technopolis group

June 2025

International Science Partnerships Fund (ISPF)

Baseline report

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Executive Summary

Technopolis were commissioned by the UK Department for Science, Innovation and Technology (DSIT) to develop the evaluation framework and baseline evaluation for the **International Science Partnerships Fund (ISPF).**

ISPF is an international science, research, technology and innovation (SRTI) initiative, funded and managed by DSIT. It was created in 2022 to support international SRTI partnerships between the UK and other countries, and brings together DSIT international funding – Official Development Assistance (ODA) and non-ODA – under a single structure[1]. It is delivered by a consortium of UK research and innovation bodies (ISPF Partner Organisations (POs)), who work with international partners in the design, funding and delivery of ISPF activities.

The Evaluation Framework for ISPF was completed during the first phase of the study and has recently been published (Technopolis, March 2025)[2].

The current report focuses on the **baseline evaluation** and incorporates three main elements:

- An updated **portfolio analysis**. This is based on a desk-based analysis of the latest available programme data collected by DSIT, as well as additional input from POs.
- An assessment of the **baseline position** for indicators listed in the evaluation framework (where these are non-zero). This is based on desk-based analysis and bibliometrics, as well as consultations exercises with POs (via written request) and ISPF programme participants / award holders (via online survey).
- A **piloting of the Value for Money rubric** for five sub-dimensions (that are most relevant at this stage of the Fund) and a subset of 10 programmes. This is based on desk-research, online interviews with programme leads, and analysis of programme data collected by DSIT, as well as evaluator assessment and scoring of the evidence obtained.

The main findings from each of these elements is set out below.

[1] ISPF ODA funding is primarily for collaboration with low- and middle-income countries, while non-ODA funding relates to collaboration with high-income countries.

[2] https://www.gov.uk/government/publications/international-science-partnerships-fund-evaluation-framework

Main findings

Portfolio analysis

The baseline portfolio analysis provides insight into the shape and focus of the Fund. It focuses on **the "current" portfolio of live and underway ISPF programmes, as at December 2024** (i.e. those programmes with spend reported up to this point). This portfolio includes:

Total		ODA	Non-ODA
128	Programmes	42	86
854	Awards made	513	341
	Expenditure so far*	£80.6m	£62.6m

* Expenditure reported at programme or award level (excluding delivery costs) as at December 2024. ODA spend is reported on a cash accounting basis, while non-ODA spend follows accruals accounting.

The analysis reveals that the current ISPF portfolio is:

- **Addressing all of ISPF's four target thematic areas**, which relate to major challenges and supporting the talent necessary to address these[3]. Coverage is not evenly spread, however, with the 'healthy people, animals & plants' theme addressed by a smaller proportion of the portfolio (20% of current programmes) than the other three areas; 'resilient planet' (50%), 'Transformative Technologies' (41%) and 'Tomorrow's Talent' (37%)[4].
- **Supporting a broad range of different types of activities.** International collaborative academic research is a feature of the majority of current programmes (71%), and the *main* activity type for nearly half (45%). However, all seven other types of activity defined for the evaluation are each found in at least 10% of programmes. This includes international collaborative business-led RD&D (which one might expect to have a stronger innovation / commercial focus), which is a feature of 33% of programmes, and the main activity of 15%.
- **Well aligned with key policy priorities that have emerged since the Fund was launched.** More than one-third (35%) of the current ISPF portfolio of programmes is relevant to one or more of the UK's current critical technologies[5], with the highest number relating to AI. Over half (55%) of current programmes are also relevant one or more of the eight growth-driving sectors[6] (digital & technologies, clean energy, and life sciences are the most common).

The current data does, however, indicate that there is a risk of underspend during the initial 3-year spending review (SR) period. It has taken time to get programmes underway, and the scale and pace of activity has increased significantly in recent months. However, at December 2024 (3 months before the end of the initial SR period), £80.6m of ODA programme spend had been reported so far, with £42.3m forecast to be spent in the remaining quarter, while £62.6m of non-ODA spend had been reported so far, with £23m forecast for the remaining period.

[3] Further details on ISPF themes available here: https://www.gov.uk/government/publications/international-science-partnerships-fund-ispf/international-science-partnerships-fund-ispf.

[4] Programmes can be tagged against multiple themes.

[5] Critical technologies identified within the DSIT Science and Technology Framework (April 2025): Artificial Intelligence, Engineering biology, Advanced connectivity technologies (formerly called future telecommunications), Semiconductors, and Quantum technologies.

[6] Growth-driving sectors identified in The UK's Modern Industrial Strategy (June 2025): Advanced manufacturing, Clean energy industries, Creative industries, Defence, Digital & technologies, Financial services, Life sciences, and Professional & business services

Baseline position (and progress so far)

The ISPF Evaluation Framework identified 9 output and outcome indicators with a non-zero baseline to be captured at this stage (out of a total of 55). These baseline positions provide a comparison point to track ISPF programmes and projects over time, but have limited evaluative value at this stage. However, for s some indicators it was suitable to also capture progress so far since the baseline (i.e. since the point of application). An online survey of ISPF grant / award holders was undertaken (with 679 respondents) to capture baseline positions, as well as explore early progress. The results from this survey demonstrated:

- **Good alignment with motivations**. Participants demonstrate motivations for involvement that are well aligned with Fund objectives, with access to funding (75%), advancing research interests (59%), and contributing to global challenges (67%) as primary drivers. There is however a lower result when it comes to accessing resources (talent or infrastructure) not available nationally (36% and 24% of respondents reported that these were critical drivers respectively). There is a stronger articulation of the need and value of international collaboration at the programme level (demonstrated in the VfM assessment).
- **Strong early progress across multiple indicators.** The baseline assessment reveals encouraging signs of ISPF's early contribution across nine key indicators.
- **Substantial knowledge and skills development.** Researchers already show (since application) marked improvements in understanding across critical areas - from an average of 6.5 to 8.0 (on a scale from 1-very low to 10-very high) in terms of user needs, 7.3 to 8.5 in terms of research methods, and 6.9 to 8.4 for enhanced capabilities in leading international collaborative research. This indicates strong capacity building outputs.
- **Notable innovation advancement.** Despite the early stage of programmes, significant progress is also evident in technology readiness levels (TRL), which measure the technical maturity from basic research through to operational deployment. Over half of participants providing a response reported advancement of one or more TRL, and 36% an increase of two or more levels. This signals that ISPF is being effective in supporting translational research and innovation. Data needs to be taken with caution, however, as we identified some inconsistencies in the reporting of initial TRL by participants.

Value for Money assessment

The ISPF Evaluation Framework presents a Value for Money rubric to assess value across four main dimensions (Economy, Efficiency, Effectiveness and Equity) and 25 sub-dimensions. At the baseline we have piloted the Economy component (where the sub-dimensions are most appropriate for assessment at this early stage) across a sample of 10 ISPF programmes.

This VfM pilot assessment has demonstrated:

- **Strong portfolio performance on relevance and alignment.** ISPF exceeds minimum expectations on four of the five sub-dimensions, with particularly strong performance in strengthening R&I capabilities (an aggregate score of 3.4 on a scale from 1-poor to 4-excellent), with ODA programmes scoring particularly highly on this dimension (3.8). Average scores are also good-to-excellent in relation to developing strategic partnerships (3.1) and deepening SRTI quality through international collaboration (3.3).

- **An effective approach to addressing shared challenges.** Programmes demonstrate good alignment with ISPF themes and show evidence of joint problem definition with international partners, though this varies between 'excellent' programmes that involve full co-creation and 'adequate' programmes that have more limited partner input to design.
- **Co-funding is currently an area of weakness.** Programmes showed poor performance on leveraging international co-funding (aggregate score of 1.5), with most programmes unable to mobilise partner contributions in line with Fund expectations. Evidence from VfM case studies indicates that this partly reflects structural challenges such as funding restrictions, timeline mismatches, and insufficient time for partnership development.

As such, the pilot exercise has shown that ISPF is laying good foundations for achieving value for money. A more comprehensive assessment (covering all VfM dimensions) will be undertaken at a later stage, once all criteria can be assessed.

Enablers and barriers

The evidence collected for the VfM case studies has enabled some initial reflections on the enablers and barriers in the initial implementation of ISPF programmes and activities:

- **Pre-existing relationships are crucial success factors**. The evidence strongly indicates that programmes building on established partnerships achieve better outcomes in terms of coordination, co-funding, and strategic alignment. However, newer partnerships can also succeed with adequate pump-priming and relationship-building time, and can lay the groundwork to become the established partnerships of the future.
- **Co-design approaches contributed to aligning needs and priorities**. Programmes employing collaborative design processes with international partners demonstrate stronger mutual relevance and good stakeholder buy-in. Going forwards this may also deliver improved prospects for sustainability.
- **Funding uncertainty may undermine partnership sustainability**. The most significant barrier to achieving ISPF's long-term partnership objectives is uncertainty about future funding, which prevents organisations from making meaningful commitments to international partners and risks undermining trust in ongoing collaborations. This may further challenge the improvement of perceptions of the UK as trusted R&I partner.
- **Structural challenges require systematic solutions**. Administrative and structural barriers including ODA funding restrictions, misaligned funding cycles, and visa/mobility constraints represent systemic issues that cannot be fully address by ISPF, but need to be considered when understanding the Fund's effectiveness and impact.

Recommendations

Based on the evidence so far, we suggest the following recommendations for future iterations of ISPF (or similar initiatives):

- **Co-funding**. The VfM assessment shows that co-funding has been low (and lower than anticipated). A Fund that intends to leverage funding from international partners (at least non-ODA partners) may need to make this a requirement, but the process may also need to allow more time for negotiations and agreements to take place.
- **Co-creation**. The VfM case studies have revealed strong examples of co-creation and co-design with international partners, which mean that their perspectives, needs and priorities are embedded from the outset. This could be further encouraged, but these activities are resource intensive, and POs may need funding to support early engagement.

- **Supporting new and existing partnerships**. The VfM case studies show that pre-existing relationships are an enabler of success, in that they facilitate negotiations and coordination. However, new and emerging partnerships could be where the Fund provides more added value. The portfolio should continue to cover both aspects.
- **Directionality**. The portfolio assessment shows that there is not an even distribution of programmes or funding across ISPF themes, partner countries, activity types, critical technologies or industrial strategy sectors. That is not a problem in principle, but if there is a desire to support some sectors or areas specifically (or more evenly) the Fund should consider being more prescriptive in establishing activities in under-represented areas.

Based on the experience of implementing the baseline evaluation, the report also provides recommendations for the next stages of ISPF evaluation, which focus on adjustments and improvements to data collection tools and activities, as well as the continuation of good practices that have been crucial to the successful implementation of the baseline stage.

1 Introduction

1.1 The Fund

The International Science Partnerships Fund (ISPF) is an international science, research, technology and innovation (SRTI) initiative, funded and managed by the UK Department for Science, Innovation and Technology (DSIT). It was created in 2022 to support international SRTI partnerships between the UK and other countries, and brings together DSIT international funding – Official Development Assistance (ODA) and non-ODA – under a single structure. It is delivered by a consortium of research and innovation bodies (ISPF Partner Organisations (POs)), who work with international partners in the design, funding and delivery of ISPF activities.

1.2 The study

DSIT is committed to embedding evaluation into every facet of its work, ensuring policies and programs are driven by evidence and continuous improvement, that interventions deliver maximum impact, and that public funding is spent as effectively as possible. Monitoring, evaluation and learning (MEL) is important for the long-term success of ISPF. It ensures that there is robust evidence available to assess Fund performance and Value for Money (VfM), for learning and accountability purposes and to inform improvements to design and delivery.

ISPF will be comprehensively evaluated across multiple stages, to understand how it was delivered and experienced (process), the extent to which it represents VfM, the extent to which it achieved intended outcomes (effectiveness) and an assessment of its impact. The current study covers the preliminary stage of this process (Evaluation Framework & Baseline Evaluation).

The evaluation framework for ISPF was completed during the first phase of the study and is now published[7]. It includes a revised Theory of Change (ToC) for the Fund, performance metrics and recommended methods and approaches for future stages of evaluation. It also provided first insights into the Fund itself, through an initial mapping of the ISPF portfolio. The current document builds on this framework and presents an assessment of the baseline for the Fund.

1.3 This report

The current baseline evaluation report incorporates three main elements:

- An **update to the portfolio analysis** that was presented in the evaluation framework. This is based on a desk-based analysis of the latest available programme data collected by DSIT, as well as some additional input from some Partner Organisations (POs). See Section2 2. The portfolio of individual POs is then presented in a separate Annex.
- An **assessment of the baseline position** for indicators listed in the evaluation framework (where these are non-zero). This is based on desk-based analysis and bibliometrics, plus as consultation with POs and a survey of ISPF participants / award holders. See Section 33.
- A **piloting of the VfM rubric** for five sub-dimensions (that are most relevant at this stage of the Fund) and a subset of 10 programmes. This is based on desk-research, interviews with programme leads, and analysis of programme data collected by DSIT, as well as evaluator assessment and scoring of the evidence obtained. See Section0 0.

  The underlying evidence for the VfM assessment is also presented in the form of a series of programme-level case studies, provided in a separate Annex.

Further details on the approach and method for the baseline are presented in Appendix A.

[7] https://www.gov.uk/government/publications/international-science-partnerships-fund-evaluation-framework

2 Baseline position - ISFP portfolio

2.1 Introduction

The ISPF Evaluation Framework provided first insights into the Fund, with an initial mapping of the ISPF portfolio presented that was based on PO reporting to DSIT up to and including Q4 of the 2023/24 financial year (i.e. March 2024). The current baseline report provides an update to this portfolio analysis, based on more recent data (PO reporting to DSIT up to and including Q3 2024/25 i.e., December 2024), plus additional PO tagging of programmes by key policy areas. Significant changes since the initial analysis are also highlighted.

The remainder of the section is set out as follows:

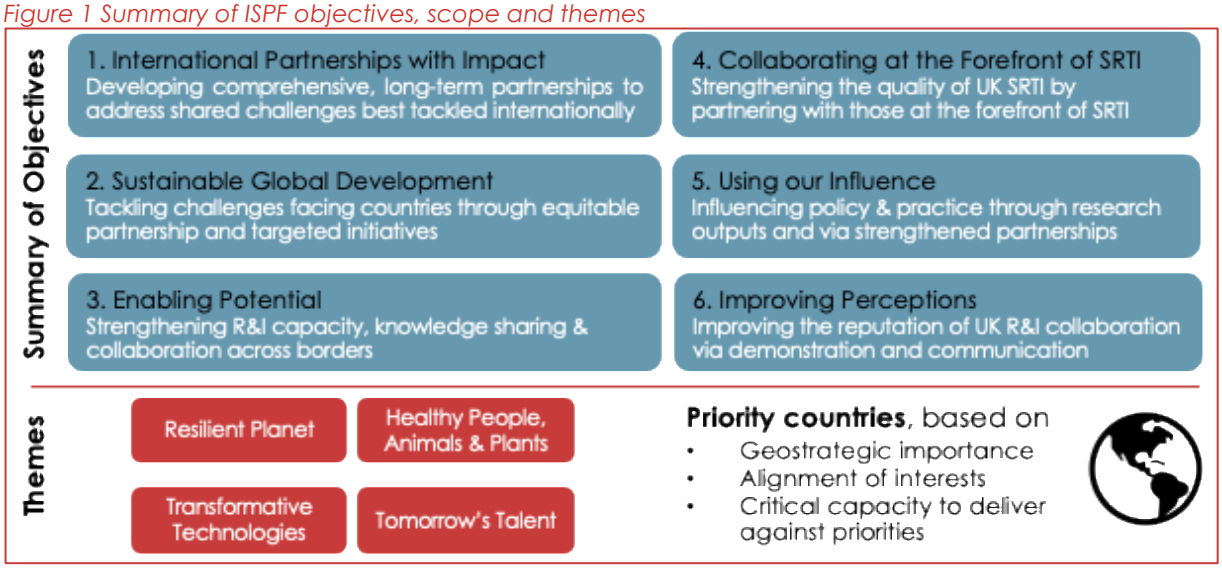
- Section 2.2 presents a brief overview of ISPF, including key features of its design that are important for understanding the analysis to follow.
- Section 2.3 then presents the high-level overview of the updated ISPF portfolio.
  - It begins with details of the approach and data sources (further details in Appendix A.1).
  - Analysis is then presented on **Allocations of ISPF funding to different partner organisations** and programmes for the three financial years (2022/23, 2023/24 and 2024/25).
  - The analysis then focuses on **the "current" portfolio** (as of December 2024), defined as those programmes where actual expenditure had been reported as of that point.

A more detailed presentation of the portfolio of each PO is provided in in Appendix A.1.

2.2 Overview of the Fund

As summarised in Figure 1, ISPF aims to address global challenges best tackled collaboratively, by empowering individuals, institutions, and systems to deliver enhanced outcomes and impacts, as well as positive international influence and improved perceptions for the UK.

Figure 1 Summary of ISPF objectives, scope and themes



The Fund addresses four **main themes** that relate to major challenges ('resilient planet', 'healthy people, animals & plants', 'transformative technologies') and supporting the talent necessary to address these ('tomorrow's talent').

It does so through equitable partnerships with **partner countries** selected for their geostrategic importance, alignment, and critical capacity to deliver against the Fund's objectives / Themes.

ISPF is designed to be a long-term fund, but with an initial **£337m in the Spending Review (SR) period** (financial years 2022/23 to 2024/25), of which £218m is ring fenced for ODA to deliver research and innovation partnerships with low- and middle-income countries (LMICs) (and, within this, at least 20% delivered for the benefit of Least Developed Countries (LDCs).

The first phase of ISPF was launched in April 2023, utilising £119m non-ODA funding over a two-year SR period. Then in July 2023 it was confirmed that ISPF would have up to £218m additional ODA funding, for research and innovation partnerships with LMICs. As such, the Fund combines **ODA and non-ODA** funded SRTI activities within a single portfolio. As shown in the portfolio analysis (Section 2.3.2), during the initial three-year period, 69% of budget allocations and 32% of programmes relate to ODA funding, with 31% and 68% relating to non-ODA funding.

The Fund is managed by DSIT, but **implementation is decentralised** to a consortium of leading research and innovation bodies (see Figure 2).

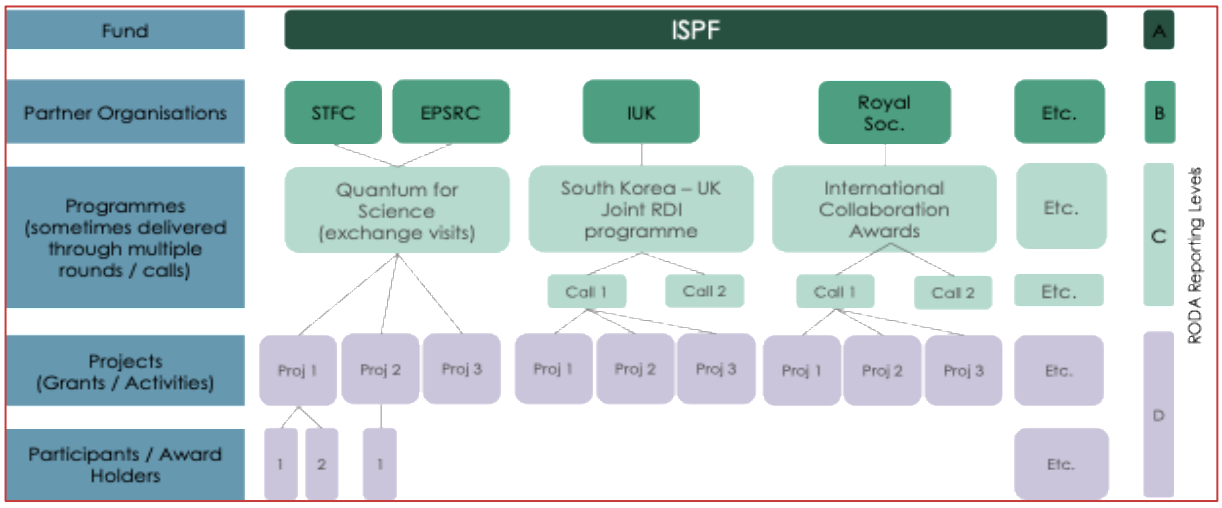
Figure 2 ISPF Partner Organisations

It is at this PO level that the Fund is translated into **programmes**, which are then managed as coherent packages of work (see Figure 3). The Fund is designed to respond to priorities identified by Government, with DSIT setting the strategic direction through objectives, research themes and priority countries. However, ISPF POs are then empowered to design relevant calls, investments and activities to reflect these priorities and any emerging demands they identify.

Across the resulting portfolio, ISPF supports all stages of research and innovation, from early stage, foundational research, through to applied research and commercialisation, as well as skill, talent and capacity development.

Additional to grant funding, and reflecting the "dual support" model of research funding in the UK for investment via UKRI, ISPF also makes available an equivalent amount of **unhypothecated institutional support funding** (also known as Quality Research funding). This funding (£55.8m over financial years 2023/24 to 2024/25) is delivered through Research England, the Scottish Funding Council, the Commission for Tertiary Education and Research Wales (MEDR) and the Northern Ireland Department for the Economy. Though unhypothecated, the ODA-funded institutional support must be used for ODA-eligible outcomes, and is allocated proportionally to the level of ODA-eligible activity undertaken by a given Higher Education Partner.

Figure 3 Overview of the ISPF portfolio structure



2.3 Overview of the ISPF portfolio

2.3.1 Introduction

This section provides the high-level updated overview of the ISPF portfolio, including breakdowns by relevant areas of interest. Detailed presentations of the portfolios for each of the 22 ISPF Partner Organisation (PO) are then provided in a separate Annex.

The analysis is based on Allocations data and PO reporting through RODA (see Box 1), plus some additional tagging of programmes by POs on the request of the study team.

Box 1: Information on Allocations data and RODA reporting

Allocations data (maintained by the DSIT PMO team) records the **original allocations of ISPF ODA and non-ODA funding** (separately) across the different ISPF POs and their Programmes (or delivery costs) and across financial years. There is the flexibility for POs to re-balance their allocations within their ODA or non-ODA portfolios over time (e.g. increasing or reducing the scale of particular programmes), and this is then reflected in future year allocations within this database (once the change has been notified to DSIT through the ISPF Change Management Process). It also includes information on ISPF Themes and Partner countries for each programme (both of which can also be updated as part of the ISPF Change Management Process). The allocations data used for the analysis was correct as of 21st January 2025 and covers three financial years (2022/23, 2023/24 and 2024/25).

