RO workshop were perhaps pre-disposed towards supporting global collaboration,⁸ it is worth noting that similar views were expressed in a review of Open Call Research commissioned by ESRC in 2022. This asked about the international Co-I policy in a much broader context with similar responses:

⁸ Workshop participants were recruited via Universities UK international's Global Research & Innovation Network (GRIN). Whilst they represented a range of different roles, the majority had some level of international or global focus within their remit. They were, however, asked to represent the wider views of their Research Organisation, rather than their own personal views, and many of them had consulted with colleagues in advance.

Generally, helps you find the best people to work with, irrespective of where they are; you expand the pool

We are able to do research with our target impact area. It increases our ability to achieve impacts in low and middle-income countries, which is our mission statement, our mission focus

Views from UK PIs

Almost all (97%) of UK PIs said that the unique knowledge / expertise of their collaborator was a very or critically important factor in selecting them as a Co-I. In addition, access to contacts, networks and markets (77%) and access to facilities or infrastructure required for the projects (66%) also ranked highly (see Figure 7).

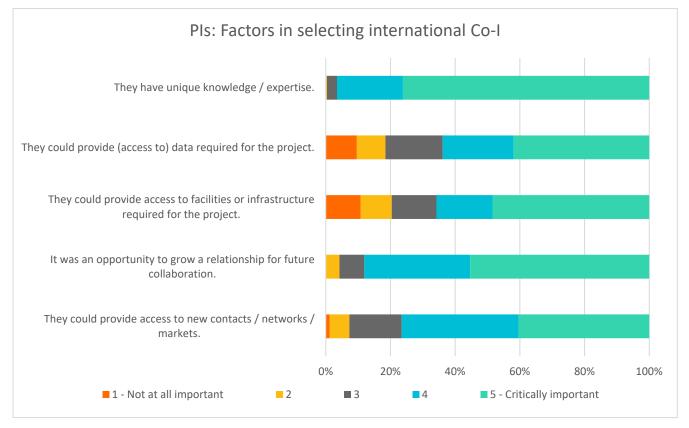


Figure 7 Factors in selecting international Co-I

Likewise, of those PIs who had started reporting outcomes via ResearchFish, 97% said that their outcomes would have been somewhat (20%) or significantly (77%) different without their international Co-I. When asked to justify their response, the most common reason given was that the Co-I was essential to the project and that it could not have happened (at all / in the same way / at the same scale) without them:

Several key papers arose from the project showing important differences between the organisation of maternity care in the UK and NL, and the views and experiences of service users in each of these countries. This would not have been possible without the NL team input.

Project literally couldn't have happened without them.

The outcomes are not yet really reflected well in ResearchFish, but we have generated an incredible wealth of data as part of this collaboration and grant funding and this will be used for years to come to better understand malaria transmission biology. The project simply would not have been possible without receiving joint funding.

The whole study is set outside the UK so all outputs depend on the international Co-Is, including the study site/location, recruitment and follow-up of participants, intervention delivery, laboratory analysis and data management.

PIs also pointed to the role of their international Co-Is in enabling impacts through:

• Enabling or contributing to data collection

Without the International Co-I, we would have struggled to access relevant communities and networks, and to collect data.

• Contributing unique expertise

The international Co-I was vital to the project conceptually because he provided the computerscience and imaging expertise.

• Being responsible for local, practical arrangements

The role of the international co-I was critical - not just because of expertise, but also because during the Covid pandemic travel was impossible so he was relied on to be able to assist in organising staffing in the other country.

• Leveraging their networks, on-the-ground engagement and by providing local legitimacy

They were instrumental in delivering impact through local contacts and roles, i.e., links with ministries of health, other policy makers, and committees responsible for guidance and practice.

The international co-Is are essential in delivering impact in-country. Fundamentally, as a permanent presence in-country, e.g., who may be providing government agencies and others with graduates, they have social capital and relationships with stakeholders that an overseas university working on a fixed-term project just does not have.

Some PIs acknowledge that the outputs might have happened regardless of the international Co-I but would have been of lower quality:

Our international Co-Is appear as co-authors on publications. In some cases, the publications would have happened without them, but were enhanced by their contribution. In others they would not, since the datasets on which they were based were collected in their Institutions.

I have produced an important piece of research jointly with my Co-I that is currently under review for publication. This will be an important component of the grant outputs and would have materialised at a much smaller scale without my Co-I's inputs.

The access to human tissues will enable us to publish in higher profile journals and have more impact.