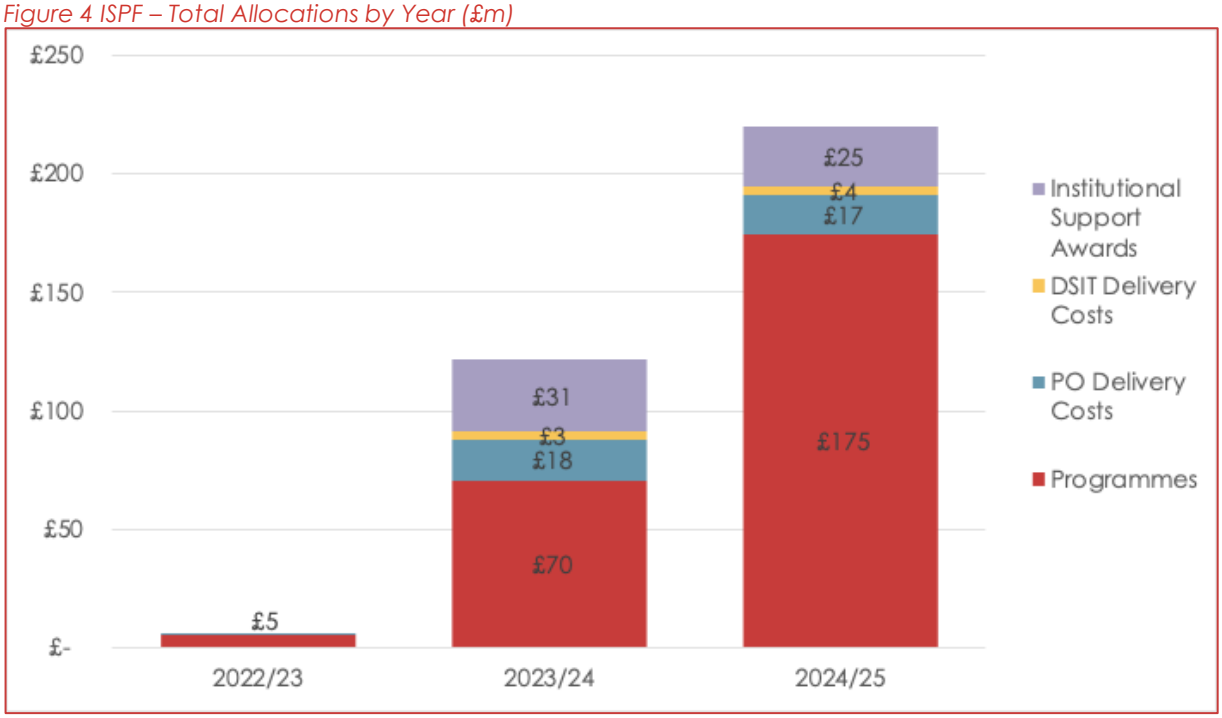
ISPF POs are required to make quarterly data submissions via the financial reporting system (**RODA**). The focus is **information on actual past and forecast future expenditure**, however other information is also collected (e.g. the number and value of awards made, or alignment with Sustainable Development Goals). ISPF reporting through RODA begins once programmes are launched (and so is already underway, but will expand over time). The current analysis is based on RODA submission covering the period up to and including December 2024.

It is important to note that the analysis provides a snapshot in time. Additional programmes may have been added, programme allocations changed, awards made, and funds expended over subsequent months, which are not yet captured. The analysis will be repeated in future evaluation stages (based on the latest data), capturing more recent changes.

2.3.2 *ISPF allocations*

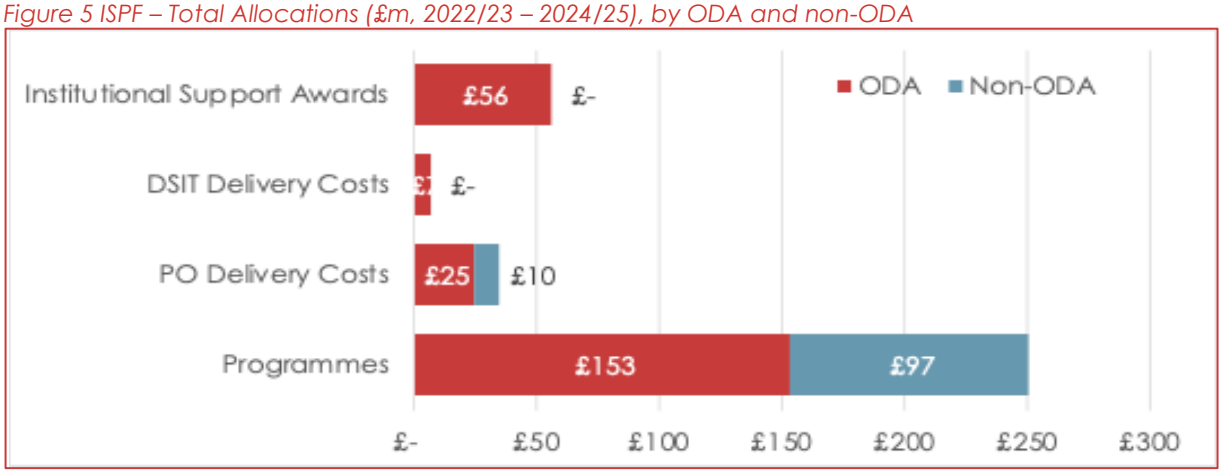
ISPF Funding Allocations by Type	A **total of £347.0m is allocated to ISPF** over 2022/23 to 2024/25[8]. The majority (72%) is allocated to the **163 programmes** currently planned across the different Partner Organisations (POs). The remainder relates to PO delivery costs (£34.6m), DSIT delivery costs (£6.5m) and Institutional Support Awards (£55.8m). See Figure 4. Two thirds (69%) of all allocations relate to ODA funding. See Figure 5.

Figure 4 ISPF – Total Allocations by Year (£m)



Source: Technopolis based on Level B Allocations Data January 2025.

Figure 5 ISPF – Total Allocations (£m, 2022/23 – 2024/25), by ODA and non-ODA

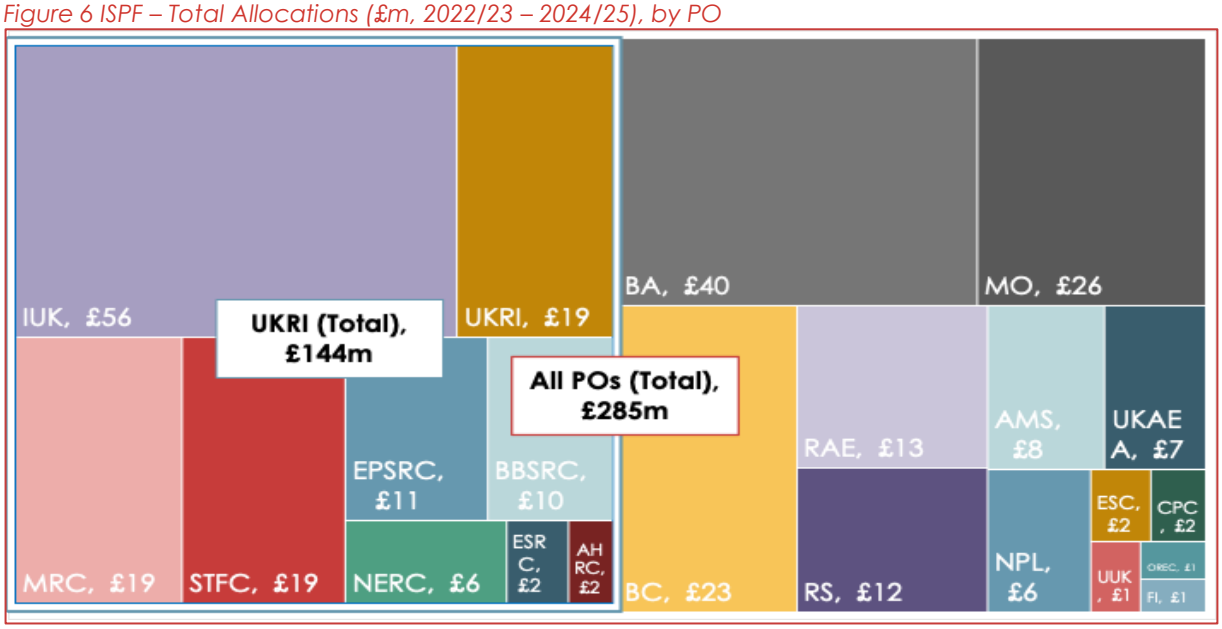


Source: Technopolis based on Level B Allocations Data January 2025.

[8] To manage the risk of underspend, and based on historic precedence, POs were allowed to over-profile by c10% across their ISPF portfolio and manage the spend effectively. Overall programme allocations therefore exceed the total ISPF budget.

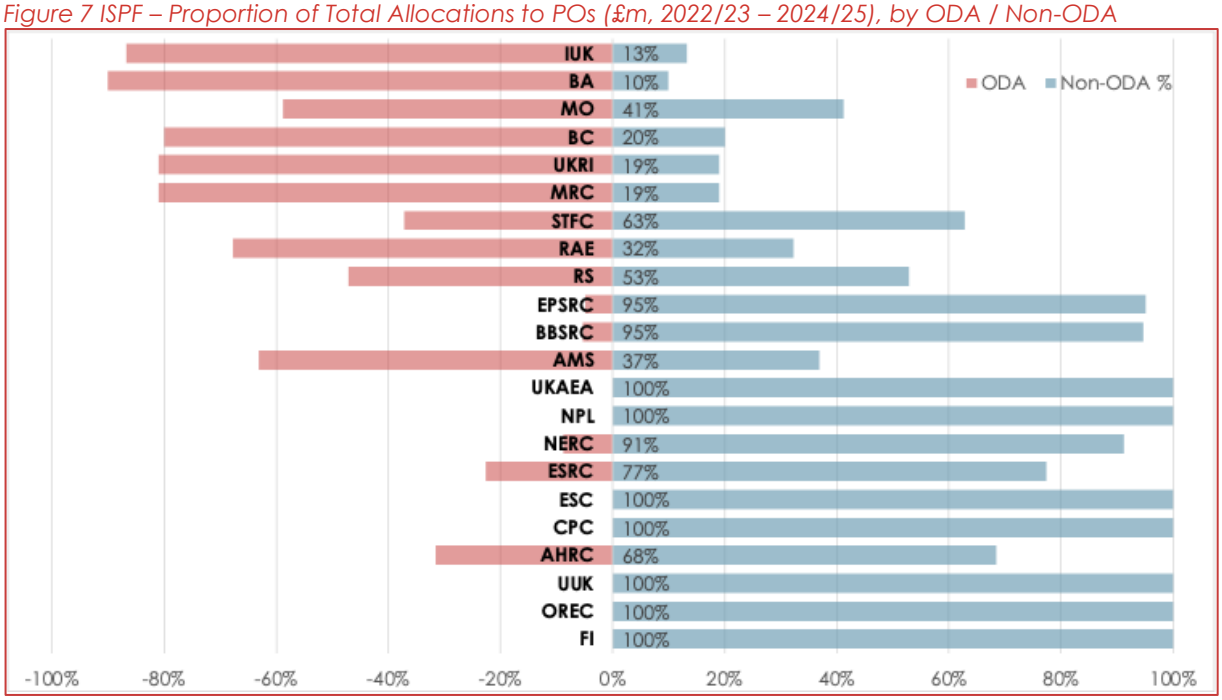
ISPF Funding Allocations by PO	Allocations are spread across **22 Partner Organisations** (POs). See Figure 6. Note that DSIT gives one allocation to UKRI, which is then divided internally between the different Councils, Innovate UK and UKRI itself. The scale of allocations varies between the POs, from £0.9m (the Faraday Institution, with 1 programme) to £55.6m (Innovate UK, with 9 programmes) (allocation figures include both programme and delivery costs). 62% of allocations to POs relate to ODA funding. See Figure 7. All 22 POs have non-ODA allocations, while 15 also have ODA allocations.

Figure 6 ISPF – Total Allocations (£m, 2022/23 – 2024/25), by PO



Source: Technopolis based on Level B Allocations Data January 2025. Bottom right are OREC and FI.

Figure 7 ISPF – Proportion of Total Allocations to POs (£m, 2022/23 – 2024/25), by ODA / Non-ODA



Source: Technopolis based on Level B Allocations Data January 2025, ordered by total funding amount from highest (top) to lowest (bottom).

2.3.3 ISPF "Current" Portfolio (December 2024)

Not all of the POs, Programmes or PO Delivery Cost lines that are present in the allocations data appear (yet) in RODA data (as of December 2024):

- Allocations data shows 22 POs, with 163 programmes, and 65 PO delivery cost lines (some for specific programmes, some covering more than one programme, some covering the PO's entire portfolio), with total allocations over 3 years of £284.7m[9].
- RODA data (as of December 2024) also includes 22 POs and 65 PO delivery cost lines, but only 156 programmes. The programmes and delivery cost lines currently included relate to £271m of allocations (95.2% of the total allocations to POs).

There are several reasons why programmes present in the allocations data may not (currently) be captured through RODA. Missing items may include some or all:

(i) Programmes with allocation for FY 22-23 which were initially funded through the DSIT Tactical Fund mechanism

(ii) Programmes where there has not yet been any expenditure

(iii) Programmes which were originally agreed between a Partner and DSIT, but will not go ahead (flexibility is given to POs to transfer allocation between programmes)

We have limited the remainder of the portfolio analysis just to those programmes that appear in RODA and where past expenditure is recorded (at any level) as of December 2024. This provides a view of the 'live / underway' portfolio at that point in time, which can then be updated in future iterations. Henceforth this group is referred to as the "current" portfolio.

We have included comparisons between the "current" portfolio (as of December 2024) with results from the initial portfolio analysis, which was undertaken as part of the development of the Evaluation Framework (and based on RODA submissions up to March 2024).

Details of the approach to undertaking the portfolio analysis are presented in Appendix A.1. However, there are some key points to note before reading the analysis (see Box 2).

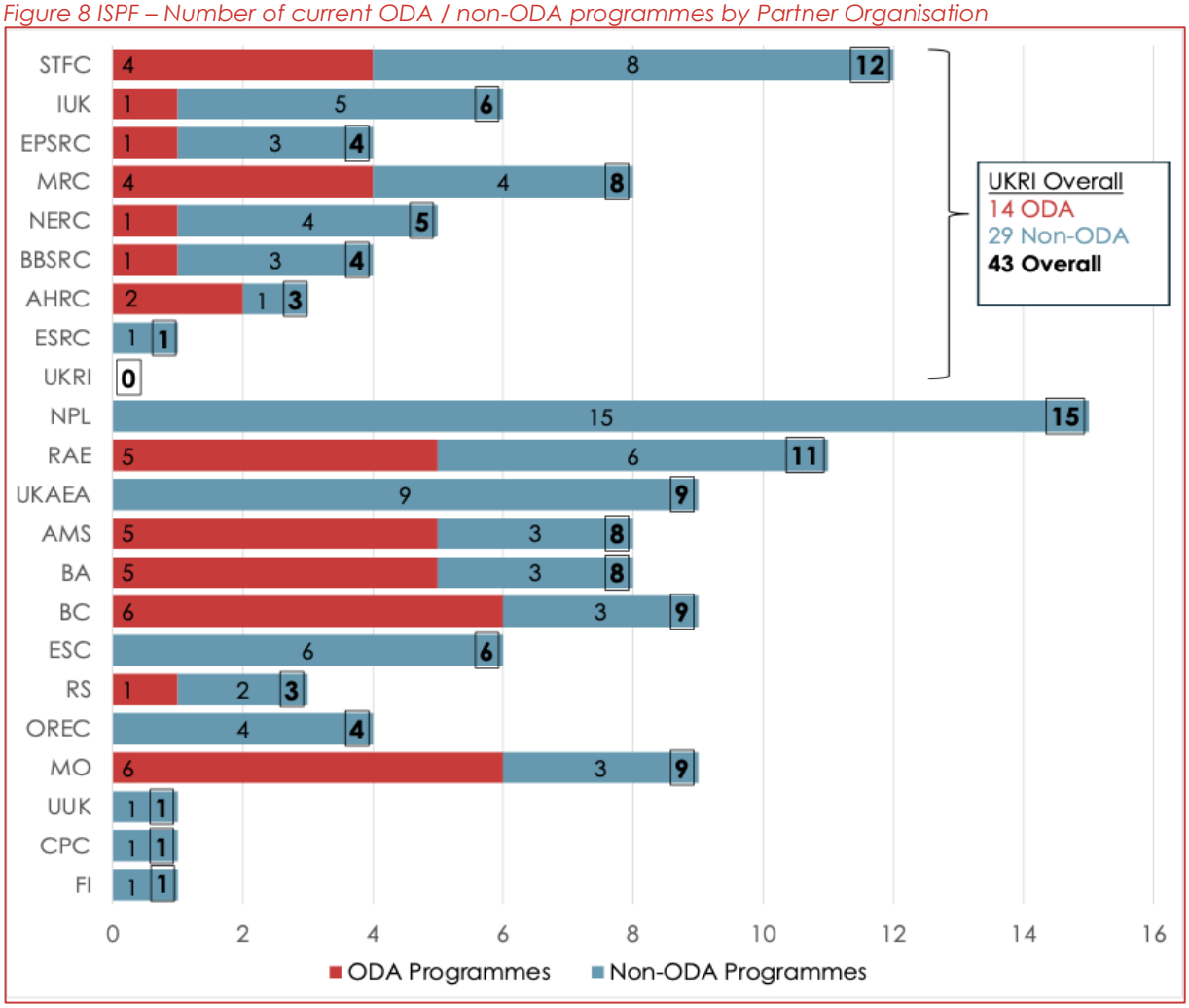
[9] The allocations data also includes £62.3m in additional allocations for DSIT delivery costs and institutional support awards through the four UK higher education funding bodies. However, these are excluded from the remainder of the analysis presented in this section.

Box 2: Key points regarding the analysis of RODA data

- Level B entries in RODA have been used to identify ISPF 'Programmes', with the Level B Title used for the 'Programme Name'. Where the same programme appears in both ODA and non-ODA databases, two programmes are recorded (with ODA / non-ODA noted).
- The only exception is where the Level B Title indicates that the RODA entry relates to Delivery Costs. These are presented separately in the analysis (as 'delivery costs', not 'programmes'), with an indication of whether costs relate to a specific programme, or to the PO portfolio more generally (based on the information provided in the Level B Title).
- Level C entries in RODA have been used to determine whether there are one or more 'Rounds' of funding being deployed within the programme *[Information on the relevant round (e.g. number or year) has been identified from the RODA field: Activity Title]*. For programmes that recorded rounds, only rounds with at least one award recorded in RODA (see below on awards) have been included in the analysis. Other rounds will be incorporated within future iterations of the analysis, as and when awards are reported.
- Where entries are provided at Level D in RODA, these have been recorded as 'Awards' in the analysis. The number of awards presented is based on the number of Level D entries. Some Level C entries also include summary details on the number of awards *[RODA field: Total Awards]*, but this has not been used due to inconsistencies in reporting. Note that in a few exceptional cases POs have no Level D entries, but report projects at Level C; these have been incorporated alongside Level D awards in the analysis.
- The analysis focuses on the "current" portfolio of programmes, based on whether any expenditure had been reported (against Level B, C or D entries) in RODA as of the end of December 2024. For each programme, the analysis presents an overview of reported spend to date *[sum of figures in field: Actual Net (all quarters up to and including Q3 2024/25)]*, as well as forecast future spend *[figures in field: Forecast Q4 2024/25)]*.
- Expenditure for ODA and non-ODA components of the fund are calculated separately and are not combined in the analysis, due to differences in accounting methodologies:
  - ODA spend is reported on a cash accounting basis, meaning expenditure is recorded against the financial quarter when a payment has been made.
  - Non-ODA spend follows accruals accounting, where expenditure is recorded against the financial quarter when an activity has taken place irrespective of when the payment is made.
- Note also that:
  - Programme level expenditure figures include amounts reported against Level B, C and D in RODA (combined), unless otherwise stated.
  - We have had to exclude PO delivery costs from the analysis, as this is often not tied to specific programmes.
  - The analysis only includes financial figures up to and including the 2024/25 financial year (i.e., to March 2025 and not any forecast spend beyond this)
- The analysis focuses mainly on information reported in RODA. However, information on ISPF Themes and Partner Countries is taken from the Allocations data, where any changes to these fields over time have been recorded. Tagging by activity type, critical technologies and growth-driving sectors has been provided separately by POs.
- As the following section focuses on the ISPF programme portfolio, DSIT delivery costs and Institutional Support Awards are excluded from the analysis.

Current ISPF Programmes	Currently, ISPF has a portfolio of **128 programmes** that are live or underway (i.e. those programme with past expenditure reported as at December 2024 RODA data), up from 89 programmes as at March 2024. These are being delivered by **22 Partner Organisations** (POs), who have between 1 and 15 programmes each (6 per PO on average). There are currently 86 non-ODA programmes (delivered by 21 POs) and 42 ODA programmes (delivered by 13 of these POs). See Figure 8. There are therefore fewer ODA programmes, but these are (on average) three-times larger than non-ODA programmes (based on Allocations data).

Figure 8 ISPF – Number of current ODA / non-ODA programmes by Partner Organisation

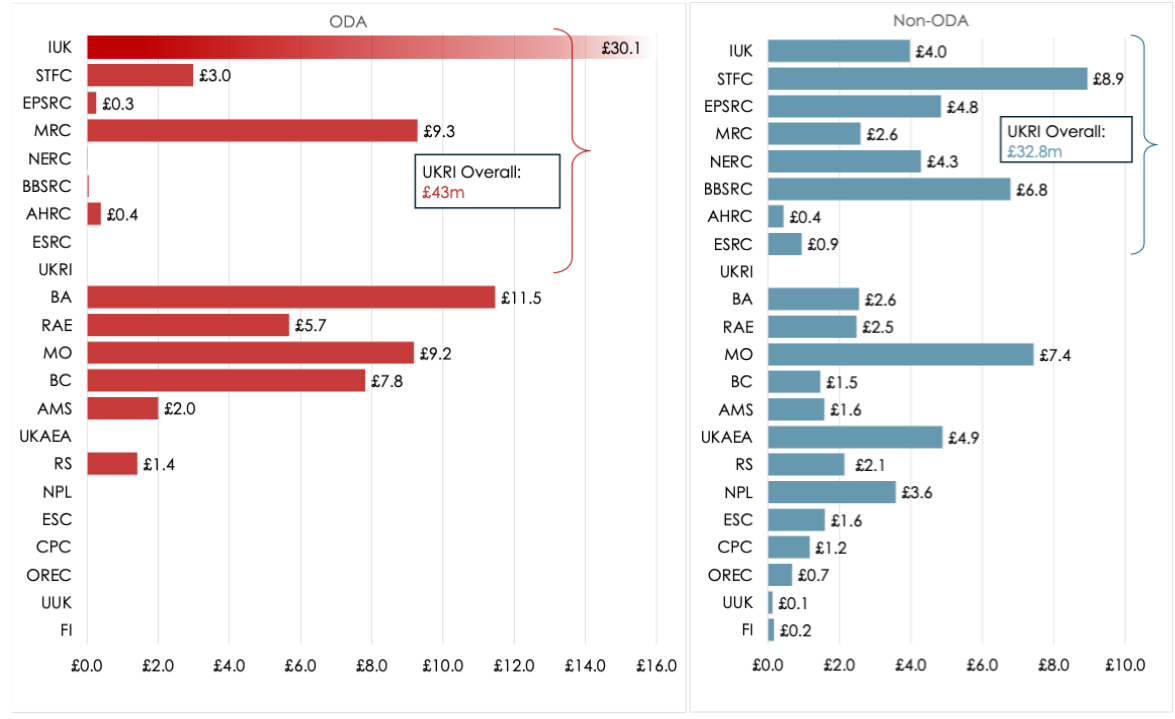


Source: Technopolis based on RODA Data from December 2024.

ISPF Awards	**61 of the current programmes (and 15 POs) have made awards** so far (December 2024), up from 42 programmes in March 2024. These programmes have made **854 awards** in total (sometimes across more than one round of funding), up from 507 awards in March 2024. There are a higher number of ODA (513) than non-ODA (341) awards, reflecting the larger (average) size of ODA programmes within the current portfolio.

ISPF Spend	As of December 2024, 'live' **ODA programmes** have reported a **total expenditure to this point of £80.6m***, up from £32.7 at March 2024. £58.4m of this past expenditure is through awards (72% of programme total), up from £23.3m in March 2024. These same programmes **forecast additional spend of £42.3m** to March 2025. ODA programmes that were not 'live' (i.e., those that did not report any expenditure up to December 2024), but are included in RODA, have forecast expenditure of **£13.2m** up to March 2025. As of December 2024, 'live' **non-ODA programmes** have reported a **total expenditure to this point of £62.6m***, up from £26.6 at March 2024. £34.8m of this past expenditure is through awards (56% of programme total), up from £10.8m in March 2024. These same programmes **forecast additional spend of £23.0m** to March 2025. Non-ODA programmes that were not 'live' (i.e., those that did not report any expenditure up to December 2024), but are included in RODA, have forecast expenditure of **£3.8m** up to March 2025. * *Programme Spend and Award Spend (but not PO delivery costs) to December 2024. ODA spend is reported on a cash accounting basis, while non-ODA spend follows accruals accounting.*

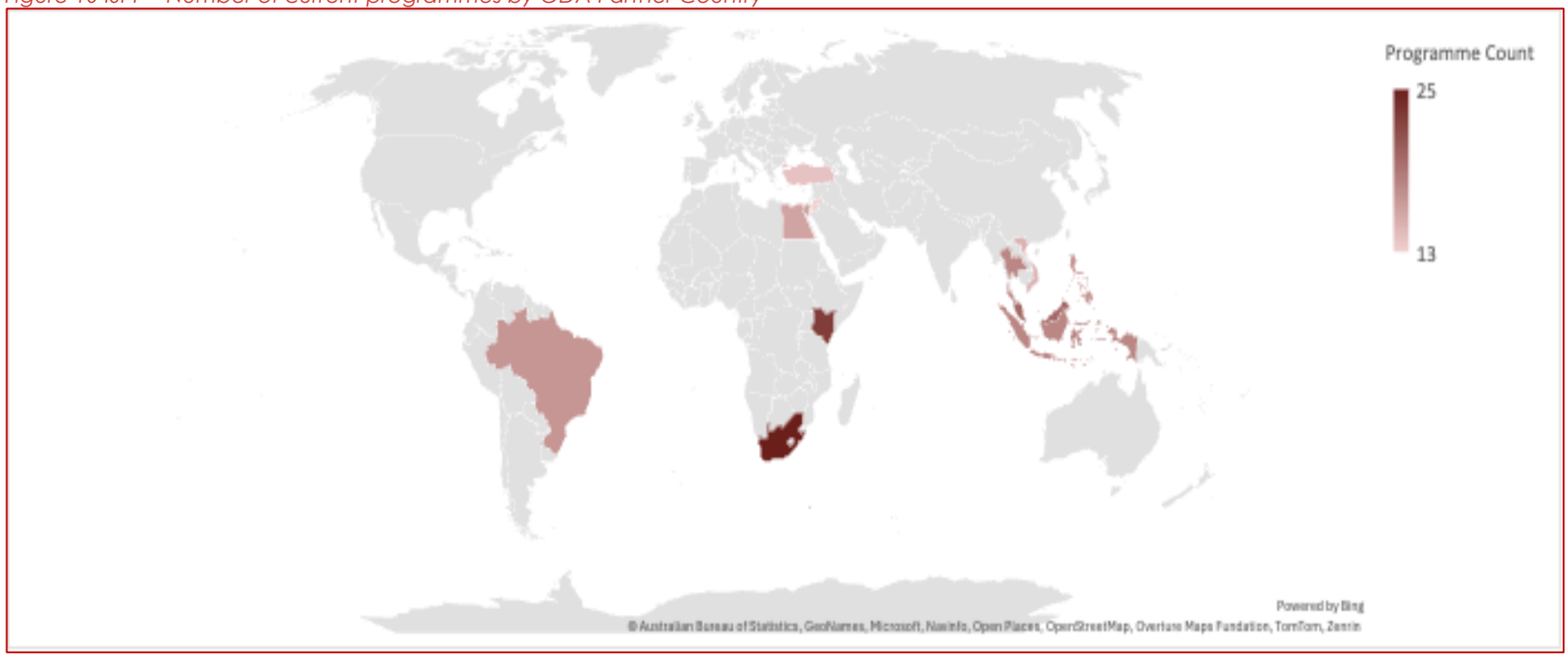
Figure 9 ISPF – Past expenditure (£m) of current ODA / non-ODA programmes by Partner Organisation



Source: Technopolis based on RODA Data from December 2024. ODA spend is reported on a cash accounting basis, while non-ODA spend follows accruals accounting.

ODA	Within the current portfolio, **42 programmes (32%) are with ODA countries**, with **total spend of £80.6m already reported*** against these programmes. This is an increase from 24 programmes and £32.7m by March 2024. The most common partner countries** are **South Africa** (25 programmes), **Kenya** (23) and **Malaysia** (20). Others include Indonesia (18), Thailand (18), Brazil (17), Philippines (17), Egypt (16), Vietnam (15), Turkey (14), Jordan (13)***. See Figure 10. ** Includes Programme Spend and Award Spend (but not PO delivery costs) to December 2024. ODA spend is reported on a cash accounting basis.* *** One or more partner countries are listed against each programme. All have been included.* **** Some ODA programmes specify "LDCs" instead of / as well as listing specific countries – these "LDC" entries are not included in the figure below.*

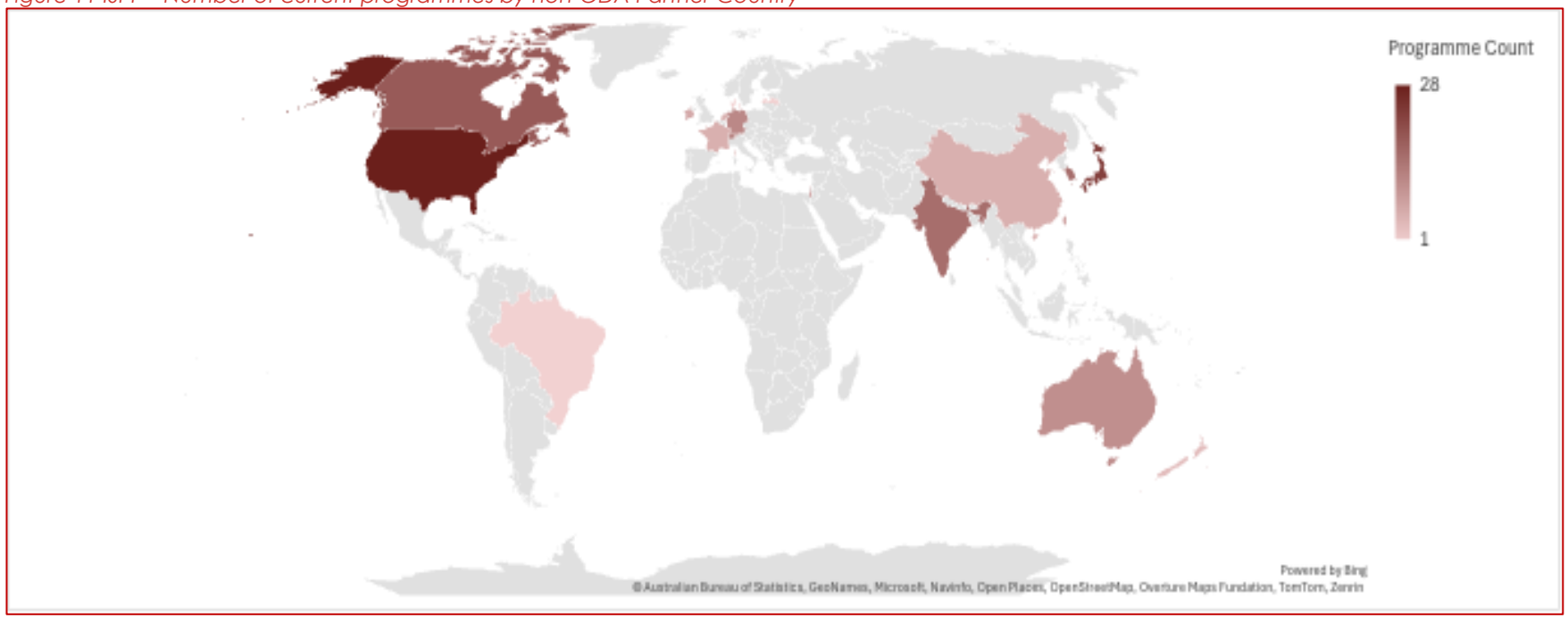
Figure 10 ISPF – Number of current programmes by ODA Partner Country



Source: Technopolis based on RODA December 2024 data and Level B Allocations data (for partner countries) January 2025

Non-ODA	Within the current portfolio **86 programmes (68%) are with non-ODA countries**, with **total spend of £62.6m already reported*** against these programmes. This is an increase from 65 programmes and £26.6m by March 2024. The most common partner countries** are **the United States of America** (28 programmes), **Japan** (23), **Canada** (19), **India** (16) and **South Korea** (16). Others include Switzerland (13), Germany (12), Australia (11), Singapore (10), Taiwan (8), Israel (7), Ireland (7), China (6), France (6), Netherlands (6), New Zealand (4), Denmark (1), Latvia (1) and Brazil (1). Figure 11. ** Programme Spend and Award Spend (but not PO delivery costs) to December 2024. Non-ODA spend follows accruals accounting.* *** One or more partner countries are listed against each programme. All have been included.*

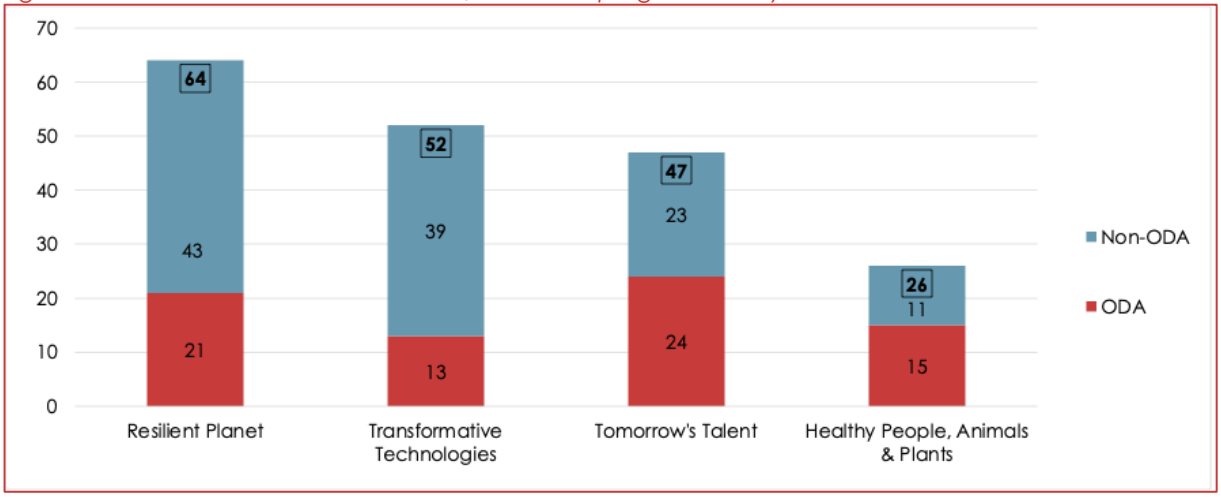
Figure 11 ISPF – Number of current programmes by non-ODA Partner Country



Source: Technopolis based on RODA data from December 2024 and Level B Allocations data (for partner countries) January 2025

ISPF Themes	The number (and proportion) of current programmes tagged against each of the 4 **ISPF Themes*** is as follows (also shown in Figure 12, with ODA/non-ODA split): • Resilient Planet (64 programmes, 50%) • Transformative Technologies (52 programmes, 41%) • Tomorrow's Talent (47 programmes, 37%) • Healthy People, Animals & Plants (26 programmes, 20%) Table 1 shows the breakdown by Theme across different POs. ** Note that figures sum to >100% as programmes can be tagged against multiple themes.*

Figure 12 ISPF – Number of current ODA / non-ODA programmes by ISPF Theme



Source: Technopolis based on RODA data (Dec 2024) and Allocations data (for Themes) (Jan 2025)

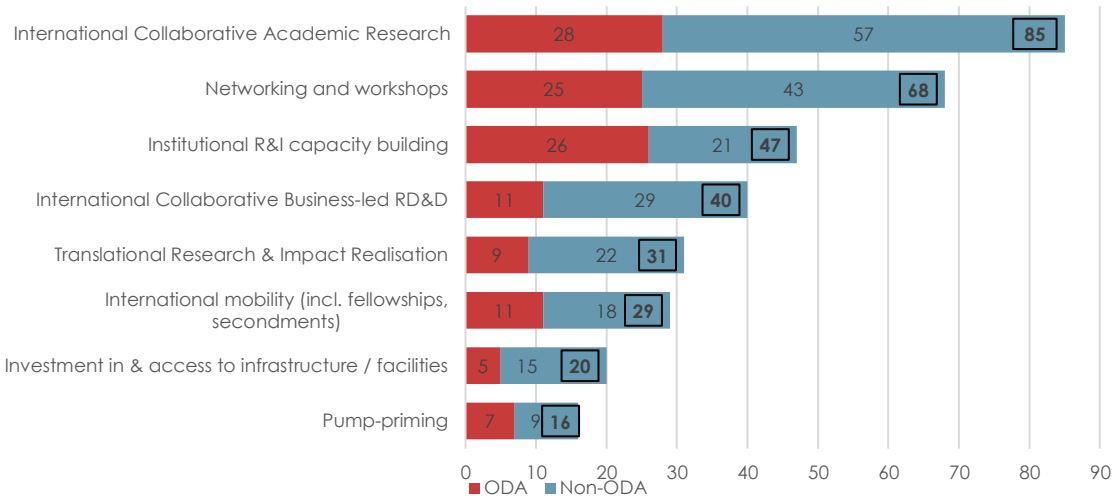
Table 1 ISPF – Number of current programmes by ISPF Theme and Partner Organisation

PO	Resilient Planet	Transformative Technologies	Tomorrow's Talent	Healthy People, Animals & Plants	All Programmes
STFC	3	10	7	1	**12**
IUK	2	5	-	-	**6**
MRC	-	-	2	8	**8**
EPSRC	4	1	-	1	**4**
NERC	5	1	1	-	**5**
BBSRC	1	2	-	2	**4**
UKRI	-	-	-	-	**-**
ESRC	1	-	-	-	**1**
AHRC	-	1	2	-	**3**
UKRI Total	**16**	**20**	**12**	**12**	**43**
NPL	7	8	1	-	**15**
RAE	8	7	10	7	**11**
UKAEA	6	4	1	-	**9**
AMS	-	-	5	6	**8**
BA	1	2	8	1	**8**
BC	7	6	2	-	**9**
RS	-	-	3	-	**3**
ESC	6	1	1	-	**6**
MO	9	1	2	-	**9**
OREC	4	1	1	-	**4**
CPC	-	1	-	-	**1**
UUK	-	-	1	-	**1**
FI	-	1	-	-	**1**
All POs	**64**	**52**	**47**	**26**	**128**

Source: Technopolis based on RODA data (Dec 2024) and Allocations data (for Themes) (Jan 2025)

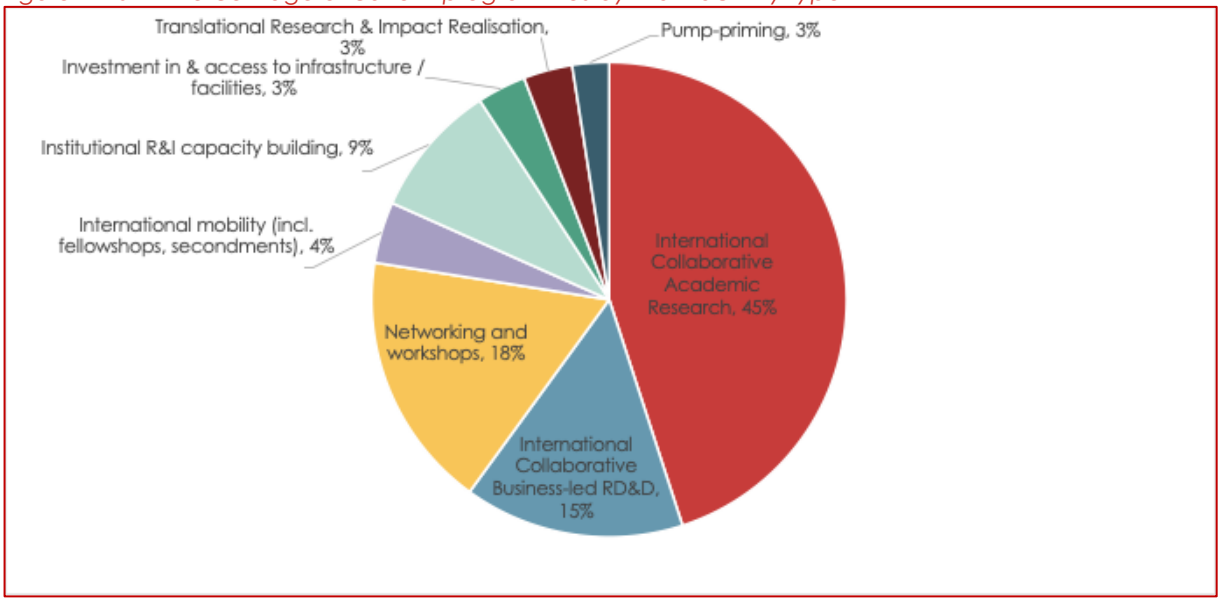
Activity Types	Current ISPF programmes most commonly include the following activity types*: **International Collaborative Academic Research** (71% of all programmes**), **Networking and workshops** (57%) and **Institutional R&I capacity building** (39%). International Collaborative Business-Led Research activities are taking place within 33% of programmes in the current portfolio. See Figure 13. Figure 14 then presents the portfolio by (single) *main* activity type. **Tagged by POs, based on a typology defined as part of ToC development. For definitions of each activity type see Appendix **Error! Reference source not found.**. Please note that programmes can be tagged against multiple activity types.* ***Calculations based on 126 programmes where activity type is known.*

Figure 13 Number of current ODA/non-ODA programmes that include each activity type



Source: Technopolis based on RODA data from December 2024 and POs input from January 2025

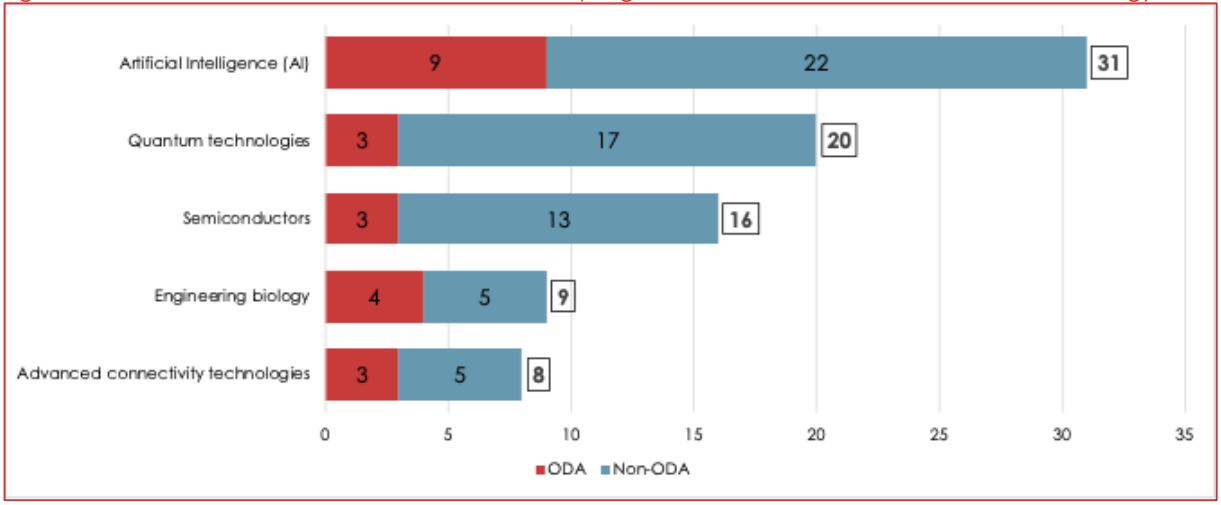
Figure 14 ISPF - Percentage of current programmes by main activity type



Source: Technopolis based on RODA data from December 2024 and POs input from January 2025