ResearchFish outputs

The awards under consideration are less than five years old, making it challenging to truly understand their research outputs and impacts. That said, 155 of the international Co-I awards funded through responsive mode calls in the last five years have started reporting some outputs through ResearchFish, which are summarised here.

In total, these 155 awards have reported **1,824 publications** (average of 12 per award). When we consider average number of publications per award and control for the start date of the award (see Figure 8), there seems to be an initial suggestion that these internationally collaborative projects may reach higher levels of productivity, but may also take longer to produce those outputs. However, more robust analysis considering a longer timeframe, and accounting for differences in award types (including across councils), would be needed to test this hypothesis.

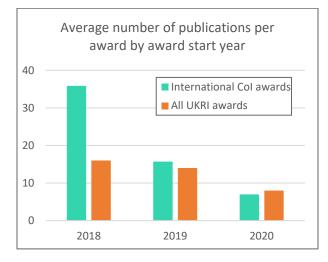


Figure 8 Publications per award

There are also **three examples of patents / trademarks produced** by international Co-I awards. This number is too low for meaningful analysis.

There are notable limitations with the outputs we can track through ResearchFish, especially in relation to the three councils under investigation. For example, within the arts and humanities many projects will generate a notable amount (or even all) of their outcomes in a non-publication category. Likewise, awards in the global health space, for example, may not be aiming for patents or trademarks, but rather for open knowledge sharing in order to advance policy change and enable health and social impacts. Within the PI survey, respondents referenced a number of alternative outputs, including dissemination activities and non-publication artefacts produced in collaboration with their international Co-Is, for example:

We produced several creative artefacts from the network, and at least a third of these could not have been produced without the international Co-Is.

We wrote press releases, organised a press breakfast and a stakeholder dissemination event together, for which the contacts and local knowledge of the Co-I was essential.

The international co-Is also helped to co-ordinate and facilitate impact and engagement events following the research, including film-screenings with participants and stakeholders.

Key impact-generating events and activities, including reports, policy briefings and films, could not have happened without them.

We had a team from [University in Sweden] involved. Initially they were there to offer theoretical expertise but it turned out we needed them to develop the virtual reality program we had paid for. We couldn't have afforded to go back to the private company we were working with for this extra work.

Supporting research that otherwise could not happen

The majority of PI and Co-I respondents believe that the collaboration could not have happened, or would have been diminished, without the international Co-I mechanism. This is particularly pronounced for PIs, with their international Co-Is – especially those from DAC-list countries – slightly more positive that they would have been involved in the project regardless of their role as an international Co-I on a UKRI award. In many instances, this was because these Co-Is saw their role as an essential underpinning to a project which could not have happened without their contribution.

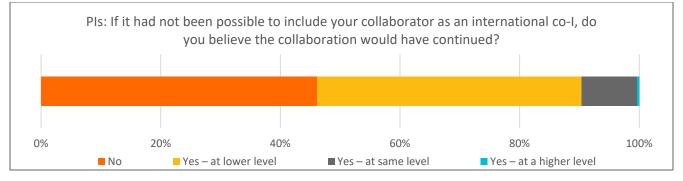


Figure 9 PI views on collaboration in absence of international Co-I award

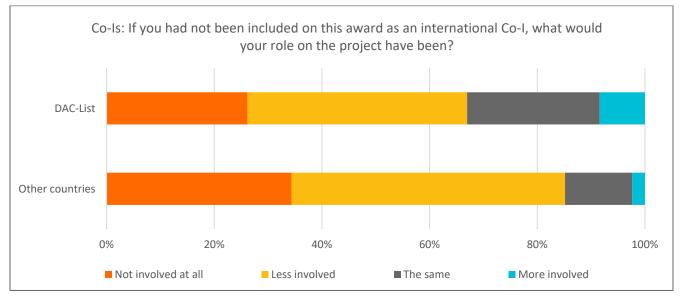


Figure 10 Co-I views on collaboration in absence of international Co-I award

PIs suggested that the international Co-I mechanism was important in ensuring that their collaborators were invested in the project:

So that we were equally invested in the research itself, the implementation of some of the findings and the setting up of collaborations between students in different institutions over a period of time.

It felt important to us both that we had equal stakes and status in the project with appropriate funding for activities, although her not getting any funding for her time is an issue.