Critical Technologies	46 ISPF programmes (36% the current total) are relevant to one or more of the UK's current critical technologies, as identified in the DSIT Science and Technology Framework (April 2025). The highest number of programmes have been tagged* as relevant to: **Artificial Intelligence** (31 programmes, 24% of all programmes), **Quantum Technologies** (20, 16%), and **Semiconductors** (16, 13%). See Figure 15. **Tagged by POs. Programmes can be tagged against multiple technologies.*

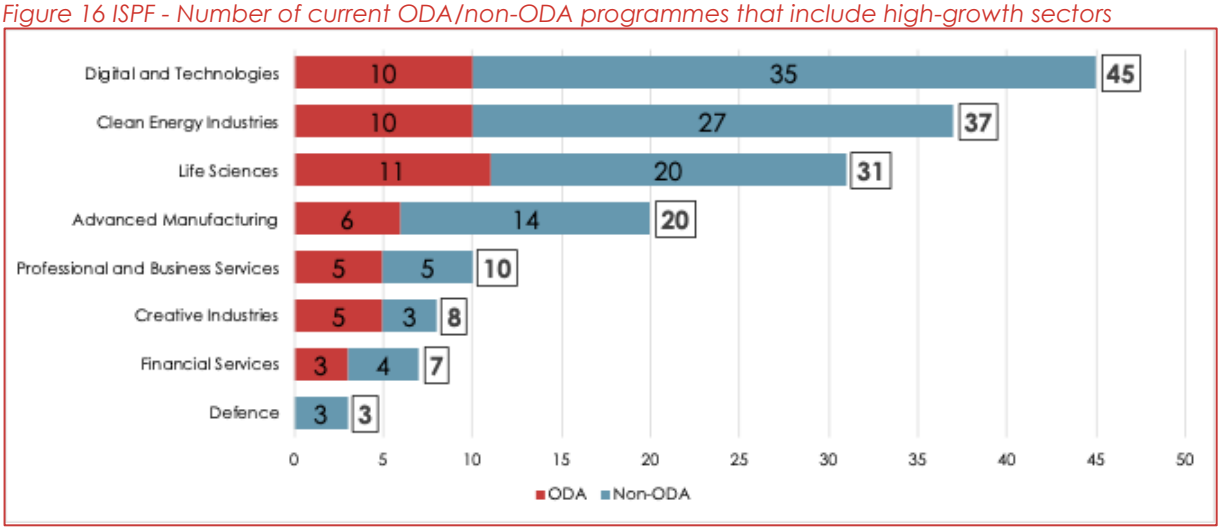
Figure 15 ISPF - Number of current ODA/non-ODA programmes relevant to each critical technology



Source: Technopolis based on RODA data from December 2024 and POs input from January 2025

Growth-driving sectors	70 ISPF programmes (55% of the current total) are relevant to one or more of the eight Growth-Driving Sectors, as identified The UK's Modern Industrial Strategy, June 2025. Most commonly, programmes were tagged* as relevant to: the **Digital and technologies** sector (45 programmes, 35%), the **Clean energy** sector (37, 29%) or the **Life sciences** sector (31, 24%). See Figure 16 below. **Tagged by POs as relevant. Programmes can be tagged against multiple technologies.*

Figure 16 ISPF - Number of current ODA/non-ODA programmes that include high-growth sectors



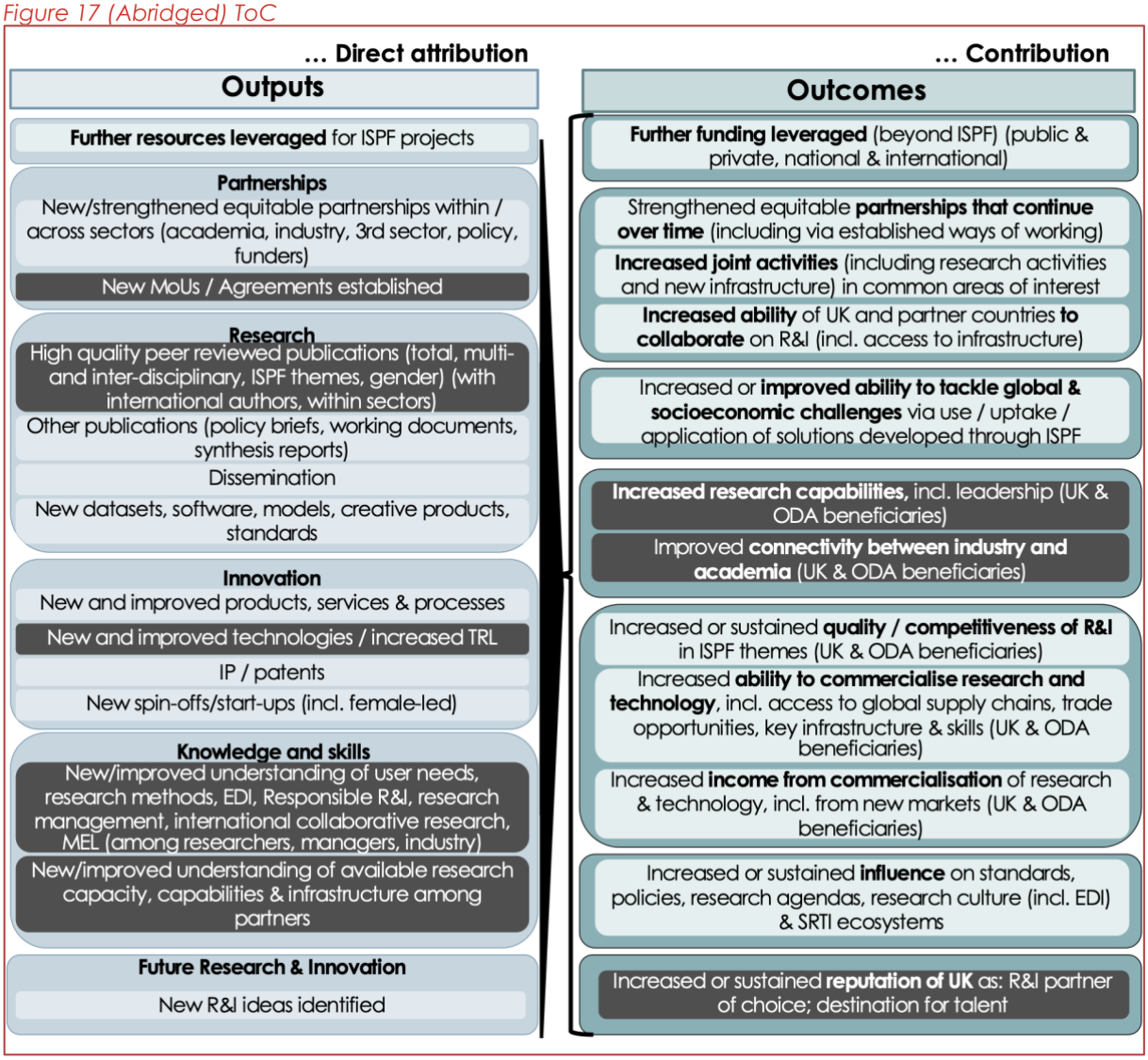
Source: Technopolis based on RODA data from December 2024 and POs input from January 2025

3 Baseline position – outputs and outcomes

3.1 Introduction

The ISPF Evaluation Framework includes a total of 55 indicators. Of these, most were identified as having a zero value at the baseline stage (e.g. the number of spin-outs generated by ISPF is, by definition, zero before the Fund has begun), while 9 were identified as having a non-zero baseline position that could be captured at this stage. These correspond to the elements marked in dark grey in the abridged ToC presented in Figure 17.

Figure 17 (Abridged) ToC



Source: Adapted from ISPF Evaluation Framework (Technopolis, March 2025)

These 'baseline indicators' include **output indicators** on:

- Supporting institutional partnerships: Joint areas of interest / priorities est. (country, funder, researcher / innovator) (see section 3.3)
- Innovation: New and improved technologies / increased TRL) (see section 3.4)

- Knowledge and skills) (see section 3.5), including:
  - New/improved understanding of user needs, research methods, EDI, Responsible R&I, research management, international collaborative research, MEL (among researchers, managers, industry)
  - New/improved understanding of available research capacity, capabilities & infrastructure among partners

It also includes **outcome indicators** on:

- Paving the way for future R&I outcomes (see section 3.6), including:
  - Increased research capabilities, incl. leadership (UK & ODA beneficiaries)
  - Improved connectivity between industry and academia (UK & ODA beneficiaries)
  - Increased or sustained quality / competitiveness R&I in ISPF themes (UK & ODA beneficiaries)
- UK reputation as a trusted R&I partner (see section 3.7).

It is important to note that the baseline position provides a comparison point to track ISPF programmes and projects over time, as such it has limited evaluative value at this stage. Whenever possible, however, we have tried to draw relevant observations in line with the ToC. In addition, for some indicators it was suitable to capture progress so far since the baseline (i.e. since the point of application). These results need to be taken with caution, however, given the limited time between the baseline position and the point at which the data was captured (April/May 2025). Nevertheless, they do provide an early indication of progress.

All the indicators (except on MoUs and bibliometrics) have been captured via a survey of ISPF grant / award holders. The survey received 679 responses overall, representing 48% of the individuals approached with a request to participate. The majority of respondents (71%) were based at an institution in the UK, while the remainder were based in other partner countries. Further methodological explanation is provided in Appendix A.2.

The baseline survey questions invite reflection on changes in indicators in the context of the ISPF projects, and so are designed to capture the effects of ISPF. Other factors could also be at play, however. As such, the results provide a good indication of contribution, rather than (full) attribution.

3.2 Motivations to participate

While not relating specifically to a baseline indicator, the survey of award holders provided an opportunity to explore the drivers to participate in ISPF programmes, which in turn provides some context on the role that ISPF plays for researchers and innovators.

Figure 18 summarises how responding participants rated the importance of various pre-defined motivations. There were four main factors that drove participation in an ISPF programme:

- **Access to funding:** Three quarters of respondents (75%) stated that "access to funding" was a critical factor, while 70% stated "access to funding to work internationally" was a critical factor for participation. In both cases, the percentages are slightly higher among UK participants (in comparison with international participants).
- **Advancing research and knowledge:** Participants indicated that the "opportunity to advance or apply research interests" (59%) and the "opportunity to apply research interested in an international context" (59%) were critical factors that motivated participation. Moreover, the "opportunity to contribute to global societal challenges" was a critical driver for two thirds of participants (67%). Results are similar among UK participants

and international participants, with the percentages being slightly higher among UK participants when it comes to contributing to global societal challenges.

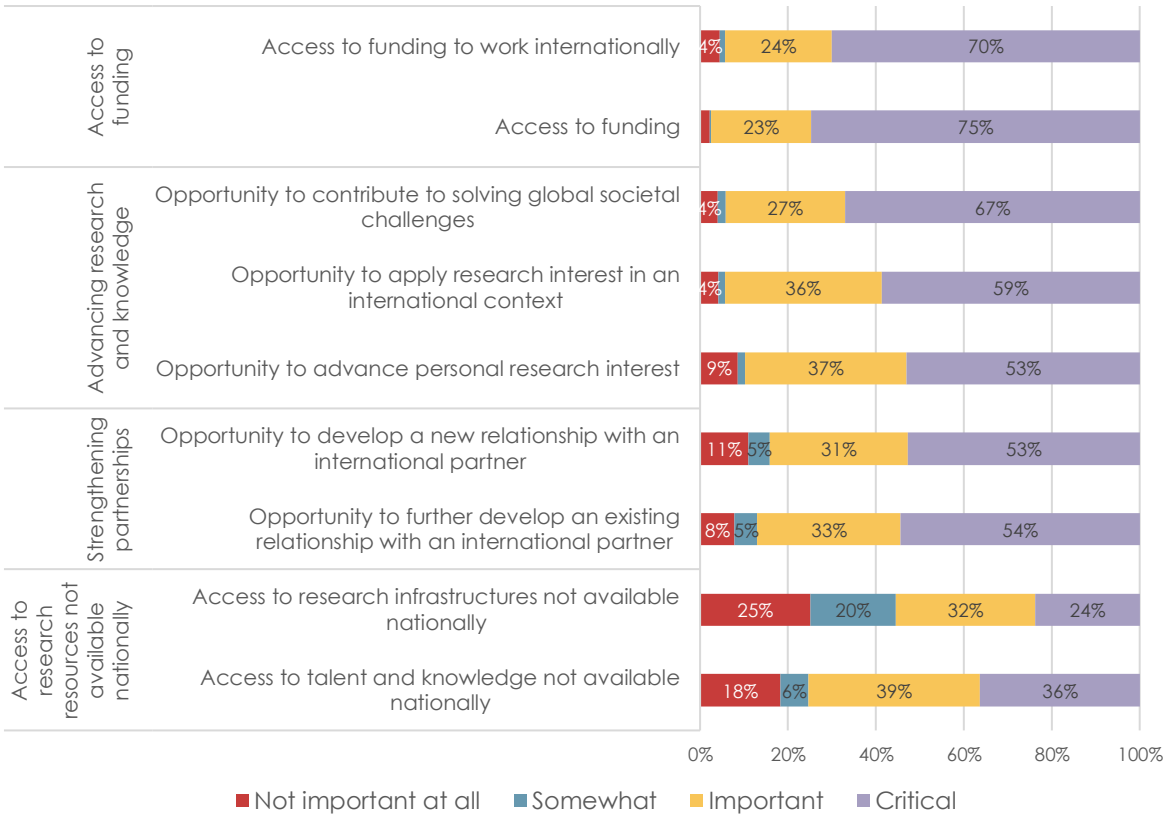
- **Strengthening partnerships:** Just over half of respondents indicated that the "opportunity to further develop an **existing relationship** with an international partner" (54%) and the "opportunity to develop a **new relationship** with an international partner" (53%) were critical in their motivations to participate. In both cases, the factor was more critical among international participants.

Access to research resources not available nationally appears to be less critical to participation, with "access to talent and knowledge" and "access to research infrastructures not available nationally" only selected as critical by 36% and 24% respondents, respectively.

Note that on research infrastructures, 45% of respondents indicated that this was somewhat a factor or not important at all. These may reflect in part the composition of ISPF programmes and projects, with activities related to capacity building, networking or even innovation activities that do not require research infrastructures. However, we would have expected to see "access to knowledge not available nationally" ranked higher. This, in turn, may be explained, by the strong drive around particular research areas and / or the desire to work internationally to contribute to address global challenges (as reported above).

Results on talent and knowledge are similar among UK and international participants. When it comes to research infrastructure, 31% of international participants state this as a critical factor, versus 21% of UK participants.

Figure 18 Motivation to participate in ISPF, level of importance



Source: Survey of ISPF participants (Technopolis, 2025), N=671-678

A couple of quotes from surveyed researchers on their motivations for participation are presented below to exemplify the drivers for ISPF participation.

> *"I am pleased to take part in the ISPF project. I strongly believe that international partnerships are essential for addressing today's complex global challenges. These issues—whether related to migration, inequality, climate change, or public health—transcend national borders and require collaborative, cross-cultural, and interdisciplinary approaches. While national research collaborations are valuable, they often lack the diverse perspectives, comparative insights, and shared learning that international cooperation brings. By working across borders, we can co-produce knowledge, strengthen institutional capacity, and develop solutions that are contextually grounded yet globally relevant". Response provided in open text to the survey*

> *"This has been an important and unique opportunity to develop innovative and equitable partnerships with international partners, and it is very exciting to see the outcomes of this collaboration". Response provided in open text to the survey*

3.3 Supporting institutional partnerships

Type	Ref No.	ToC Element	Indicator	Sources	Baseline
Output	**O3**	Joint areas of interest / priorities est. (country, funder, researcher / innovator)	Examples of joint areas of interest / priorities identified (country, funder)	> PO/programme leads template / interviews	Number of existing MoUs gov-to-gov or international partner org, before ISPF

As explained in the ISPF ToC narrative, ISPF programmes and projects are expected to lead to the establishment of **joint areas of interest and joint priorities,** at the country, funder, and researcher or innovator level (as well as to the identification of new R&I ideas that may be pursued in future, possibly through international partnership). This will be explored in future phases of evaluation through surveys of participants and programme-level case studies. However, for the baseline we have sought to understand the extent to which there were already PO-level agreements in place with equivalent organisations in ISPF partner countries.

Through consultation with POs, we have identified **135 agreements across 16 ISPF partner organisations.** However, the information available does not always allow us to discern whether these were established prior to ISPF, or as a result of the Fund. There were also varying interpretations across POs as to what constitutes an agreement (some entries reflect formal partnership agreements, others refer to contracts, Memoranda of Cooperation (MoCs), or broader collaborative agreements), creating some inconsistencies in the data.

Further details of the information obtained are provided in A.2.2, but included below are two examples of the agreements provided. The first concerns an existing agreement that then formed the basis for two ISPF programmes, while the second concerns an agreement that was signed with the launch of two ISPF programmes.

Two ISPF programmes have been established between the UK and South Africa that build on a Memorandum of Understanding (MoU) that was signed by the UK Science and Technology Facilities Council (STFC) and the National Research Foundation (NRF) in South Africa in April 2021. The Research Infrastructure Partnership Programme will facilitate lab-to-lab collaborations between NRF and STFC facilities and promote physics-related research by universities, while the Africa-UK Physics Partnership Programme will involve the UK working in partnership with seven African countries to build and sustain a skilled cohort of STEM graduates. https://www.ukri.org/news/stfc-announces-funding-for-two-flagship-african-partnerships/	In April 2023, the UK and India signed a landmark Memorandum of Understanding on science, research and innovation at the UK-India Science and Innovation Council in Parliament. Four joint programmes were announced by UKRI and Indian partners, including two funded through ISPF: • Improving farmed animal health and welfare through better understanding of infectious diseases and resistance to treatment. £5 million UK funding via BBSRC, matched by India (DBT). • Technology and skills partnership programme. £3.3 million UK funding via STFC, matched by India (DAE). https://www.gov.uk/government/news/uk-and-india-sign-landmark-research-agreement

Recommendations have been provided at the end of this report for improving this exercise in future phases of the evaluation. We also suggest that future VfM case study development (including interviews with POs and overseas partners) may offer an alternative route to explore the complexity around agreements in more depth (for a sample of ISPF programmes).

3.4 Innovation

Type	Ref No.	ToC Element	Indicator	Sources	Baseline
Output	**O11**	New and improved technologies / increased TRL	Percentage of projects that advance one or more TRL levels due to ISPF funding	> Survey with ISPF project participants (UK and international)	TRL starting point at the point of application
			Percentage of programmes /projects that have made progress in terms of market readiness as a result of ISPF funding.	> Survey with ISPF project participants (UK and international)	MRL starting point at programme / project start

As explained in the ISPF ToC narrative, ISPF-supported translational research and business-led innovation in particular, are expected to lead to innovation outputs, including new and improved technologies, with **an increase in technology readiness levels or similar metrics**. We have captured the baseline position and progress so far through the award holder survey, for three related metrics.

In term of the **baseline position**, we find the following:

- **Technology readiness level (TRL)** measures the technical maturity of the technology itself - from basic research through operational deployment. This was reported on by 71% of survey respondents. We found that:
  - 39% of those that reported on TRL started their projects at low TRLs (1-3), which signals a stage of conceptual, early research.
  - A further 39% started their projects at medium TRLs (4-6), which mean projects were at a stage of technology development and validation.
  - Finally, 22% started their projects at high TRLs (7-9), which means projects were at a stage of integration and close to deployment / market.
- **Manufacturing Readiness Level (MRL)** measures the manufacturing process maturity - how ready production systems are to manufacture the technology at required scale, quality, and cost. This was reported by 43% of survey respondents. We found that:
  - 53% of those that reported on MRL progress started their projects at Low MRLs (1-3), meaning the projects were at the stage of developing basic manufacturing concepts.

- A further 32% started their projects at medium MRLs (4-6), i.e., at the point of manufacturing development and validation.
- Finally, 15% started at high MRLs (7-10), which mean projects were at a stage of manufacturing readiness & production.

- **Commercial Readiness Levels (CRL)** measures market/business readiness - regulatory approval, market acceptance, business model viability, supply chain, etc. This was reported on by 47% of survey respondents. We found that:
  - 62% of those that reported on CRL progress started their projects at low CRLs (1-3), which means the projects were focused on developing early commercial concepts.
  - A further 28% started their projects at medium CRLs (4-6), i.e., at the point of commercial development and validation.
  - Finally, 10% started at high CRLs (7-10) which means projects were at a stage of commercial deployment and market establishment.

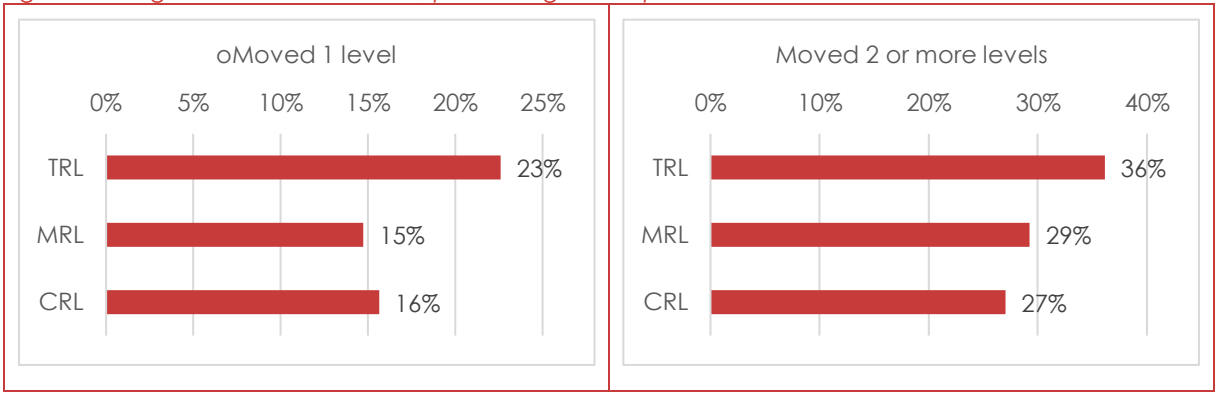
It is important to note that the relatively high proportion of respondents that chose high levels across these three metrics is somewhat puzzling.

A closer examination of programmes and project names reveals that **survey respondents may have misunderstood the** scales (even though they were provided as part of the question in the survey), and that there was some confusion **between research maturity and technology/ manufacturing/ commercial readiness**. On the latter, some respondents chose high levels across these scales even when their programmes / projects were focused on e.g. networking and collaboration-building activities, partnership development and research collaboration. Note also that UK (rather than international) participants are driving the results for higher scales.