This project was designed - and could only have been undertaken - as an international collaboration led by a set of academic peers. It is not a UK idea "sold" to others, but grew out of African commitments, in particular, to their perceived priorities. Once the pandemic hit, the ability of the excellent team leads to continue to lead and work with their teams, and share work online, despite huge pandemic pressures and loss (including my lengthy absence with Covid19 in 2020) was the essential factor that has allowed us to meet the project objectives.

Co-Is cited a number of pressures which would have diminished their role in the absence of this mechanism. This included being unable to dedicate time to the project in light of other priorities, funding pressures and the legitimacy provided by the Co-I status:

I don't think I'd have been able to commit the time to the project without a formal arrangement (and funding) in place.

There wouldn't have been funds to conduct the experiments required to fulfil the aims of the grant. As an [early/mid career researcher] I am unable to carve out time from other projects to dedicate to this project unless there are allocated funds for my time.

Research time is precious and having a co-I status allows some control in the collaboration.

Because I would not have same authority and say on how the research was designed and executed. I felt I owned the research, not just a research assistant. I was ultimately responsible for the Nigeria side of the work and that has strengthened my research management skills and gave me status in my university.

A small number of international Co-Is suggested that they would have been more involved without the international Co-I award. In justifying this, a number of respondents suggested that they would have taken more of a leading role without a UK PI, others pointed to their (existing) integral role within the project. One respondent alluded to limitations within the international Co-I role.

Because of the UK PI, my life was easy. If this collaboration was not there, I might had to do many other things myself and had to get more involved.

This is a tricky question; I am assuming I would have been receiving funding from elsewhere to lead the project by myself, or as in the later iterations of the [programme] grants, have been the PI to start with. The project would not have been implemented without my involvement.

The research was built on my PhD finding, meaning that I am the principal expert in this study. My experience, my position ad my commitments were critical to get Malian stakeholders support, mainly governmental organizations.

There were limitations as to what my involvement could be as international Co-I.

UKRI's approach in a global context

Comparator Funders

The international Co-I policy adopted by AHRC, ESRC and MRC is not unique in a global funding context. Examples of comparable policies include:

• NWO (Netherlands): Money Follows Cooperation (MFC)

The <u>MFC mechanism</u> applies to most NWO funding instruments with the exception of the NWO Talent Programme, large-scale infrastructure and some bi- or multi-lateral programmes. It allows for **up to 50%** of the total requested budget to be used for the MFC element. Dutch applicants must demonstrate that the relevant expertise is not available in the Netherlands (unless NWO has a reciprocal agreement in place with a funder in the country of collaboration).

• SNSF (Switzerland): International Co-I policy

<u>SNSF's international Co-I policy</u> is currently limited a small set of countries with reciprocal schemes (Denmark, Norway, Sweden, Netherlands, UK). The UK scheme has been running since 2013, and is restricted to AHRC and ESRC disciplines. Costs for UK researchers are limited to 30% in line with AHRC/ESRC policies (this is 50% for other countries). A recent change to SNSF's project funding regulations now allows international applicants to be included even where there is no reciprocal agreement, provided there are a minimum of two Swiss applicants, and with a funding cap of 20% for the international Co-I element.

In the submission periods between April 2018 and October 2022 (5 years), SNSF funded **11 awards** with UK Co-Is.

In 2018/19-2022/23, ESRC and AHRC funded **5 responsive mode awards** and **9 other awards** with Swiss Co-Is.

• RCN (Norway): Money Follows Cooperation (MFC)

The <u>RCN MFC</u> model allows researchers from eligible countries to be included within applications to national funding programmes. AHRC, ESRC, EPSRC, MRC and NERC agreed a reciprocal international Co-I agreement with the Research Council of Norway in November 2022. Up to 50% of an application to RCN can be allocated to a UK Co-I; for Norwegian Co-Is on UKRI applications, the usual 30% cap applies. RCN has similar agreements in place with Switzerland, the Netherlands, South Korea, Japan and Finland.

• ARC (Australia)

All ARC funding schemes are <u>open to international researchers</u>, provided they apply through an eligible Australian institute. Notably, this includes allowing overseas researchers to apply for funding as Partner Investigators on Discovery Projects.

• NIH (United States)

In line with many medical research funders globally, the National Institutes of Health in the US <u>fund</u> <u>researchers both inside and outside the US</u>, eligibility is dependent on the focus of the institute and programme.

Whilst this was not a specific question in the PI survey, two respondents gave examples of having **leveraged funding from overseas funding agencies** as a result of their international Co-I award:

Our collaborations with Scandinavian investigators have already led to further collaborations (collaboration on a grant funded by the Norwegian government) and are opening opportunities for EU funding.

I am now a CI on a recently awarded project by the Canadian Social Sciences and Humanities Research Council, which would not have happened had I not collaborated with my CI.

Enhancing the UK and UKRI's reputation globally

In this global context, the promotion of an international Co-I policy, alongside other mechanisms for supporting international collaboration, can be seen as a way of demonstrating that UKRI is a globally facing organisation, and, more broadly, of enhancing the UK's global reputation. This was cited by Research Organisations as one of the benefits of the mechanism:

If we want to be portrayed as open to the world we need mechanisms like this to encourage global collaboration to happen. And where and what should follow the science (in its broadest meaning)

Improves perception of UK R&D base as open to global collaboration in a more comprehensive/fundamental way - cross-cutting not just thematic

At a time when most countries seem to be becoming more nationally focused and introverted, these awards help make the case for looking outwards

When Co-Is were asked how likely they were to collaborate with UK researchers (outside of the PI on this project) in future, over 80% gave a positive response. A number of Co-Is used free text boxes to commend UKRI's approach.

I am especially impressed with the support given to humanities research in the UK. Although there is abundant funding for large-scale, collaborative research in the natural and social sciences in the US, there are few models for the kind of collaborative work in the humanities made possible by the UKRI grant. We could learn a lot from the UK system

I would like to thank UKRI for encouraging UK institutions to collaborate with partners in the global south. I feel that such programs benefit more to the global south and I hope these shall be strengthened. There is a lot of capacity, knowledge and skill that we (in the global south) could learn from our UK partners through such collaborative research project works.

A small minority cited more negative impressions of UKRI and the UK, linked to experiences around funding cuts to Official Development Assistance (ODA) grants and, in one instance, a very negative personal experience with the UK PI.

UKRI has been seriously negatively affected by Brexit, as has the standing of researchers in the country. Cutting funding for [Global Challenge Research Fund] projects was super super-damaging to both research and to the perception of the UK as a reliable place for collaboration and funding. It really tanked the image of GCRF and UKRI. I am very careful now about collaborating with UK researchers and when thinking of being involved in applications for UK funding.

Unfortunately, however, the P I has continuously underestimated and humiliated my collaboration as a C I and that of the same Institute to which I belong [...] The P I came into conflict with all the local cultural institutions. [...] Instead, the collaboration with the other C I and with the two research fellows was very fruitful and there was a real scientific exchange with them that greatly enriched me; unfortunately, it did not lead to the desired results due to the behaviour of the P I. which nullified the potential of the project shared and generously financed by you [...] My perception of the UK's research and innovation system for now is completely negative, given the terrifying experience in this award.

International Co-I in the context of other collaboration mechanisms

Councils see the international Co-I mechanism as a **fundamental underpinning of their support for international collaboration, complimentary to other mechanisms**. It provides an open option for investigatorled collaboration.

This is complemented by directed and bi-/multi-lateral opportunities which support more balanced and more substantial collaborations, and provide more directed funding for new and emerging collaboration in areas where there might be gaps.

Research Organisations value the **flexibility of the mechanism**, and saw it as a way of **sustaining relationships** in the absence of directed funding:

Allows the researchers more choice to work with who they want to rather than who they'd need to

[The International Science Partnerships Fund (ISPF)] is very targeted (countries / disciplines) - I-Col provides mechanism for academics whose research does not fit into those limited areas

Helps us to keep existing international partners 'warm' engaged between specific opportunities (but only in certain discipline areas)

They emphasised the need for **international Co-I to work alongside other mechanisms** to support a diversity of collaborations and career stages, including:

• Smaller, pump-priming or travel grants

Grants supporting travel of individuals to work in country can boost partnership building and impact on the ground and knowledge exchange

• More directed opportunities which provide more substantial or better directed funding

Easier to start new collaborations with partners in countries where there is a bilateral agreement (and therefore dedicated funding)

Lead agency agreements⁹ - can bid for more substantial funding

⁹ Lead agency agreements are bilateral agreements between two funders who agree to co-fund collaborative projects between their national researchers. The 'lead agency' manages the peer review process, with the agencies taking a joint funding decision and each funding their respective national researchers.

international funding calls that are [Official Development Assistance (ODA)] allow better equity of resources and co-lead arrangements - they also have different selection criteria which can be preferable than responsive mode

Within the survey, multiple PIs gave examples of having **international project partners and / or contractors on their projects alongside international Co-Is**. In general, there seemed to be a distinction between the Co-I role (academic co-leadership) and a project partner or contractor (industrial or practitioner).