We present these findings as part of our lessons learned (Section 6.3) along with suggestions on how this could be mitigated in the future (including re-assessing the baseline position).

Noting the concerns above, in terms of **progress so far,** more than half of participants report that their ISPF projects that have moved one step in at least one of the scales introduced above, including 23% who did so in TRL, 15% in MRL, and 16% in CRL. Furthermore, 36% (TRL), 29% (MRL), and 27% (CRL) moved two or more levels. This showcases very positive progress considering that it is early days in the lifetime of the ISPF programmes.

Figure 19 Progress in readiness levels, percentage of respondents



Source: Survey of ISPF participants (Technopolis, 2025,) N=563-593

3.5 Knowledge and skills

Type	Ref.	ToC Element	Indicator	Sources	Baseline
Output	**O14**	New/improved understanding of user needs, research methods, EDI, Responsible R&I, research management, international collaborative research, MEL (among researchers, managers, industry)	Percentage of ISPF participants for whom participation on the ISPF project has led to new/improved understanding of user needs, research methods, EDI, Responsible R&I, research management, international collaborative research, MEL (among researchers, managers, industry)	> Survey with ISPF project participants (UK and international)	At point of application
Output	**O15**	New/improved understanding of available research capacity, capabilities & infrastructure among partners	Percentage of ISPF participants for whom participation on the ISPF project has led new/improved understanding of available research capacity, capabilities & infrastructure among partners	> Survey with ISPF project participants (UK and international)	At point of application

ISPF project activities (particularly those that focus on capacity building) are expected to lead to the development of new knowledge and skills, including **new and improved understanding** among researchers, managers and industry, of various aspects including:

- User needs, research methods, EDI, Responsible R&I, research management, international collaborative research, MEL (among researchers, managers, industry).
- Available research capacity, capabilities & infrastructure among partners.

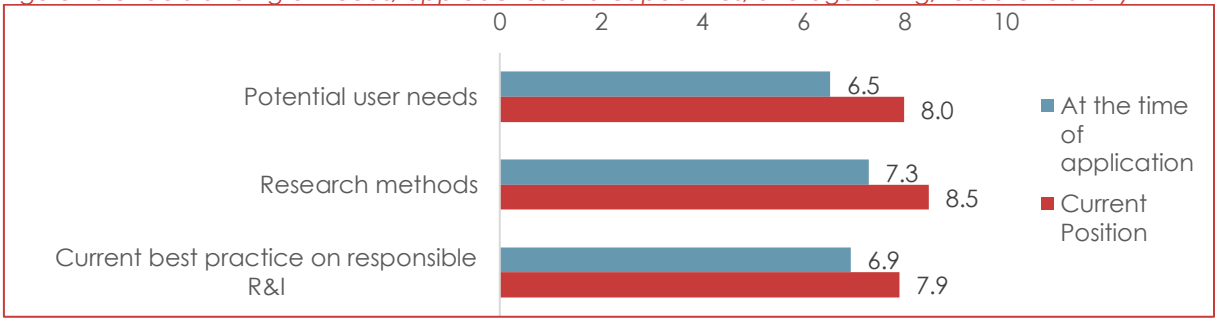
Participants were asked through the survey to rate their level of understanding using a scale from 1 (no understanding) to 10 (high understanding). Figure 20 compares how the understanding of three aspects—potential user needs, research methods, and current best practice on responsible R&I—are rated at the time of application versus the current position.

At the **baseline**, we find that -at the time of application- researchers (who responded to the survey) reported a high to moderate understanding of research methods (7.3 on average[10]), as well as of current best practice on responsible R&I (6.9) and potential user needs (6.5)[11].

In terms of **progress so far**, researchers reported an improved understanding of potential user needs, increasing from an average of 6.5 at the time of application to 8.0 in their current position. Their grasp of research methods also strengthened, rising from 7.3 to 8.5. Awareness of current best practices in responsible research and innovation grew from 6.9 to 7.9. All differences are statistically significant.

Again, this is a positive result, showcasing early contributions of ISPF towards outputs.

Figure 20 Understanding of needs, approaches and capabilities, average rating, researchers only



Source: Survey of ISPF participants (Technopolis, 2025), N=618-629.

[10] Please note that average means the mean.

[11] As a reminder, the baseline position and progress so far have been captured in the same survey, consequently information 'at the point of application' relies on a degree of recollection from respondents.

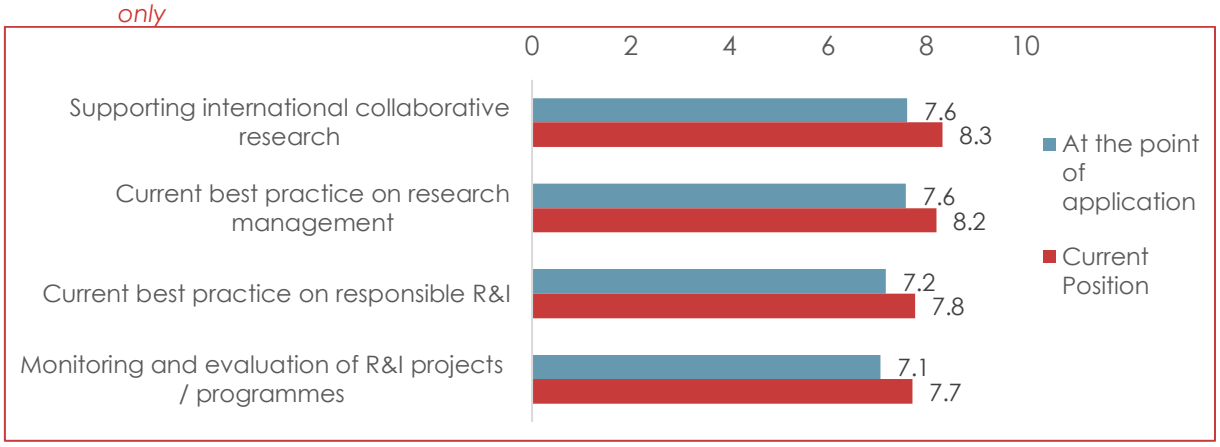
Research managers[12] were also asked to use a scale from 1 (no understanding) to 10 (high understanding) to rate their understanding of:

- Supporting international collaborative research
- Current best practice on research management
- Current best practice on responsible R&I
- Monitoring and evaluation of R&I projects / programmes

Figure 21 presents the results. At the **baseline position,** researcher managers responding to the survey had a moderate understanding of best practices on research management and responsible R&I (6.3 and 6.4 on average, respectively), as well as supporting international collaborative research and monitoring & evaluation of R&I projects / programmes (6.3 each).

In terms of **progress so far**, researcher managers showed a slight improvement across all those dimensions, moving 0.6-0.7 points between the point of application and currently. This increment, even if marginal, is positive and statistically significant.

Figure 21 Understanding of needs, approaches and capabilities, average rating, researcher managers only



Source: Survey of ISPF participants (Technopolis, 2025), N=39

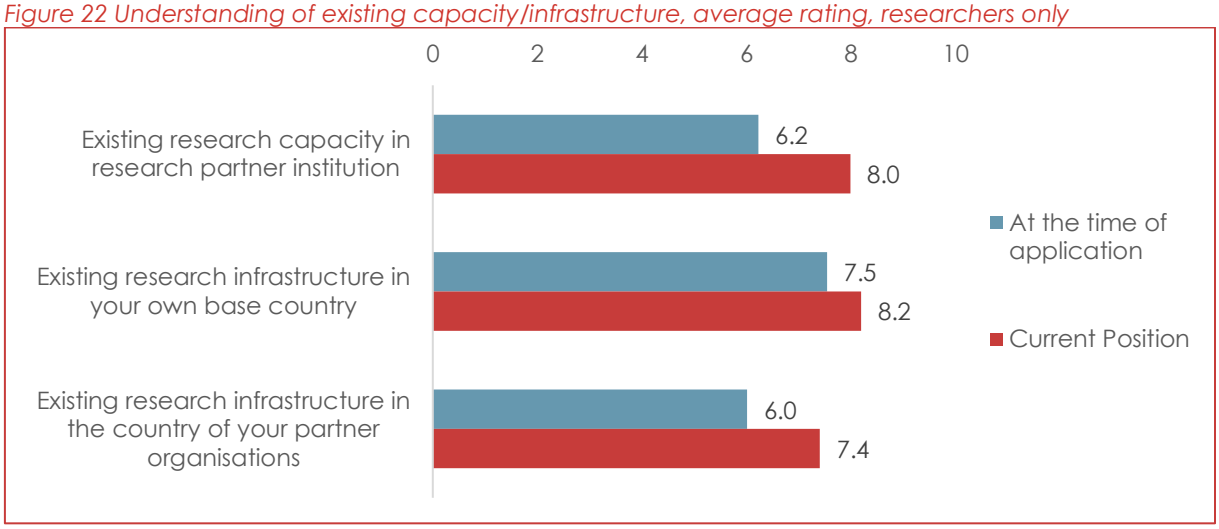
ISPF activities are also expected to contribute to **new or improved understanding of available research capacity, capabilities & infrastructure among partners.** Figure 22 presents results here.

At the **baseline position,** researchers who responded to the survey show a moderate to high understanding of existing research infrastructure in their own country (7.5 on average), but a lower understanding of such capacity in the country of their partner organisations (6.0). There is also a moderate understanding of research capacity in partner institutions (6.2).

In terms of **progress so far**, researchers reported a significant improvement across all those categories, in particular research capacity (with scores rising from 6.2 at the time of application to 8.0 in their current position). All differences are statistically significant.

[12] ISPF projects include different type of participants. At the beginning of the survey, respondents were asked to select whether they were "Researchers or Innovators" or "Research / innovation / infrastructure managers", or "Other". The other category mainly included "Researchers or Innovators" (e.g. PI, Co-PIs).

Figure 22 Understanding of existing capacity/infrastructure, average rating, researchers only



Source: Survey of ISPF participants (Technopolis, 2025), N=621-627

> *"ISPF was critical in helping us develop a partnership with a major US institution. As the project has progressed, we have learned a great deal about use of data capture and analysis infrastructure along the transport-energy interface in the US... This has also included collaboration with industry partners in the US." Response provided via open text in the survey.*

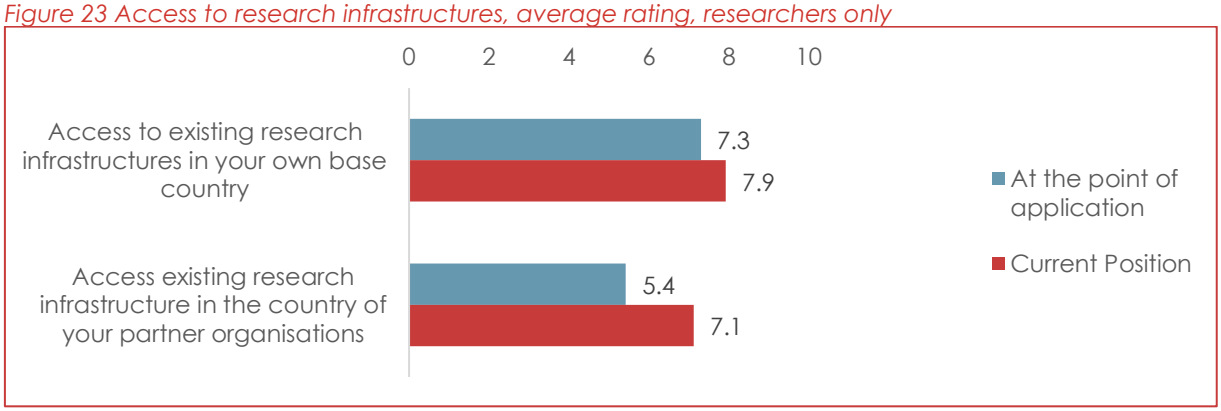
Beyond awareness, we also **explored actual access to research infrastructure** through the survey, with respondents scoring access on a scale from 1 (none) to 10 (high) . Figure 23 presents average ratings on access among researchers.

At the **baseline position**, access to research infrastructure in their own country is high, with an average rate of 7.3, while access to partner's research infrastructure was medium to low with an average rate of 5.4.

In terms of **progress so far**, there is an improvement in access within participants own country (from 7.3 to 7.9), and an even more pronounced improvement when it comes to access to partner's research infrastructure (from 5.4 to 7.1).

This results showcase a positive progress in terms of access, which could lead to further R&I outputs in the future.

Figure 23 Access to research infrastructures, average rating, researchers only



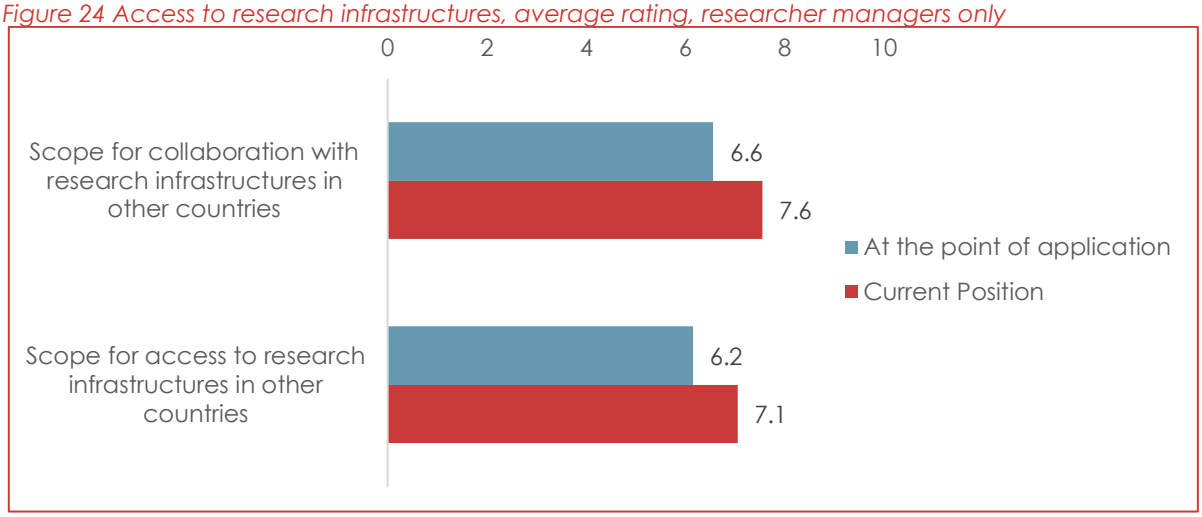
Source: Survey of ISPF participants (Technopolis, 2025), N=615-624

Research managers were asked about both the scope for collaboration with and access to research infrastructures, again using a scale of 1 (none) to 10 (high). Figure 24 presents the average ratings.

At the **baseline position**, and in line with the results above, access to research infrastructure in other countries was medium with an average rate of 6.2, while scope for collaboration was slightly higher, with an average score of 6.6.

In terms of **progress so far,** there is an improvement in both access and opportunities for collaboration, with average scores of 7.1 and 7.6, respectively. These results indicate a clear enhancement in both collaboration opportunities and infrastructure accessibility over time. All differences are statistically significant.

Figure 24 Access to research infrastructures, average rating, researcher managers only



Source: Survey of ISPF participants (Technopolis, 2025), N=38-39

3.6 Future R&I outcomes

Type	Ref No.	ToC Element	Indicator	Sources	Baseline
Outcome	**OC6**	Increased research capabilities, incl. leadership (UK & ODA beneficiaries)	Percentage of ISPF participants for whom participation on the ISPF project has led to increased research capabilities, incl. leadership + examples	> Survey with ISPF project participants (UK and international) + follow up interviews	Starting point at the point of application
Outcome	**OC7**	Improved connectivity between industry and academia (UK & ODA beneficiaries)	Percentage of ISPF participants for whom participation in the ISPF project has led to improved connectivity with industry / academia	> Survey with ISPF project participants (UK and international)	Starting point at the point of application
Outcome	**OC8**	Increased or sustained quality / competitiveness R&I in ISPF themes (UK & ODA beneficiaries)	Citation impact - as measured by Average of Relative Citations (ARC) and HCP (Highly cited papers) - of ISPF publications (total, broken down by ISPF themes, gender and field/sector).	> Bibliometric data / analysis	Citation impact (as described in the indicator) for UK (before ISPF)

The ToC captures a series of outcomes that are expected to emerge in line with the objectives of the Fund, in terms of capabilities, connectivity among actors of the R&I ecosystem, and quality of R&I outputs. These have been explored through the baseline survey of award holders.

3.6.1 *Capability to collaborate internationally*

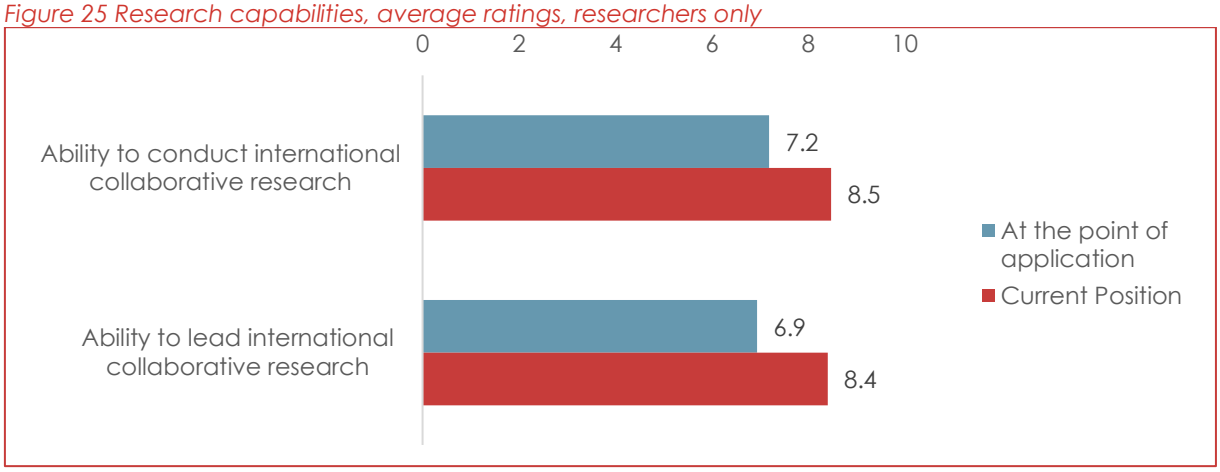
Figure 25 compares individuals' self-assessed abilities to conduct and lead international collaborative research at two time points: the point of application (baseline) and their current position. In both cases, respondents assessed abilities on a scale from 1 (none) to 10 (high).

At the **baseline position**, survey respondents report a relatively high ability to conduct international collaborative research and to lead such projects, with an average score of 7.2 and 6.9 respectively.

In terms of **progress so far,** there are already improvements on both fronts, with an increase in scores for both categories, especially when it comes to the ability of leading collaborative international research (with average scores increasing from 6.9 to 8.4). All differences are statistically significant.

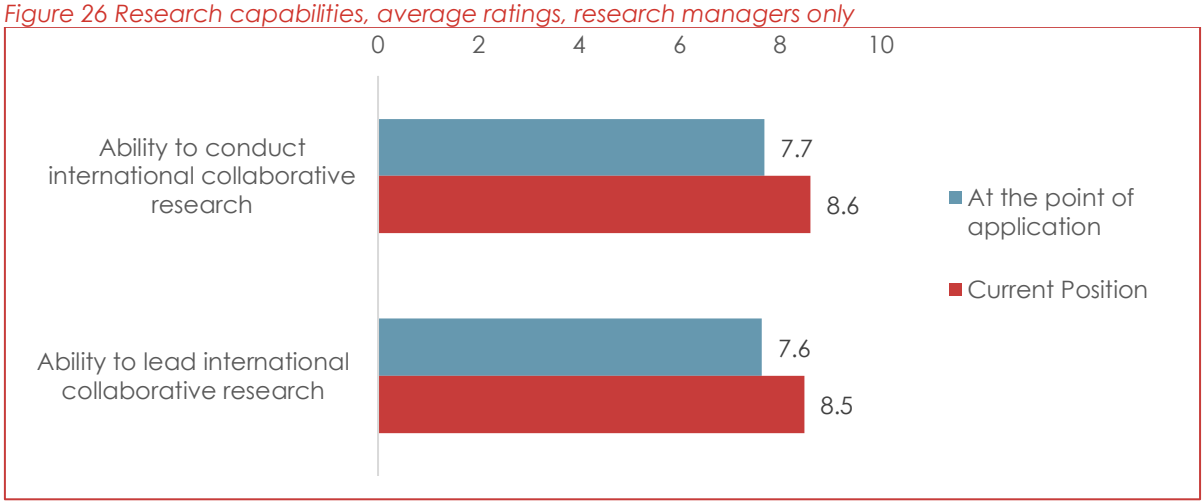
These results should pave the way for further and sustained collaborations with international partners.

Figure 25 Research capabilities, average ratings, researchers only



Source: Survey of ISPF participants (Technopolis, 2025), N=622-629

Figure 26 Research capabilities, average ratings, research managers only



Source: Survey of ISPF participants (Technopolis, 2025), N=39

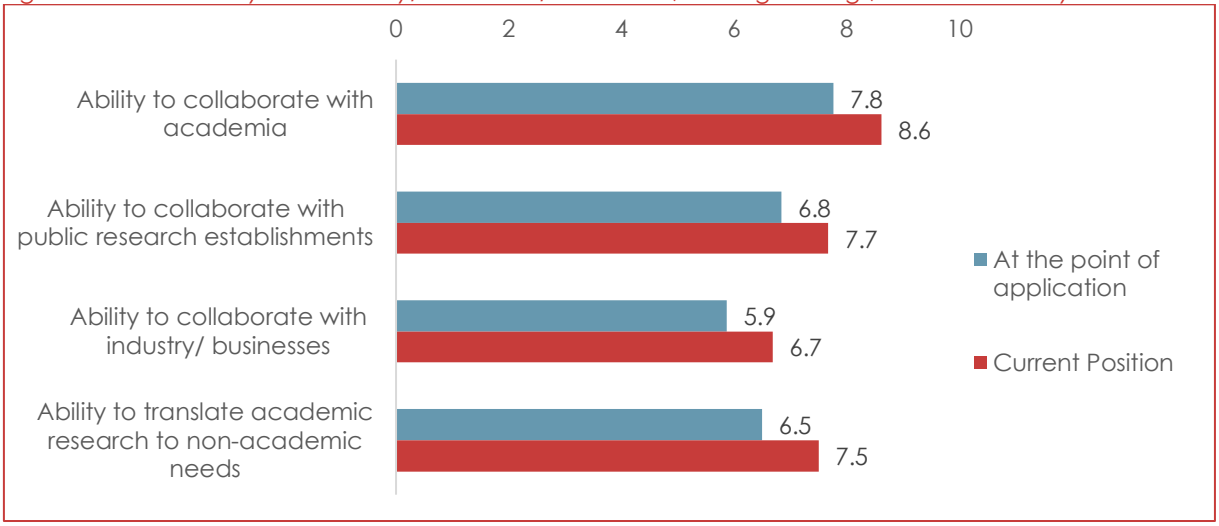
3.6.2 *Ability to collaborate with different actors in the R&I ecosystem*

Figure 27 compares researchers' self-assessed abilities in four areas at the point of application and at their current position. Respondents used a scale from 1(none) to 10 (high).

At the **baseline position**, survey respondents report a high ability to collaborate with academia (with an average score of 7.8). The ability to collaborate with other actors is lower, especially with industry/ businesses (average score of 5.9). The difference may partly be driven by the predominance of academics (rather than industry / businesses) amongst respondents. We also capture the ability to translate academic research to non-academic needs, which at the baseline position, is reported as being medium (with an average score of 6.5)

In terms of **progress so far,** there is an improvement across the board when it comes to collaboration with academia, businesses and public research establishments. There is also a marked improvement in the ability to translate academic research to non-academic needs, with average scores going from 6.5 to 7.5. All differences are statistically significant.

Figure 27 Connectivity with industry/businesses/academia, average ratings, researchers only



Source: Survey of ISPF participants (Technopolis, 2025), N=607-620

3.6.3 *Co-publication and citation impact*

In this report, we have captured contextual information on the degree of co-publication with partners in ISPF countries, using bibliometric data. This analysis covers two categories:

- UK publications overall (i.e. those with at least one UK-based author).
- UK publications co-authored with partners in ISPF countries, disaggregated by ODA and non-ODA.

The timeframe for this analysis includes publications from the ten years preceding the launch of ISPF (2014-2023). In addition to citation metrics, we examined the distribution of publications by research field, their alignment with the UN Sustainable Development Goals (SDGs), and the proportion of publications involving at least one female author.

Appendix A.2.3 shows the full analysis, while the key findings are summarised here.

Strong baseline for international collaboration: The UK has a robust tradition of international co-publication, with 41% of all UK publications including at least one author from a non-ODA country during 2014-2023. Co-publication with ODA countries is less common, but still significant at 6% of all publications, and showing growth over time.

Field-Specific Collaboration Patterns: The analysis reveals that:

- ODA collaborations are concentrated in development-relevant fields: Agricultural & Biological Sciences (1.85x higher than overall distribution of UK publications), Environmental

Science (1.51x), and Energy (1.33x), as well as in Health-related fields: Dentistry, Nursing, Immunology and Pharmacology.

- Non-ODA collaborations focus on advanced technology fields: Neuroscience (1.85x higher than overall distribution of UK publications), Earth & Planetary Sciences (1.41x), Mathematics (1.35x), Materials Science (1.34x), Physics & Astronomy (1.26x) and Computer Science (1.25x).

This exemplifies how different countries and collaborators offer different strengths, knowledge and research resources that support the advancement of a variety of research fields.

Sustainable Development Goals. The analysis reveals that:

- ODA collaborations concentrate on poverty/environment SDGs: Life on Land (1.82x higher than overall distribution of UK publications), No Poverty (1.47x), Responsible Consumption and Production (1.47x), and Life below water (1.30x).
- Non-ODA collaborations focus on governance/infrastructure SDGs: Peace, Justice & Strong Institutions (1.40x), Reduced Inequalities (1.25x), Affordable & Clean Energy (1.24x).

International collaboration supports inclusivity: In line with the EDI commitments of ISPF, it is also expected that there is a proportional gender balance in the authorship across research outputs. As such, the bibliometric analysis explored the proportion of papers that have at least one female author at the baseline stage. Over the past decade, the proportion of UK publications with at least one female author has steadily increased, reflecting broader trends towards improved gender representation in research. Interestingly, UK publications co-authored with both ODA and non-ODA partner countries had a higher proportion of female co-authorship compared to UK publications overall: In 2023, 72% and 64% of all authors were female in the first two groups, in comparison with 62% (for UK publications overall). This suggests that international collaboration may play a role in supporting more inclusive research teams.

Citation Impact Excellence. The analysis reveals that UK research maintains world-leading impact: UK publications consistently achieve Field-Weighted Citation Impact (FWCI) above 2.00, meaning they are cited at a rate that is more than twice the global average.

It also shows that international collaboration enhances this impact. Publications with international co-authors from ISPF partner countries achieve even higher FWCI than UK publications overall, indicating that international collaboration leads to higher impact (uptake) of UK publications in further academic literature. This is consistent with the literature on international collaboration, which indicates that this effect is not only due to the size of the communities linked to authors but to the global reach of those publications[13].

Results are presented in Table 2. The table marks in amber when the difference in FWCI with respect to all UK publications is 0.5 or lower, in light green if it is higher than 0.5 and lower than 1, and in dark green if it is 1 or above. Note that cells in amber or light green do not mean to say that citation impact is low, it just signals that it is not higher than the overall benchmark of UK publications.

A notable example is the field of "Arts and Humanities", where publications done in collaboration with ODA and non-ODA contributors increased the citation impact almost twofold, compared with the FWCI for all UK publications. Another notable example is "Medicine". As reported above, a substantial proportion of UK publications are in this field (40%), and collaboration with researchers affiliated to institutions based in both ODA and non-

[13] Jue Wang, Rainer Frietsch, Peter Neuhäusler, Rosalie Hooi, International collaboration leading to high citations: Global impact or home country effect?, Journal of Informetrics, Volume 18, Issue 4, 2024, 101565, ISSN 1751-1577, https://www.sciencedirect.com/science/article/abs/pii/S1751157724000786

ODA countries substantially increases the citation impact, from 2.49 to 4.30 and 3.73 respectively.

Beyond these interesting results, the baseline position showcases the importance of drawing comparisons with appropriate benchmarks to assess the potential effect of ISPF in increasing (or sustaining) the degree of co-publication with countries participating in SIPF (as suggested in the Evaluation Framework).

Table 2 Average (mean) FWCI per field

Field	All UK	ODA Collaboration	Non-ODA Collaboration
Agricultural and Biological Sciences	3.30	4.16	4.12
Arts and Humanities	5.60	11.2	9.18
Biochemistry, Genetics and Molecular Biology	2.62	3.72	3.57
Business, Management and Accounting	5.15	6.23	6.59
Chemical Engineering	1.89	1.86	2.22
Chemistry	2.01	1.72	2.31
Computer Science	3.68	4.83	4.39
Decision Sciences	4.35	8.04	5.90
Dentistry	2.01	3.14	3.13
Earth and Planetary Sciences	3.34	4.46	3.93
Economics, Econometrics and Finance	4.30	6.08	5.49
Energy	2.84	3.16	3.23
Engineering	2.49	2.79	2.93
Environmental Science	3.39	4.67	4.15
Health Professions	2.90	4.70	4.28
Immunology and Microbiology	2.51	3.32	3.33
Materials Science	2.11	2.04	2.44
Mathematics	2.50	3.42	3.03
Medicine	2.49	4.30	3.73
Neuroscience	2.53	3.13	3.13
Nursing	2.65	3.89	3.75
Pharmacology, Toxicology and Pharmaceutics	2.11	2.60	2.62
Physics and Astronomy	2.47	4.31	3.00
Psychology	3.28	4.51	4.26
Social Sciences	4.95	6.82	6.78
Veterinary	2.22	2.58	3.12

Source: Technopolis (2025), based on data from OpenAlex. The table marks in amber when the difference in FWCI with respect to all UK publications is 0.5 or lower, in light green if it is higher than 0.5 and lower than 1, and in dark green if it is 1 or above.

3.7 UK reputation

Type	Ref No.	ToC Element	Indicator	Sources	Baseline
Outcome	**OC12**	Increased or sustained reputation of UK as: R&I partner of choice; destination for talent	Percentage of international funders / delivery organisations for whom participation in the ISPF programme has led to a significant improvement in their own organisation's and other organisations' perceptions of the UK as an SRTI partner.	Survey with international project participants	Starting point at the point of application

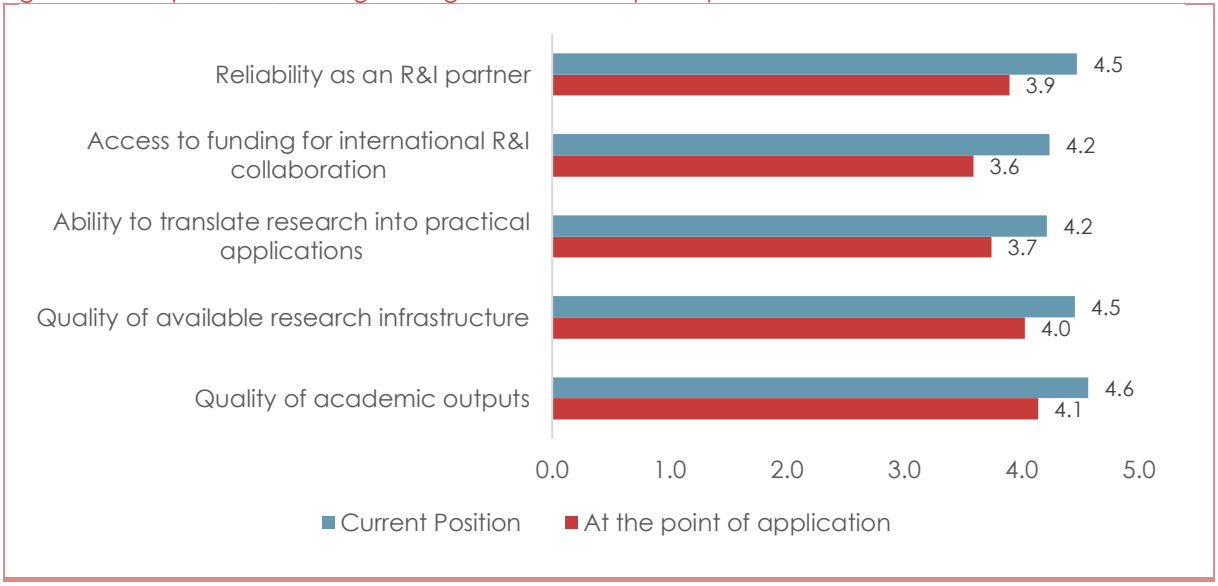
One of the high level objectives of ISPF is to help improve the reputation of the UK and UK R&I by building long-term relationships, working in a fair and transparent way, and demonstrating the benefits of the UK international partnerships. It is anticipated that ISPF partnerships and interactions will help increase or sustain the reputation of the UK as an R&I 'partner of choice' or as a destination of choice for talent and investment.

In the survey, we captured perceptions of the UK across five dimensions from international (non-UK) participants in ISPF projects and awards (on a scale from 1-very negative to 5-very positive).

At the **baseline position,** results suggest reasonably good ratings across all categories (from quality of academic outputs, to access to funding, and reliability as a R&I partner), ranging from an average of 3.6 to 4.1 (where 3 is 'neutral' and 5 is 'very positive'). The averages across international participants in ODA and non-ODA programmes are similar, and always below 4.2.

ISPF alone cannot fully influence these perceptions, but we do expect to see some improvement as ISPF projects and programmes progress. Indeed, the survey results show that perceptions have **improved slightly over time** (from application to currently) amongst these participants, with average scores now ranging from 4.2 to 4.6 across the dimensions explored.

Figure 28 UK reputation, average ratings, international participants



Source: Survey of ISPF participants (Technopolis, 2025), N=197-201

4 Piloting the Value for Money assessment

4.1 Introduction and approach

The ISPF Evaluation Framework[14] provides the full Value for Money framework for ISPF, which follows a rubric approach. The framework includes four main dimensions (Economy, Efficiency, Effectiveness and Equity) and 25 sub-dimensions.

Pilot and sample. At this baseline stage, we are testing the Economy component of the VfM rubric, which contains four sub-dimensions on relevance (and alignment with ISPF objectives) plus another on leverage:

- Developing long-term strategic international R&I partnerships, at all levels (see section 4.3.1)
- Delivering solutions that contribute towards addressing specific shared challenges (within an ISPF Theme) (see section 4.3.2).
- Strengthening R&I capabilities (UK & ODA), at all levels (see section 4.3.3)
- Strengthening SRTI quality through international collaboration (UK & ODA) (see section 4.3.4)
- Co-funding / contributions in kind for ISPF activities (see section 4.4)

These are the parts of the VfM rubric that are most appropriate for undertaking a first assessment at this early stage in the Fund.

This piloting has been conducted for 10 cases (out of the 21 selected in the sampling framework) (see Appendix A.3 for list). Methodological reflections are presented in Section 6.3.

Evidence and calibration. Evidence has been collected through interviews (with ISPF Partner Organisations, plus overseas partners) and desk-based review of publicly available documentation. This has then been presented in the form of a case study narrative (see separate case study annex). Each sub-section within a case has helped to inform the scoring of a sub-dimension (with a justification), which has then informed the VfM rubric assessment.

The case studies have followed a 2-stage calibration and QA process:

- Peer learning support and calibration: the cases have been developed by 4 case study leads (including the project manager) who have discussed emerging findings and the implementation of the VfM rubric in weekly meetings.
- Scoring (and justification) has then been reviewed by the Project Director, to maintain consistency across all 10 cases.

Analysis. In line with the proposed approach, the analysis of "Value" is not performed at the programme level but at the Fund level. The approach requires the evaluators to make (evidenced) value judgements for each individual unit of analysis, and as such, the initial assessment is done at programme level. However, the analysis is presented in an aggregate form, as the methodology is not intended to be used to judge individual programmes. We did not expect each individual programme to score highly across all the VfM dimensions or sub-dimensions, but rather seek to get a view of performance of the ISPF portfolio. Consequently, the analysis keeps references to specific examples (programmes) to a minimum. Examples on specific programmes are presented in the subsequent section on enablers and barriers.

[14] https://www.gov.uk/government/publications/international-science-partnerships-fund-evaluation-framework/international-science-partnerships-fund-ispf-evaluation-framework

4.2 Summary of the VfM assessment

Figure 29 presents and overview of the results of the VfM assessment across the portfolio of 10 ISPF programmes examined. For each of the five sub-dimensions assessed in this pilot exercise (listed down the left-hand side), the average VfM score is given – for the portfolio of 10 programmes overall, and for the sub-portfolios of 5 ODA and 5 non-ODA programmes. The range of scores provided on each sub-dimension is also shown (in parenthesis) alongside the overall average.

Overall, the portfolio has performed well against the standards set across four of the five sub-dimensions. If the '2-adequate' rating is taken to represent the minimum expectations for the Fund (as was the intention when designing the performance standards), then these expectations have been exceeded by the portfolio in relation to its relevance and alignment with four key ISPF objectives, and in particular in relation to the strengthening of R&I capabilities (especially in ODA countries).

On the final sub-dimension, which relates to the leveraging of cash and in-kind contributions from partners alongside the ISPF investment, the portfolio has performed less well, and is currently more in line with minimum expectations (or even falling slightly short of these in terms of non-ODA activities where the bar was set higher). Several potential reasons for this are discussed further below, but it is worth also noting the assessments on this sub-dimension (more so than the others) could evolve over time, with additional co-funding / contributions realised as programmes progress further with their implementation.

Figure 29 Summary of the VfM assessment

Ref	Sub-dimension	Overall Average score (range)	ODA Average score (range)	Non-ODA Average score (range)
1.1.1.	> Developing long-term strategic international R&I partnerships, at all levels *Relevance / alignment of the activity (its scope, focus & intentions) with key ISPF objectives:*	**3.1** (2-4)	**3.2** (2-4)	**3** (2-4)
1.1.2.	> Delivering solutions that contribute towards addressing specific shared challenges (within an ISPF Theme) *Relevance / alignment of the activity (its scope, focus & intentions) with key ISPF objectives:*	**2.9** (2-4)	**2.8** (2-4)	**3** (2-4)
1.1.3.	> Strengthening R&I capabilities (UK & ODA), at all levels *Relevance / alignment of the activity (its scope, focus & intentions) with key ISPF objectives:*	**3.4** (2-4)	**3.8** (3-4)	**3** (2-4)
1.1.4.	> Strengthening SRTI quality through international collaboration (UK & ODA) *Relevance / alignment of the activity (its scope, focus & intentions) with key ISPF objectives:*	**3.3** (3-4)	**3.2** (3-4)	**3.4** (3-4)
1.2.1.	Co-funding / contributions in kind for ISPF activities	**1.5** (1-3)	**1.8** (1-3)	**1.2** (1-2)

Key:	1 - Poor	2 - Adequate	3 - Good	4 - Excellent

Source: Technopolis (2025)

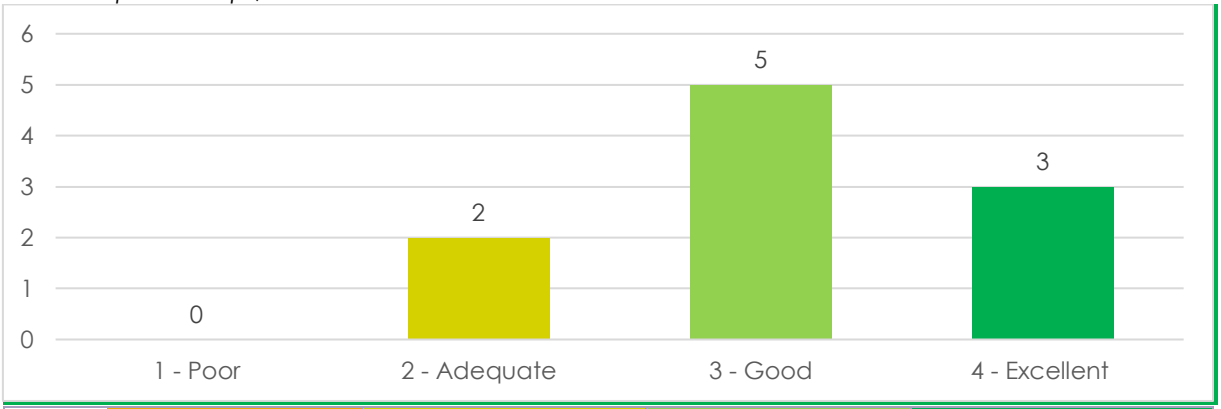
4.3 Relevance / alignment of the activity (its scope, focus & intentions)

4.3.1 Developing long-term strategic international R&I partnerships, at all levels

As stated in the ToC, ISPF has an objective to develop long-term strategic international partnerships at every level, which deliver better R&I, and that address shared priority areas. Most programmes within the ISPF portfolio are expected to contribute towards this objective, in that they will involve different partnerships (at different levels, between different types of individual and organisation), that the Fund will have helped to create or strengthen.

In line with these ambitions, this VfM sub-dimension standard tries to capture the extent to which the programmes have been set up in close coordination with international partners and / or the extent to which national and international partners can articulate the strategic importance of the collaboration. Results are presented in Figure 30, with the performance standards below.

Figure 30 Distribution of scores - Sub-dimension "Developing long-term strategic international R&I partnerships, at all levels"



Score	1 - Poor	2 - Adequate	3 – Good	4 – Excellent
Performance Standard	There is **no evidence** that UK and international funders / delivery organisations or participants (researchers, innovators) involved see participation in the programme as part of a (potential) longer-term R&I partnership.	Evidence suggests that UK and international funders / delivery organisations involved **see the programme as helping to maintain existing R&I partnerships, or serving as a starting point for possible longer term R&I partnerships.**	As 2-Adequate… **AND** UK and international funders / delivery organisations involved **can articulate the strategic importance of the partnerships.**	As 3-Good… **AND** The programme was **designed/set up in the context of pre-existing or new agreements (e.g. MoUs)** between the UK and international funders / delivery organisations

Source: Technopolis (2025)

We found that nearly all the programmes score as good or excellent in terms of setting up the basis for long-standing international relationships.

Overall, programmes have followed a dual approach: both maintaining existing partnerships (60%) and establishing new ones (40%).

All programmes assessed as '4 - excellent' on this sub-dimension, showed evidence of existing **institutional infrastructure** (agreements, frameworks) and **strategic embedding** within broader bilateral relationships. They show evidence of **explicit stakeholder commitments** to continuing relationships beyond the programme. In those cases, both UK and international partners could

clearly explain mutual advantages, and an articulation of why collaboration adds unique value that neither side could achieve alone.

These programmes also show **multi-level engagement,** at an institutional, and government/diplomatic levels. Two programmes scored as '4 - excellent' operated within broader diplomatic relationships (UK-Japan Nuclear Framework, UK-South Africa academic cooperation), and are in line with wider diplomatic, economic, or strategic objectives. Based on the ToC, this should further support the development of long-term strategic international R&I partnerships. It is important to note that partnerships were a combination of formal or semi-formal agreements (i.e. they operated with or without an MoU). Additionally, in some cases, the funding provided an opportunity to execute an MoU.

Programmes that scored as '3 – good' also expressed clear long-term relationship goals, with both sides (UK and international counterparts) being able to articulate mutual benefits. In those cases, however, partnerships depend on individual programmes/organisations rather than building upon institutional level frameworks, and the absence of these institutional level frameworks may make it more difficult to translate individual level relationships into long term partnerships.