We have a project partner/subcontractor included in this award: we are running workshops with [partner], which constitute the public-facing aspects of the project. But this project partner/subcontractor role does not bring with it scholarly expertise.

However, please note we also had additional international partners who were not Co-Is due to practical issues (time to get them set up as Co-I would have meant we missed the call deadline). Overall we tried to work with them on a comparable level to the Co-I, but it was not so successful and they were not integrated in the team as effectively

We work with a group of additional partners whose time is not funded. Again, their specific professional expertise and experience are critical to project success.

Having both international Co-Is and partners was a critical part of the project, ensuring that while the Co-Is focused on academic development of the project, partners were able to deliver on other dimensions.

Our project includes a combination of in-country Co-Is (for their academic expertise) and nonacademic/practitioner Project Partners (for their practitioner expertise).

Equitable partnerships

Views from Research Organisations

Research Organisations highlighted international Co-I as a mechanism to support equitable partnerships by allowing overseas collaborators to be included as 'equals' on an application. Funding for international partners was seen as an important element of this.

It is essential to work with LMIC partners when conducting research on issues specific to LMICs, the relationships we build through these projects allow us to work together to respond to urgent issues e.g. research on COVID-19

Equitable partnership – there is wide recognition that there are structural power imbalances in funding structures and being able to include international co-investigators helps reduce these structural barriers to equitable partnership.

breaks down barriers to meaningful, equitable collaboration by funding the time of the international collaboration partner - In the context of decolonising research and equitable partnerships, the international Co-I option is essential to recognise the contribution of research partners based in low resource settings.

International Co-I was also cited as a mechanism for UK researchers to work with collaborators in LMIC without a development lens.

It's really important not to assume that every collaboration with LMICs should be funded through a development framing - this perpetuates a neo-colonial worldview and shuts off access to global expertise and talent and comparative or two-way research programmes. UKRI can take a leading role and positive soft power position for the UK by supporting a policy that opens up opportunities for innovative research collaborations and projects across the disciplinary spectrum.

Views from PIs

PIs cited similar themes when asked about why they chose the international Co-I status over an alternative form of collaborator, e.g. contractor or project partner. Key themes included:

• This was an appropriate recognition of the collaborator's role

We designed the project together and our IP was combined. For the research to be meaningful, the management/ oversight role needed to be meaningful, too. The CI role reflected this more than any other. Also - I would have been embarrassed with any lesser role.

• Equitable partnerships

There are significant colonial legacies of doing research with global south partners where research looks more like mining than collaboration. It is important that work relationships are balanced in all aspects – intellectual and economic. Access to and control of funding is one of the key indicators of power that exemplifies how geopolitics affects the conceptualisation and management of a project. Collaboration based on both researchers being acknowledged as full investigators is crucial if we are to challenge and change the colonial legacies that still dominate research cultures. It is ethical, dignified and suggests real academic integrity and honesty.

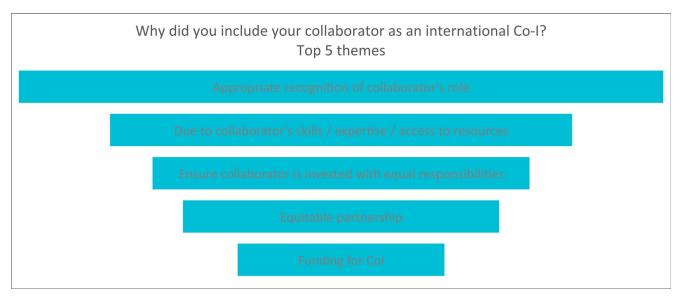


Figure 11 Top 5 reasons for including collaborator as and international Co-I

Funding cap as a barrier to equitable partnerships

In general, councils see the 30% funding caps as striking the right balance between allowing meaningful international collaborations, whilst maintaining a healthy level of support for the UK research base. In a global context, the cap is lower than NWO (Netherlands)'s 50% cap but higher than SNSF (Switzerland)'s 20% cap. Both SNSF and RCN (Norway) allow a higher cap of 50% where there is a reciprocal agreement in place.

All three councils which operate the policy did point to examples where there is a need for flexibility. Notably, on Official Development Assistance (ODA) programmes and some other collaborations with Low and Middle Income Countries (LMICs), the cap could be raised to 50% or lifted entirely (indeed, within MRC, it is standard for the cap to be 100% when the international Co-I is based in an LMIC).

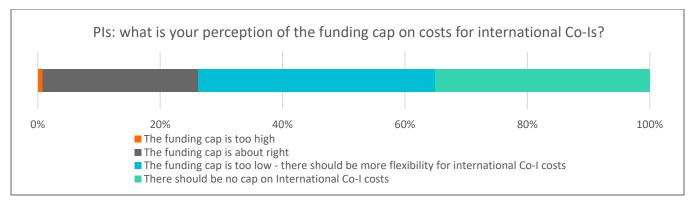
Research Organisations highlighted the funding cap as a potential limitation to equitable partnerships:

Limit of 30% budget on ESRC grants to international cols is challenging from an equitable partnership perspective when working with partners in low and middle income countries

Funding cap can be an issue, especially where partners are totally reliant on project funding to be able to participate

Notably, 42% of Co-Is from LMICs indicated that they no other sources of support for the project, suggesting that they are wholly reliant on UKRI funding to support their participation.

91% of Co-Is and 84% of PIs said that the award had somewhat or completely addressed financial barriers to collaboration. When asked about the funding cap specifically, a majority of respondents suggested it should be lifted; however, it is notable that a quarter thought the cap was about right (see Figure 12).





Administrative barriers to equitable partnerships

Due diligence processes were seen as another potential barrier to equitable partnerships. By requiring overseas Co-Is to report to, and justify themselves, to their UK collaborators, rather than directly to the funder, it can exacerbate unhelpful inequalities in partnerships with LMICs. This was flagged by Research Organisations:

Due diligence can be problematic and negatively affect relationships with partners

Likewise, Co-Is reflected on the challenge that administrative activities posed for their work, including sometimes challenges in working with the UK Research Organisation.

Because I spent much more time than initially planned on administrative activities. And I had to face a very difficult [situation] with the delay (9 months!) of the initial payment, a situation that demanded much more efforts to be overcome.

Collaborations between UK and international institutions is so important, but the process could be much enhanced if it were simpler for the international co-I to access the funding allotted to them for specific outputs. There is far too much red tape and hoop jumping at present, which would deter me from participating in further funded collaborations with UK colleagues.

We were constantly having to contact university administrators for permission to do our research in case it was outside the remit of the project. This was always a huge worry.

There was also a call from LMIC researchers for UKRI to fund PIs in LMICs to collaborate with UK Co-Is as a way of enabling capacity building and true equitability:¹⁰

I wish UKRI had included in its policy specific conditions and programs in which someone from the Global South could be a PI. Most of us also have the technical capacity and leadership in the knowledge production field. A true collaborative process must at some point address equity and equality in its framework.

UKRI may consider revising its policy to allows African Researchers to also act as PI especially if they lead the conception and design of the study. UK-based PI can act as Co-I. This will be leading to true capacity strengthening in African leadership in science.

¹⁰ This is possible within some UKRI funding opportunities, notably the MRC Applied Global Health Research Board.

Practical considerations

Views from councils

AHRC, ESRC and MRC acknowledged that the processing of international Co-I awards adds a small amount of workload. This includes handling queries around the eligibility of costs and organisations, and checking both of these when applications are received. In line with the UKRI Simpler Better Funding (SBF) principles, ESRC and AHRC have agreed to remove the need for a letter of support from the international Co-I's Head of Department, which will remove one office check; the new budget structure in the Funding Service (TFS) should also make cost eligibility checks easier to perform going forward.

In light of other complicated checks on standard applications, the additional effort required by international Co-I applications is seen as fairly negligible. However, additional requirements from the Trusted Research and Innovation (TRI) policy may create additional workload in future. This will apply to any form of international collaborator; arguably, the additional information collected on international Co-Is relative to other forms of collaborators (for example, project partners) and the due diligence processes that are already in place within Research Organisations around these types of awards, should facilitate accurate reporting and any required TRI checks.

Views from Research Organisations

Research Organisations generally saw this as a straight-forward mechanism to engage with due to the familiarity of both the funder (UKRI) and the funding schemes (standard grant). Some Research Organisations noted that applying through this route was easier than through bilateral schemes (e.g. the AHRC/DFG scheme) which require organisations to navigate two funders' systems and policies, including potential clashes between their respective terms and conditions.