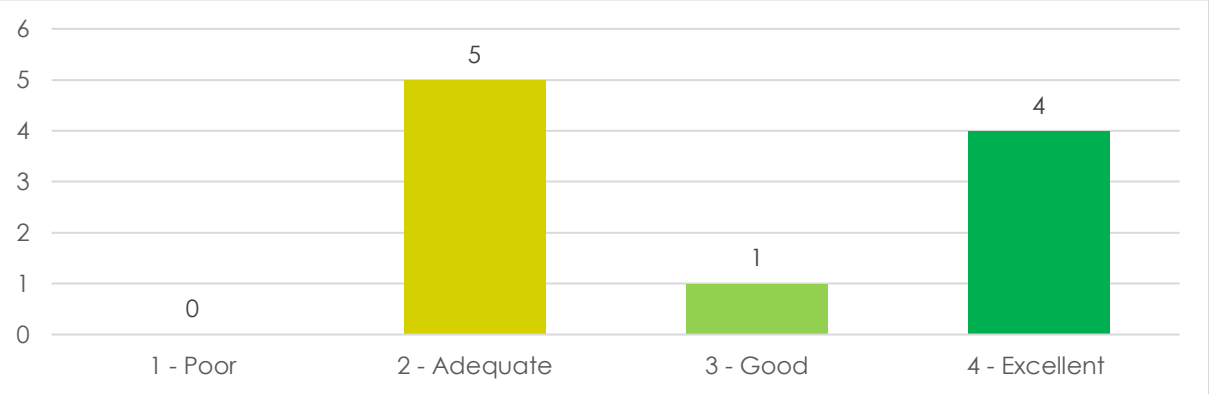
Finally, those programmes qualified as '2 - adequate' built upon strategic objectives but did not develop the programmes in close coordination with international partners. They are qualified as adequate (rather than poor) because they have identified and can articulate the need and advantage of the international collaboration.

4.3.2 Delivering solutions that contribute towards addressing specific shared challenges

Another key objective of the Fund relates to addressing shared / global challenges, and it is expected that the Fund will make progress towards addressing specific shared challenges and priorities. Most programmes within the ISPF portfolio are expected to contribute towards this objective, in that they should be aligned with one or more of the ISPF Themes (which are intended to reflect the major challenges facing the UK and its partners) and be designed and developed in partnership with other countries.

In line with this objective, the VfM sub-dimension standard tries to capture the extent to which the themes and topics covered by the programme align well with existing strategies and ISPF themes, but also the extent to which they have been jointly defined between the UK and partner country(ies). Results are presented in Figure 31, with details of the performance standards below.

Figure 31 Distribution of scores - Sub-dimension "Delivering solutions that contribute towards addressing specific shared challenges"



Score	1 - Poor	2 - Adequate	3 – Good	4 – Excellent
Performance Standard	It is **not possible to identify** how programme high level objectives and thematic focus align with existing strategies, needs assessments and / or identified challenges for both the UK and international funders or delivery organisations.	**It is possible to identify** how programme high level objectives and thematic focus align with existing strategies, needs assessments and / or identified challenges for both the UK and international funders or delivery organisations. **AND** The thematic focus **aligns with an ISPF Theme**	As 2-Adequate… **AND** There is evidence that programme objectives and focus have been **defined with consultation** between UK and international funders or delivery organisations.	As 3-Good… **AND** There is evidence that programme objectives and focus have been **jointly defined, with close coordination** between UK and international funders or delivery organisations.

Source: Technopolis (2025)

Half of the programmes are qualified as '4 – excellent' or '3 – good' (2 ODA and 3 Non-ODA). Excellent programmes show evidence that **they were designed around shared challenges through collaborative processes**, which ensure genuine mutual relevance and strategic alignment. They also show strong alignment with ISPF themes (bearing in mind that those are quite broad).

The programmes articulate the challenges faced by both/all partners, as well as the mutual interest and benefit in the R&I collaboration, including addressing challenges that require international collaboration. Examples include:

- **Nuclear decommissioning**: Both UK (Sellafield) and Japan (Fukushima) face identical technical challenges
- **Climate change/net zero**: Shared global challenge and strategic priority, requiring coordinated response
- **Global health research capacity**: Clinical research capacity deficits have been demonstrated to affect all LMICs and global health security (e.g. through the ability to respond to pandemics)

Those programmes also show evidence of joint problem definition and solution design. This includes collaborative identification of shared challenges, and joint development of programme objectives and focus. In some cases, these processes were guided by structured coordination mechanisms, including working groups with all partners to shape the programme

and jointly define its 'terms of reference'; and dialogues and extensive consultation with key stakeholders. That meant, in practice, that UK and international collaborators had an equal voice in defining problems and solutions.

Programmes qualified as '3 – good' also show a good alignment with priorities and with ISPF themes. These programmes also put in place coordination mechanisms at the outset and design of the programme. However, in those cases, the evidence points towards consultation rather than co-creation, with international partnerships having the possibility to provide feedback, rather than directly influencing the design. Based on the performance standards set up for this sub-dimension this is considered "good".

The remaining 5 programmes (3 ODA, and 2 non-ODA) were qualified as 'adequate' since they do not demonstrate input from international partners in the design of the programme, but it is possible to trace back the focus and objectives of the programme to challenges that both / all parties face. From a ToC perspective, this however, may mean that the outputs and outcomes emerging from the programme are not fully relevant to address local challenges.

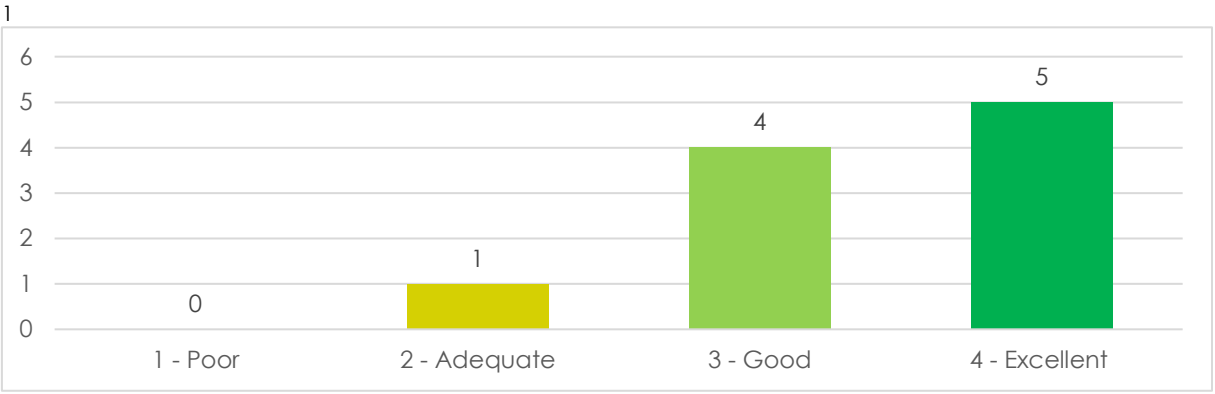
4.3.3 Strengthening R&I capabilities (UK & ODA), at all levels

Another key objective of the Fund relates to 'enabling potential' and it is expected that the Fund will contribute to strengthening R&I capabilities in the UK and in international partner countries, at the individual, institutional, and system level.

Most programmes within the ISPF portfolio are expected to contribute towards this objective, in that they will involve different partnerships (at different levels, between different types of individual and organisation), that it is expected will share knowledge and understanding. Some activities will also be specifically targeted towards increasing knowledge, skills and understanding amongst different individuals and institutions.

In line with this objective, this VfM sub-dimension standard tries to capture the extent to which programmes include activities that are focused on strengthening capabilities at the individual and institutional level. Results are presented in Figure 32, with the performance standards below.

Figure 32 Distribution of scores - Sub-dimension "Strengthening R&I capabilities (UK & ODA), at all levels"



Score	1 - Poor	2 - Adequate	3 – Good	4 – Excellent
Performance Standard	The **programme does not include activities** focusing on strengthening R&I capabilities at any level in ODA countries [ODA] / in the UK [non-ODA]	The programme **includes activities** focusing on strengthening R&I capabilities **at individual level** (researchers, innovators) in ODA countries [ODA] / in the UK [non-ODA] **BUT** There are **no planned activities to facilitate** (i.e. encourage / enable) **spillover effects** beyond those individual researchers & innovators	As 3-Good… **AND** **There are planned activities to facilitate (i.e. encourage / enable) spillover effects**	The programme has high level objectives and planned activities focusing on strengthening R&I capabilities **at institutional level** (organisation) in ODA countries [ODA] / in the UK [non-ODA]

Source: Technopolis (2025)

We found that nearly all the programmes score as '3 – good' or '4 – excellent' in terms of strengthening R&I capabilities, including 5 ODA and 4 Non-ODA programmes.

The programmes qualifying as excellent attempt to build capabilities at various levels. One programme stands out in particular; it includes activities that aim at improving skills at:

- **Individual level**: Commercial skills development, entrepreneurial mindset training
- **Organisational level**: Technology transfer capabilities, business creation support
- **Institutional level**: Policy regulation training for government stakeholders
- **Ecosystem level**: Improving overall culture around commercialisation

Programmes qualifying as excellent included in their design activities that may support spillover effects including. This includes:

- Planned activities to facilitate effects beyond individual participants and mechanisms to transfer learning to institutional level, such as train-the-trainer activities and workshop replication (i.e. delivering workshops and providing material that can then be replicated by participants), such that participants can become change agents.
- Activities that aim at improving institutional frameworks and policies, which could potentially deliver benefits beyond those directly involved in the ISPF activities.

Programmes qualified as '3 – good' show the potential for spillover effects but are mostly concentrated on providing support to individual participants. They do include some activities to support or influence spillover effects, but in a more indirect way (in comparison with the cases qualified as excellent). Those activities include dissemination activities (case studies and reports intended for wider audiences, including funders and policy makers), and networking events. The focus of those programmes is more on the individuals (researchers and innovators)

rather than on institutions. Based on the performance standards set up for this sub-dimension this is considered "good", in so far as it goes in line with the design and intentions of other international collaborative R&I programmes (such as international research infrastructures), in particular those implemented in collaboration with non-ODA countries.

In contrast, the one programme qualified as adequate does include activities that would lead to strengthening of R&I capabilities, but just at an individual level, and there are no planned activities to enable spillover effects.

4.3.4 Strengthening SRTI quality through international collaboration

ISPF also has an objective to strengthen (increase / sustain) the quality and competitiveness of SRTI through international collaboration, delivering better outcomes and benefits for those involved (individuals, institutions and countries). Many programmes within the portfolio are expected to contribute towards this objective, with the various immediate benefits of international collaborative activities (partnership development, R&I outputs, knowledge and skill development) helping to address shared challenges and also increase (and demonstrate) the quality and competitiveness of SRTI within the UK and (ODA) partner countries.

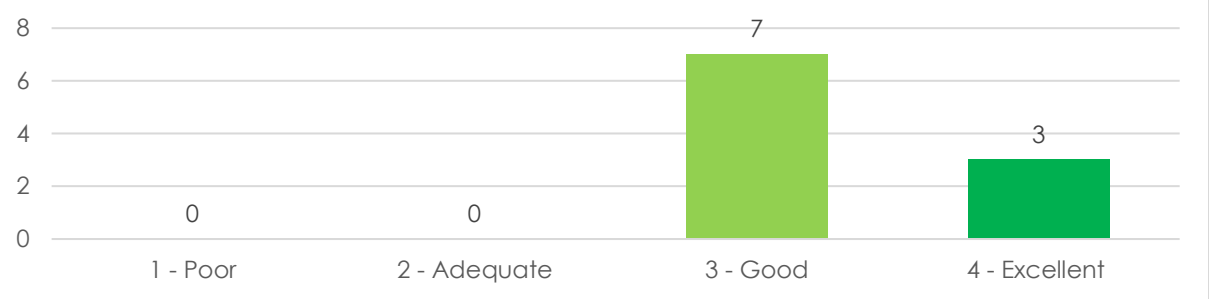
ISPF activities with a stronger innovation focus (e.g. business-led or translational research activities) are also expected to result in new and improved technologies, products and services (as well as associated IP), that can be exploited to generate commercial benefits (and wider socio-economic impact) for the UK and (ODA) partner countries.

In line with these ambitions, this VfM sub-dimension standard tries to capture the extent to which international collaboration (as opposed to a purely domestic effort) is important for the quality of the research and innovation outputs that are expected to emerge.

There is a slight difference in the standard between ODA and non-ODA programmes, where the former are primarily expected to add value to what could be realised domestically by ODA partner countries, while for non-ODA programmes the primary interest lies (from the Fund's perspective) in adding value for the UK.

Results are presented in Figure 33, with the standards below.

Figure 33 Distribution of scores - Sub-dimension "Strengthening SRTI quality through international collaboration"



Score	1 - Poor	2 - Adequate	3 – Good	4 – Excellent
Performance Standard	The programme **does not explicitly explain** how international collaboration will strengthen the quality of the expected R&I outputs.	**The programme explains** why international collaboration is **important** in strengthening the quality of the expected R&I outputs.	The programme explains why international collaboration is **highly critical** in strengthening the quality of the expected R&I outputs, including why it could not be delivered nationally in the ODA country [ODA] / the UK [non-ODA]. **AND** **Plans / processes are in place to ensure high quality SRTI is supported.**	As 4-Good…. **AND** The programme can **demonstrate that it is only supporting activities that are above a certain quality threshold**.

Source: Technopolis (2025)

All programmes have been assessed highly (good or excellent) on this sub-dimension, meaning that they have all explained (in strategic / programme documentation and when consulted for the case) how and why the internationally collaborative nature of their programme is critical to strengthening the quality of the R&I undertaken and the outputs expected, as well as why similar results could not be achieved by the parties involved alone.

Those programmes rated as **excellent** had clear processes in place to ensure that high quality SRTI is supported (e.g. rigorous proposal assessment processes, including the strict criteria and assessors involved) and were also able to demonstrate that they were only supporting activities above a certain quality threshold (through e.g. high minimum quality thresholds), which was often also reinforced by high levels of competition for funding.

ODA programmes highlighted an improved ability to address local (partner country) challenges, within and beyond the programme, as a consequence of the additional resources, expertise, training / capacity development and access to infrastructure provided to the ODA R&I community, as well as the local expertise, facilities and networks (made available to the UK). Some also emphasised that the scale of the joint endeavour (and its international 'branding') increased the chances of interest in, uptake / use and impact of results.

Non-ODA programmes focused on the skills, capabilities, knowledge, infrastructure and good practices that could be leveraged from their international partners (in both directions), the importance of connecting globally distributed talent, groups and ecosystems, and access (for the UK) to leading international centres in particular fields

4.4 Co-funding / contributions in kind for ISPF activities

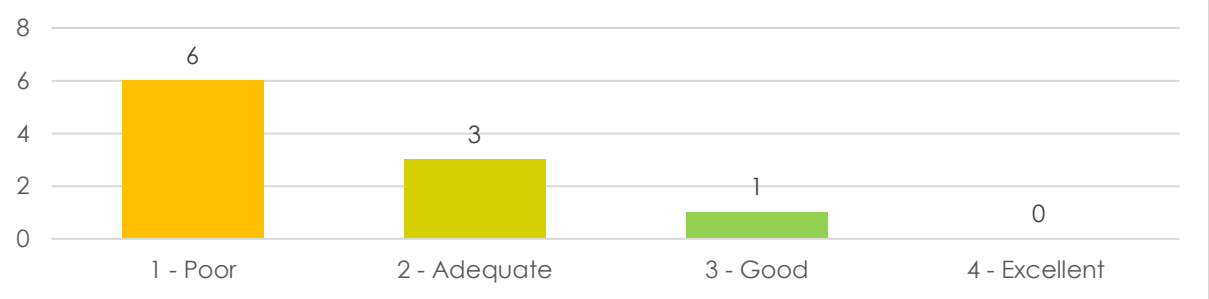
One of the main inputs to ISPF is **funding** to support international SRTI collaboration. This includes UK government funding (an initial £119m of non-ODA spend and £218m of ODA spend for FY 22/23-24/25), plus public and private **co-funding** (in cash and in-kind) from partner countries.

Contribution levels will vary across the ISPF portfolio, but there are specific considerations for Least Developed Countries[15], where there is no *requirement* for co-funding given the material pressures of LDCs, but without prejudicing their ability to contribute where they desire to.

Additionally, ISPF programmes are expected to **leverage further resources for ISPF projects and activities** (i.e. extra funding beyond the initial inputs, capacity, and other resources). These are outcomes of ISPF (in that ISPF serves as a mechanism to attract international funding), but also serve as additional inputs to the Fund (alongside ISPF expenditure and partner co-funding).

For the purpose of the VfM assessment (in this Economy dimension), the rubric focuses on co-funding from international partners at the programme level. Note that different standards are applied to ODA and non-ODA programmes, given differing levels of expectation. Results are presented in Figure 34, with the performance standards shown below.

Figure 34 Distribution of scores - Sub-dimension 1.2.1



Score	1 - Poor	2 - Adequate	3 – Good	4 – Excellent
Performance Standard	[ODA] The programme **does not include any international co-funding** (cash or in -kind) at either the programme or sub-programme / project level	[ODA] The programme **does include some** international co-funding (cash or in -kind) at either the programme and/or sub-programme / project level	[ODA] As 2-Adequate… - **equivalent to >25% of ISPF funding**	[ODA] As 2-Adequate… - **equivalent to >50% of ISPF funding**
Performance Standard	[non-ODA] The programme budget **does include** international co-funding (cash or in -kind) at either the programme and/or sub-programme / project level - **equivalent to <75% of ISPF funding**	[non-ODA] The programme budget does include international co-funding (cash or in -kind) at either the programme and/or sub-programme / project level - **equivalent to 75<125% of ISPF funding**	[non-ODA] As 2-Adequate… **equivalent to >125% of ISPF funding**	[non-ODA] As 2-Adequate… - **equivalent to >150% of ISPF funding**

Source: Technopolis (2025)

Most programmes under analysis have not (yet) been able to mobilise significant co-funding from international partners (or have not formally agreed to such co-funding in future, with a high degree of confidence that this will be realised).

Only one **non-ODA** programme qualified as adequate, as it anticipates co-funding of 60-85% from its overseas partner, plus in kind-contributions. Four of the non-ODA Programmes were qualified as poor, as they have mobilised less than 25% of ISPF funding, with one having realised no co-funding at all.

The main barriers and challenges for mobilising co-funding for non-ODA programmes include:

[15] Least Developed Country is a legally established term, with the definition of countries proposed by the Development Assistance Committee (DAC) of the Organisation for Economic Cooperation and Development (OECD). It refers to countries with low development scores across a variety of metrics, and is different to defining countries as Low-, Middle- or High-Income (purely a measure of per capita income). See: https://unctad.org/topic/least-developed-countries/list

- The fact that some programmes were delivered unilaterally, without close involvement of an overseas partner organisation
- There was insufficient time for partnership development and funding agreements
- The timeline mismatch with partner government processes and ISPF

ODA programmes were rated a little higher on this sub-dimension on average, though this is based on different expectations in terms of partner contributions (reflected in the performance standards). One programme has been classed as good, as it has realised ~40% of ISPF funding for its main sub-programme in the form of contributions in-kind (compute time and staff resources). Two programmes were rated as adequate (co-funding of <25%) and two as poor (no co-funding).

The cases suggest that the low levels of co-funding relate to:

- ODA countries typically having more constrained research funding ecosystems / more constrained budgets compared to non-ODA partners.
- Challenges related to exchange rates, with ODA partner currencies often weaker against GBP, making contributions appear smaller when converted.
- ODA partners often contribute through in-kind means that are harder to quantify and may be small in GBP monetary terms, but nevertheless are valuable in a local context.

Further success factors and challenges are discussed in Section 5 below.

5 Main enablers and barriers

The evidence collected for the VfM case studies has enabled us to provide some initial reflections below on the enablers and success factors, and barriers and challenges, in relation to the design and initial implementation of ISPF programmes and activities. Further enablers and barriers will emerge as the Fund progresses, and as outputs and outcomes emerge.

5.1 Enablers and success factors

Early evidence suggests that **pre-existing relationships** play an important role in the initial programme set-up. Most successful programmes (in terms of dimensions considered in the pilot VfM) built on established partnerships (e.g. AI for Climate – AI4C- on the Weather and Climate Science for Service Partnership Programme with South Africa, and the Academy of Medical Sciences (AMS) building up several GCRF relationships). This is consistent with prior evidence on international funds.

Programmes designed in the context of no pre-existing relationships have had to spend more time and resources building partnerships. This could lay the ground for future collaborations, but some have found that the short implementation timescales for ISPF have provided insufficient time for relationship building and agreement development (e.g. AI for Bioscience).

For newer relationships (or areas of collaboration), pump-priming activities can be an effective mechanism, with small investments generating larger follow-on collaborations. This is the case for NPL's Quantum Electronics Materials of Tomorrow (QEM4T), which supported the identification of needs and complementarities, and potential projects. Several of those proposed projects have already been funded (via other sources beyond ISPF), and are yielding results (e.g. Manchester University's work with the Japanese National Institute for Materials Science (NIMS) has led to at least five publications).

Complementary expertise and value proposition also play a positive role. Interviewees highlighted that the existence of complementary expertise helps to design programmes that are mutually beneficial (QEM4T's fabrication-testing split, AI4C's combination of supercomputing-regional expertise). Furthermore, complementary expertise and mutual strategic alignment also support the mobilisation of additional resources. This is the case of UK-Japan Civil Nuclear Research Programme. Both countries have nuclear capacity expansion goals (UK's 24GW by 2050, Japan's 20% nuclear energy by 2040) and legacy decommissioning challenges (Sellafield/Fukushima), and the programme has been able to mobilise a 50/50 split in terms of resourcing (one of the highest co-funding as percentage of ISPF funding).

Early evidence also suggests that there are positive results from applying a **co-design approach and joint objective setting.** As a case in point, AMS programme managers and international partners highlighted that in-country workshops have been a particular success. The workshops brought together 30-40 stakeholders in each region, enabling impactful discussions about the challenges faced in strengthening clinical research capacity. These discussions deepened the understanding of context-specific barriers and identified opportunities for targeted, locally relevant interventions. Early feedback also suggests that the collaborative approach adopted by the programme has been instrumental in strengthening local expertise, enabling partners to take a more active role in shaping and sustaining their research ecosystems.

Similarly, in the case of the British Council Early Career Fellowships, the needs and priorities of non-ODA countries and territories were identified in close coordination with them. Conversations were held between universities in Taiwan and South Korea and the British Council's office in East Asia. This has allowed a strengthening of relationships with partner organisations which may lay the ground for long-standing collaborations. The British Council has now established a new university consortium of four leading UK and Taiwanese universities.

The primary objective is to build up research partnerships in the areas of education and climate change and net zero research to contribute to the ambitions of both Taiwan and the UK.

Even when co-design and joint objective setting was not in place, some programmes (e.g. RAEng' Leaders in Innovation Fellowships programme) actively engaged with international partners to adapt to local needs, while maintaining the pre-existing core objectives. Beyond the design stage, RAEng also maintains a very close contact with international partners to support the international participants' selection process.