However, the international Co-I mechanism does raise particular challenges in the application process due to complicated guidance, and the need to navigate eligibility issues and systems with overseas partners.

information for call not always that obvious; key information should be put front and centre of the call pages, rather than linking to UKRI policies or handbooks elsewhere

Challenge is the lack of definition of what the international Co_i must bring to the table in terms of the project or funding

The part about salary ineligibility for international co-Is is quite vague, so sometimes causes issues with international Co-Is/research offices.

Need time to sign up for JeS and will need to re-subscribe to TFS [the Funding Service – UKRI's new grants portal]

Within the implementation of awards, due diligence is seen as a particular challenge, although it was acknowledged that this holds true across most international collaborations.

DD is always a challenge, but no more so than for other international collaborations

legal documentation and due diligence checks are difficult to do in multiple languages. It is not appropriate or realistic to expect these will be provided in English, but it's not clear how costs for translation can be recouped *GBP not always accepted by overseas partners – could make it clearer in call documentation that they should include bank foreign exchange transaction fees*

Legal obligations (Modern Slavery, Safeguarding) often have no equivalent in other countries, requiring delicate diplomacy and time to resolve.

Views from PIs

PIs expressed mixed views in relation to applying for and managing an international Co-I award, with respondents being fairly equally split on the question of whether this was more difficult than for an award without an international collaborator. The majority of PIs agreed that it was easy to find information on the international Co-I mechanism and that advice and guidance provided by UKRI / one of the councils during the application process was useful.

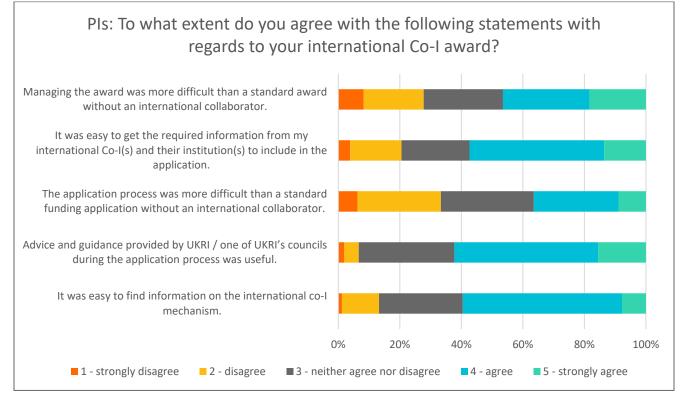


Figure 13 PI views on applying for, and managing, international Co-I award

Harmonisation across councils

There was a high degree of support from Research Organisations for a policy that covers all Research Councils.

It would be great to see this expanded in some way across other UKRI councils

We have academics working in other discipline areas that would love to be able to collaborate via this mechanism

Having the Norway agreement for EPSRC and NERC is ok but our academics don't just want to collaborate with that country

expanding policy would help unis with their need to prioritise international research collaborations (drives talent, high quality outputs, rankings, inward investment)

Some councils offer travel awards but then no next step funding so the collaboration can fall off a cliff

In particular, a lack of harmonisation is seen as a cause of confusion and a barrier to promoting the policy.

It gets confusing that all the RCs don't use the same policy

We have been trying to promote this pathway as a route to keeping international partnership going between other funding sources but not always possible as depends on discipline split

There is also confusion about how the policy applies in cross-council calls (e.g. the cross-council responsive mode pilot) and a concern that this may make inter- and multi-disciplinary research (where some disciplines are covered by the policy and others not) more challenging.

having consistency between councils provides a level playing field and supports trans/inter disciplinarity

Differences between councils which do operate the policy are also cited as a challenge:

I find it easier with some councils than others, for example MRC and ESRC but less clear with AHRC. The different approaches by the Councils doesn't help with bilateral agreements, Money Follows Cooperation Agreement etc. Hopefully that will change in the future...

But there was some, limited, acknowledgement that not all STEM researchers are in favour of this approach.

some in STEM disagree that they need international COIs and are worried that it takes ££ out of UK system

Some academics believe STEM leads to a biasing toward industrialised and more developed countries (many subject areas require complex infrastructures and large-scale investments to be effective) - so this is an argument to protect UK plc rather than considering that diversification of global science base is beneficial for knowledge creation and social impact overall.

At the same time, some STEM researchers who have pivoted to working with LMICs are struggling following cuts to Official Development Assistance (ODA) and don't have a route for funding. This especially affects early and mid-career researchers, with a risk of loss of expertise and networks.

Methodology

This review took place over three months from June-August 2023, and was led by the UKRI International Evaluation and Analysis team. To gather a range of perspectives, the review engaged with a number of stakeholder groups, including council international leads, award holders and their international co-investigators and Research Organisations. For a range of pragmatic reasons, these stakeholders were, for the most part, individuals who had some experience of engaging with the international Co-I policy: the inherent bias this creates needs to be acknowledged when considering the results of the review.

Analysis of applications and awards data

The first element of the review looked at data from across AHRC, ESRC and MRC to understand historic international Co-I application and award patterns. For the purpose of this review, it was decided to time-bound this to the last five full financial years (that is, awards with a decision date between April 2018 and March 2023).

As international Co-I applications are submitted through funding calls alongside standard (that is noninternational Co-I) applications, and there is currently no set classification for these awards, ¹¹ the only way of identifying such awards was by the location of the co-investigator as per their Je-S record. This will introduce some errors, including:

- False positives where the Co-I has moved abroad after the application was submitted
- False negatives where the international Co-I has moved to the UK after the application was submitted
- False positives where an international Co-I is included in an application but was not supported through the international Co-I policy (e.g. where their funding came through a bilateral call)

The choice of a fairly tight timeframe of more recent awards was intended to minimise the first two – although there is likely to be a small margin of error in any case; the latter was reduced (although not eliminated entirely) by excluding calls which council contacts identified as bilateral from the scope of this study and by focusing the data analysis in the <u>first section above</u> on responsive mode calls.

The analysis considered application and award rates, relative to standard applications, on a call basis. It also looked at the 'exceptions' cost category to understand funding flowing to the international Co-I (international Co-I costs are paid at 100% and therefore classed as exceptions), as well as outcomes reported by these awards in ResearchFish.

Survey of PIs and their international Co-Is

In order to gain insight into the value of the policy for UK researchers, how it is used, and the contribution of international Co-Is to UK research and innovation, we sent out two parallel surveys to award holders (Principal Investigators – PIs) identified through the above exercise and the overseas co-investigators (Co-Is) included in these awards. The survey was administered through Citizen Space and the survey questions are available on request.

Both surveys were sent out in early July and closed at the end of the month. Invites were issued to a total of 769 PIs, and 2,352 Co-Is of whom 262 (34%) and 458 (19%) respectively responded. For an unsolicited survey invite,

¹¹ Note that in TFS there is a 'Project co-Lead (International)' job role which should make identifying international coinvestigators / co-leads easier going forward.

issued during the month of July, these response rates are respectable and should give us confidence that the responses are reasonably reflective of the population of award holders (although not the wider R&I community).

The respondents to both surveys were fairly evenly split across the three councils (see table below). Whilst the survey cohort is wider than the responsive mode cohort used for the data analysis section of this report, there was reasonable representation of responsive mode award holders (40% and 22%).

	PI Survey					
	AHRC	ESRC	MRC	Unknown	Grand Total	
Responsive	50	31	25		106	
Covid Open	3	5	1		9	
Other	46	45	53		144	
Unknown			1	2	3	
Grand Total	99	81	80	2	262	
	Co-I Survey					
	AHRC	ESRC	MRC	Unknown	Grand Total	
Responsive Mode	47	29	25		101	
Covid Open Call		5			5	
Other	70	95	109		274	
Unknown	11	14	31	22	78	
			165	22	458	

UUKi Workshop with Research Organisations

We collaborated with Universities UK international (UUKi) to host a workshop in order to gather views from Research Organisations on the international Co-I policy.

From the data identified above, we identified the top 20 most active UK Research Organisations (ROs) in terms of international Co-I awards. UUKi then approached their contacts at these universities to invite them to participate in a 1.5 hour virtual workshop. Ten ROs were able to participate, including universities from two devolved nations and representing multiple geographic regions, as well as different sizes and disciplinary specialities.

The workshop aimed to gather the views of participants on:

- (positive and negative) experiences of applying for, and administering international Co-I awards;
- the (expected and realised) benefits this policy can bring to the RO and its researchers;
- and how this policy is valued in relation to other mechanisms for supporting international collaboration.

A Miro board was used to capture inputs, alongside a recording of the meeting.

Semi-structured interviews with AHRC, ESRC and MRC

We conducted semi-structured interviews with the three councils which currently operate the policy in order to understand the rationale behind the policy and how it fits into the council's wider strategy, as well as gain insight into the practical impact of implementing the policy. The interview guide is available on request.

Other sources of evidence

We sought to build on existing sources of evidence in this review, including internal reviews of the policy, previous evidence gathered by councils and engagement with overseas funders who operate comparator policies.