Also, as identified as part of the VfM assessment, there are factors that may sustain success as programmes progress. This includes:

- Multi-level capacity building**:** Working at both individual researcher and institutional levels
- Knowledge transfer mechanisms**:** Built-in sharing, networking, and dissemination activities

5.2 Main barriers and challenges

Future funding uncertainty was named as significant barrier to long-term partnership commitments. The AMS Clinical Research Pathways programme is a case in point, where UK programme managers and international partners have expressed a clear desire to sustain these relationships beyond the current ISPF project, but long-term commitments are constrained by uncertainty about future funding. Without secure funding guarantees, the AMS is hesitant to make specific commitments to partners due to concerns about being unable to follow through, which could undermine trust and future collaboration efforts.

This is also the case of the Newton International Fellowships, where both the UK and Switzerland are keen to see this partnership and collaboration continue, but have both expressed uncertainty around long-term funding to support those efforts. In the UK, partners are unable to commit until the full results of the Spending Review are published. Similarly, Swiss counterparts are undergoing a spending review and are unable to commit any further sources at this point.

Linked to the above some programmes has signalled the **follow-on funding gaps** and difficulty accessing subsequent funding to sustain momentum can play a negative role.

In line with this, but from a more positive perspective, stakeholders have expressed the importance of long term support. As stated by the British Council, having access to a mechanism allowing organisations to apply for grants in more than one international setting is crucial for providing opportunities for international working. Having access to multinational mechanisms throughout the years (e.g. ISPF, Newton Fund, GCRF, Horizon Europe), has allowed the British Council to build bilateral partnerships and attract foreign applicants to the UK.

There have also been some implementation and delivery challenges that are typical of international collaboration including **language / cultural barriers** (e.g. QEM4T Japanese-English barrier), but also **infrastructure disparities** (unequal access to research facilities and resources).

Finally, there have also been structural and administrative barriers:

- **ODA funding restrictions**: UK inability to directly fund international partners creating complex workarounds (AI4C).
- **Misaligned funding cycles**: Difficulty synchronizing with international partner timelines (BBSRC).
- **Visa and mobility restrictions**: Changing immigration policies affecting researcher exchanges (British Council).

6 Conclusions and lessons learned

6.1 Overall conclusions

Portfolio composition

The baseline portfolio analysis is intended to provide insight into the shape and focus of the Fund. It focuses on **the "current" portfolio of live and underway ISPF programmes, as at December 2024** (i.e. programmes where spend had been recorded in RODA, at any level, to this point). This portfolio includes 128 programmes, delivered by 22 POs, with 854 awards made so far and past programme / award expenditure of £80.6m (ODA) and £62.6m (non-ODA).

Comparison with the portfolio at March 2024 shows **a significant increase in ISPF activities and expenditure over the previous 9 months.** This includes:

- 39 more programmes that are underway (a 44% increase on 89 programmes)
- 19 more programmes that have made awards (a 45% increase on 42 programmes)
- 347 more awards made (a 68% increase on 507 awards)
- £47.9m more expenditure on ODA programmes / awards (a 146% increase on £32.9m)
- £36.0m more expenditure on non-ODA programmes / awards (a 135% increase on £26.2m)

The latest analysis also reveals that the current ISPF portfolio is:

- **Addressing all of ISPF's four target thematic areas**, which relate to major challenges and supporting the talent necessary to address these. Coverage is not evenly spread, however, with the 'healthy people, animals & plants' theme addressed by a smaller proportion of the portfolio (20% of current programmes) than the other three areas; 'resilient planet' (50%), 'Transformative Technologies' (41%) and 'Tomorrow's Talent' (37%)[16].
- **Supporting a broad range of different types of activities.** International collaborative academic research is a feature of the majority of current programmes (71%), and the *main* activity type for nearly half (45%). However, all seven other types of activity defined for the evaluation are each found in at least 10% of programmes. This includes international collaborative business-led RD&D (which one might expect to have a stronger innovation / commercial focus), which is a feature of 33% of programmes, and the main activity of 15%.
- **Well aligned with key policy priorities that have emerged since the Fund was launched.** More than one-third (35%) of the current ISPF portfolio of programmes is relevant to one or more of the UK's current critical technologies[17], with the highest number relating to AI. Over half (55%) of current programmes are also relevant one or more of the eight growth-driving sectors[18] (digital & technologies, clean energy, and life sciences are the most common).

The current data does, however, indicate that there is a risk of underspend during the initial 3 year spending review (SR) period. It has taken time to get programmes underway, and the scale and pace of activity has increased significantly in recent months. However, at December 2024 (3 months before the end of the initial SR period), £80.6m of ODA programme spend had been reported so far, with £42.3m forecast to be spent in the remaining quarter, while £62.6m of non-ODA spend had been reported so far, with £23m forecast for the remaining period (i.e. equivalent to 52% and 37% of all previous expenditure respectively).

[16] Programmes can be tagged against multiple themes.

[17] Identified within the DSIT Science and Technology Framework (April 2025): Artificial Intelligence, Engineering biology, Advanced connectivity technologies (formerly called future telecommunications), Semiconductors, and Quantum technologies.

[18] Identified in The UK's Modern Industrial Strategy (June 2025): Advanced manufacturing, Clean energy industries, Creative industries, Defence, Digital & technologies, Financial services, Life sciences, and Professional & business services

Baseline and progress so far

The online survey of ISPF grant / award holders (with 679 respondents) has demonstrated:

- **Good alignment between participant motivations and Fund objectives**. Participants demonstrate strong motivations aligned with Fund objectives, with access to funding (75%), advancing research interests (59%), and contributing to global challenges (67%) as primary drivers. There is however a low result when it comes to accessing resources (talent or infrastructure) not available nationally. There is a stronger articulation of the need and value of international collaboration at programme level (demonstrated in the VfM assessment).
- **Strong early progress across multiple indicators.** The baseline assessment reveals encouraging signs of ISPF's early contribution across nine key indicators.
- **Substantial knowledge and skills development.** Researchers show marked improvements in understanding across critical areas - from 6.5 to 8.0 (on a scale from 1-very low to 10-very high) in user needs comprehension, 7.3 to 8.5 in research methods, and 6.9 to 8.4 in enhanced capabilities in leading international collaborative research. This indicates strong capacity building outputs.
- **Notable innovation advancement.** Despite the early stage of programmes, significant progress is evident in technology readiness levels, with over half of participants reporting advancement of one or more TRL levels, and 36% achieving two or more level increases. This signals that is ISPF is being effective in supporting translational research and innovation. Data needs to be taken with caution, however, as we identified some inconsistencies in the reporting of initial levels of TRL by participants.

Value for Money assessment

The VfM pilot assessment (focused on the Economy sub-dimensions and a sample of 10 ISPF programmes) has demonstrated:

- **Strong portfolio performance on relevance and alignment.** ISPF largely exceeds minimum expectations on four of five sub-dimensions, with particularly strong performance in developing strategic partnerships (an aggregate score of 3.1 on a scale from 1-poor to 4-excellent) and strengthening R&I capabilities (3.4), with ODA programmes scoring particularly highly on this dimension (3.8).
- **Effective approach to addressing shared challenges.** Programmes demonstrate good alignment with ISPF themes and show evidence of joint problem definition with international partners, though this varies between excellent programmes with full co-creation and adequate programmes with more limited partner input in design.
- **Co-funding represents a significant weakness.** The most concerning finding is poor performance on leveraging international co-funding (1.5), with most programmes unable to mobilise significant partner contributions (even taking account of lower expectations for ODA programmes). This may reflect structural challenges including ODA funding restrictions, timeline mismatches, and insufficient time for partnership development.

As such, the pilot exercise has shown that ISPF is laying good foundations for achieving value for money. A more comprehensive assessment (covering all VfM dimensions) will be undertaken at a later stage, once all criteria can be assessed.

Enablers and barriers

The evidence collected for the VfM case studies has also provided some evidence on the enablers and barriers to the initial implementation of ISPF programmes and activities:

- **Pre-existing relationships are crucial success factors**. The evidence strongly indicates that programmes building on established partnerships achieve better outcomes in terms of

coordination, co-funding, and strategic alignment. However, newer partnerships can also succeed with adequate pump-priming and relationship-building time.

- **Co-design approaches contributed to aligning needs and priorities**. Programmes employing collaborative design processes with international partners demonstrate stronger mutual relevance, good stakeholder buy-in. Going forward this may also deliver improved prospects for sustainability.
- **Funding uncertainty may undermine partnership sustainability**. The most significant barrier to achieving ISPF's long-term partnership objectives is uncertainty about future funding, which prevents organisations from making meaningful commitments to international partners and risks undermining trust in ongoing collaborations. This may further challenge the improvement of perceptions of the UK as trusted R&I partner.
- **Structural challenges require systematic solutions**. Administrative and structural barriers including ODA funding restrictions, misaligned funding cycles, and visa/mobility constraints represent systemic issues that cannot be fully address by ISPF, but need to be consider when understanding the Fund's effectiveness and impact.

6.2 Recommendations for future implementation

Based on the evidence so far, we suggest the following recommendations for future iterations of ISPF (or similar Funds).

- **Co-funding**. The VfM assessment shows that co-funding has been low (and lower than anticipated). A Fund that intends to leverage funding from international partners (at least non-ODA partners) may need to make this a requirement. However, if this were to be made mandatory, the process may need to allow for time in the implementation for negotiations and agreements to take place.
- **Co-creation**. The VfM case studies have revealed strong examples of co-creation and co-design with international partners, which mean that their perspectives, needs and priorities are embedded from the outset. This could be encouraged and can create additional benefits, for instance, in terms of the ability to leverage funding. However, these activities are resource intensive, and POs may need funding to support early engagement.
- **Supporting new and existing partnerships**. The VfM case studies show that pre-existing relationships are an enabler of success, in that they facilitate negotiations and coordination. However, there is also value in supporting new and emerging partnerships, and these could be an area where the Fund provides more added value. The portfolio could cover both aspects (as has been done through ISPF).
- **Directionality**. The portfolio assessment shows that there is not an even distribution of programmes or funding across ISPF themes, partner countries, activity types, critical technologies or industrial strategy sectors. That is not a problem in principle, but if there is a desire to support some sectors or areas specifically (or more evenly) the Fund should consider being more prescriptive in establishing activities that are focused on under-represented areas within the current portfolio.

6.3 Lessons learned and recommendations for future monitoring and evaluation

6.3.1 Limitations and caveats

The main limitation of the analysis relates to the use of self-reported data from the survey for the majority of indicators in the baseline data. This data has three specific limitations:

1. **Recall**: The baseline survey asked individuals to rate their position on certain indicators at the point of application to ISPF. For some this could have been up to two years prior, which may have affected their ability to recall the situation entirely accurately.
2. **Interpretation of questions**. The assessments also rely on a common understanding of certain concepts (e.g. TRL). This is a usual limitation for this type of data collection, and is addressed in the ISPF Evaluation Framework through further triangulation of evidence (with multiple data sources in place) to arrive to final conclusions. Additionally, we provide below some recommendations for one specific indicator (TRL).

   It is important to note however that the ISPF Evaluation Framework includes 55 indicators in total and some of them would be collected via survey only. Triangulating data for each of them would require a substantial amount of resources, and there is a need to keep a degree of proportionality for the evaluation.
3. **Assessing contribution / attribution:** The baseline survey questions were designed to invite a reflection on changes in indicators (e.g., access to R&I infrastructures, ability to collaborate internationally) in the context of the ISPF projects. That means that they are designed to capture the effects of ISPF. Other factors could also be at play in the change from the baseline position, as such the results provide a good indication of contribution (rather than attribution). As above, future iterations of the evaluation will rely on multiple data sources and methods to arrive to overarching conclusions on the impact of ISPF, understanding that is not possible to draw counterfactual indicators and scenarios for each indicator.

6.3.2 Recommendations for future monitoring and evaluation of ISPF

Based on the experience of implementing the baseline evaluation, we suggest the following recommendations for future monitoring and evaluation of ISPF.

- **Survey response rates.** The baseline survey has achieved a very high response rate, with good coverage across Partner Organisations. This has only been possible because sufficient time and flexibility was built into the process to initially request and obtain contact information from POs, and to implement the survey. A short, simple questionnaire and regular targeted reminders to non-respondents have also been important factors. Future M&E efforts should follow a similar approach. Surveys of course have limitations, and they are only one method among a more complex mix-methods approach set up within the ISPF Evaluation Framework.
- **Technology / Manufacturing / Commercial Readiness levels**. As stated in the survey analysis, some respondents (between 10% and 22%) provided high baseline levels across these levels. An examination of programmes and project names, reveals that they may have misunderstood the scales (even though they were provided as part of the question in the survey), and that there was a confusion between research maturity and technology/ manufacturing/ commercial readiness**.** Future surveys may consider asking first a filter question (e.g. if the projects relate to the development of technologies, products, processes or other commercial activities); at making it even clearer to respondents that they can skip the question if it is not relevant. The baseline position could also be re-assessed (retrospectively, as has been done here) through these future surveys. The responses could also be validated further for a small sample of cases through the planned follow-up interviews.
- **Reputation levels:** The baseline survey used a five point scale for assessing various dimensions of UK reputation amongst international participants, from 1 (very negative) to 5 (very positive). This does not allow for much nuance in the responses and so we would suggest a more granular scale is used for this question in future.

- **Agreements with partner countries**: The information obtained from POs on existing agreements with partner countries does not always allow one to discern whether these agreements were established prior to ISPF, or as a result of the Fund. There were also varying interpretations across POs as to what constitutes an agreement. Looking ahead, if the exercise were to be re-run in future phases of evaluation, additional specificity could be added to the PO request, with more information also sought on the timing, scope and origins for the individual agreements provided (including the role / importance of ISPF). The VfM case studies also offer the opportunity to explore this area in more depth in relation to selected programmes, providing greater insight into how and why agreements were developed, and the extent to which POs attribute these developments to ISPF funding.
- **Value for Money (VfM) assessment.** The VfM rubric appears to have worked well. Perhaps the only point of contention could be the standards for the co-funding sub-dimension. The rubric does not capture information on activities that lead to further mobilisation of resources, such as reciprocal activities in partner countries , i.e. activities funded by the international partners in response to activities funded under ISPF (but not part of the same programme). This could be included in the rubric or reported as part of the wider narrative.

  In response to baseline results, DSIT have also flagged a desire to explore in-kind contributions in more detail, particularly where these are currently not well monitored or recorded. Greater emphasis could be placed on this area of exploration in future iterations of the VfM case studies (and associated evidence collection), noting however that even in this smaller-scale pilot (covering the economy dimension), a significant amount of information was requested from programme consultees.

  Finally, we would also highlight the importance of the QA process to support the final calibration of VfM scoring and assessment, which has proved very important during the pilot exercise in dealing with marginal cases.

Appendix A Methodological notes and additional analysis

This reports presents the results of the baseline evaluation for The International Science Partnerships Fund (ISPF). It follows the approach set out within the ISPF Evaluation Framework report (Technopolis, March 2025)[19] and incorporates three main elements:

- An updated **portfolio analysis**. This is based on a desk-based analysis of the latest available Allocations and RODA data, as well as additional input from Partner Organisations (POs).
- An assessment of the **baseline position** for indicators listed in the evaluation framework (where these are non-zero). This is based on desk-based analysis and bibliometrics, as well as a written request to POs and a survey of ISPF programme participants / award holders.
- A **piloting of the Value for Money rubric** for five sub-dimensions (that are most relevant at this stage of the Fund) and a subset of 10 programmes. This is based on desk-research, online interviews with UK programme leads and overseas partners, and analysis of RODA data, as well as evaluator assessment and scoring of the evidence obtained.

Further details of the approach taken in delivering each of these is presented below, along with some additional notes and explanation to accompany the main results.

A.1 Portfolio Analysis

Workstream 6 of the ISPF evaluation framework and baseline study concerned the mapping of ISPF programme activities to provide a clear high-level overview of the portfolio, including breakdowns by relevant dimensions (e.g. by PO, ISPF Theme, ODA/non-ODA, scale and value). This mapping activity was initially undertaken as part of the development of the Evaluation Framework (and presented as part of that report), but has now been updated with the latest available data for the baseline assessment. Results are shown in Section 2.

The individual steps involved in this workstream were as follows:

- Analysis of Allocations Data: ISPF Level B Allocations data (maintained by the DSIT PMO team) records the original allocations of ISPF ODA and non-ODA funding (separately) across the different ISPF Partner Organisations and their Programmes (or delivery costs) and across financial years (2022/23, 2023/24 and 2024/25). There is the flexibility for partner organisations to re-balance their allocations within their ODA or non-ODA portfolios over time (e.g. increasing or reducing the scale of particular programmes), and this is then reflected in future year allocations within this database (once the change has been notified to DSIT through the ISPF Change Management Process). It also includes information on ISPF Themes and Partner countries for each programme (both of which can then also be updated in this database as part of the ISPF Change Management Process).
- The latest available Allocations data was provided by DSIT and was correct as of 21st January 2025. This was interrogated by the study team to extract and consolidate information on the ISPF portfolio for each Partner Organisation (a list of programmes and annual funding allocations, plus information on relevant ISPF Themes and partner countries). This formed the basis for a request to POs and the integration of other data (see below).
- Validation and tagging of portfolios: The consolidated view of each PO's ISPF portfolio was shared (as an excel table) with that organisation for validation. The PO was asked to check (and if necessary, amend) the current information, and for each programme to also:

[19] https://www.gov.uk/government/publications/international-science-partnerships-fund-evaluation-framework

- Indicate the types of activities that will be / are being supported (as well as the primary type, where more than one). A defined set of activity types were listed, based on the categories defined within ISPF Theory of Change (listed in Figure 35).
- Indicate whether the programme is relevant to one or more of the UK's Critical Technologies[20] identified within the DSIT Science and Technology Framework (April 2025)
- Indicate whether the programme is relevant to any of the growth-driving sectors[21] identified in Invest 2035: the UK's modern industrial strategy (October 2024)[22].

Note that UKRI holds its own 'live' database of the ISPF portfolio of all councils and IUK (and which also includes a tagging by activity type). This was used to validate the portfolios for UKRI, as well as add the activity tagging (with POs asked to tag by technology and sector).

- Analysis of RODA data: The latest available PO reporting through RODA was provided to the study team by DSIT (the initial analysis for the Evaluation Framework was based on data as at March 2024, while the updated analysis for the Baseline was based on data as at December 2024). This data was interrogated to extract and consolidate information on the current ISPF portfolio for each PO and link this with the allocations data and additional PO tagging information (above). For each 'Programme' within the portfolio, this included (where available from RODA) a brief summary of the programme, a start and end date, total amounts of spend to that point and future forecast spend, and the number and value of awards made (where relevant). Information on delivery costs was also extracted.

  It is important to note that this data provides a snapshot in time (currently December 2024). Additional programmes will have been added, awards made, and funds expended over the subsequent months, which are not yet captured. The analysis will likely be repeated during future phases of evaluation, capturing these more recent changes and additions.

- Analysis and reporting: Extracted and validated information was recorded in a database for analysis, with key data, graphs and information then presented within this document. This draft will be shared with DSIT for review and comment, with feedback then addressed in the version presented as part of the ISPF Baseline Evaluation report in June.

Figure 35 ISPF – Definitions of activity types

- International collaborative academic research: These tend to be typical collaborative R&D and Innovation projects (with research plans and expected R&I outputs). They include multi- and interdisciplinary, challenge-driven and (in the case of ODA) partner-led activities
- Translational research: Researchers turn scientific discoveries from laboratory-based research into real-world applications, developing new products and services. These activities might support discoveries maturing from basic research to clinical trials and commercial development, as well as the development of prototypes and patents.
- International mobility: Researchers (both from the UK and partner countries) participate in training and secondment activities. These vary in length and intensity, and include both short visits (e.g. better understanding available research resources and infrastructure) and longer stages that will usually involve working on a particular research topic, as well as access to personnel and infrastructure.

[20] Artificial Intelligence, Engineering biology, Advanced connectivity technologies (formerly called future telecommunications), Semiconductors, and Quantum technologies.

[21] Advanced manufacturing, Clean energy industries, Creative industries, Defence, Digital & technologies, Financial services, Life sciences, and Professional & business services.

[22] And subsequently identified within The UK's Modern Industrial Strategy (June 2025).

- Institutional R&I capacity building: These activities focus on strengthening the ability of institutions (universities, research organisations, industry partners) to conduct SRTI activities. Funding might support the development of new interdisciplinary research programmes, doctoral training partnerships, support for knowledge & exchange activities and funding for early-career researchers.
- International collaborative business-led research, development & demonstration: These activities encourage businesses to collaborate with international partners, including to explore new markets or to develop new or improved products, processes and services.
- Investment in access to infrastructure / facilities: These activities support access to and development of research infrastructure. They are expected to lead to the generation of knowledge and expertise within the context of the programme, as well as future research avenues (which may then take place outside of the ISPF programme).
- Pump priming: These activities support initiatives for early-stage research, the exploration of new ideas or the development of future projects. For example, ISPF funds small projects or feasibility studies that are exploring new ideas or concept to assess their viability for further research (which would be funded and conducted beyond the ISPF programme).
- Networking and workshops: Activities such as visits, workshops, conferences and joint working that support idea generation and the exploration of common areas of research interest, partnership building, scoping and preparation of future research proposals. These activities are expected to generate new proposals, develop new partnerships between researchers, identify avenues for further collaboration and share research best practice.

A.2 Baseline Position

At this baseline stage, and in line with the ISPF Evaluation Framework we have captured 9 indicators with a non-zero baseline position[23] based on an online survey of ISPF grant holders / participants, consultation with POs (written request), and bibliometrics.

Table 3 Indicators with non-zero baseline position

Type	Ref No.	ToC Element	Indicator	Sources	Baseline
Output	**O3**	Joint areas of interest / priorities est. (country, funder, researcher / innovator)	Examples of joint areas of interest / priorities identified (country, funder)	> PO/programme leads template / interviews	Number of existing MoUs gov-to-gov or international partner org, before ISPF
Output	**O11**	New and improved technologies / increased TRL	Percentage of projects that advance one or more TRL levels due to ISPF funding	> Survey with ISPF project participants (UK and international)	TRL starting point at the point of application
			Percentage of programmes /projects that have made progress in terms of market readiness as a result of ISPF funding.	> Survey with ISPF project participants (UK and international)	MRL starting point at programme / project start
Output	**O14**	New/improved understanding of user needs, research methods, EDI, Responsible R&I, research management,	Percentage of ISPF participants for whom participation on the ISPF project has led to new/improved understanding of user needs, research methods, EDI, Responsible R&I, research management,	> Survey with ISPF project participants (UK and international)	Starting point at the point of application

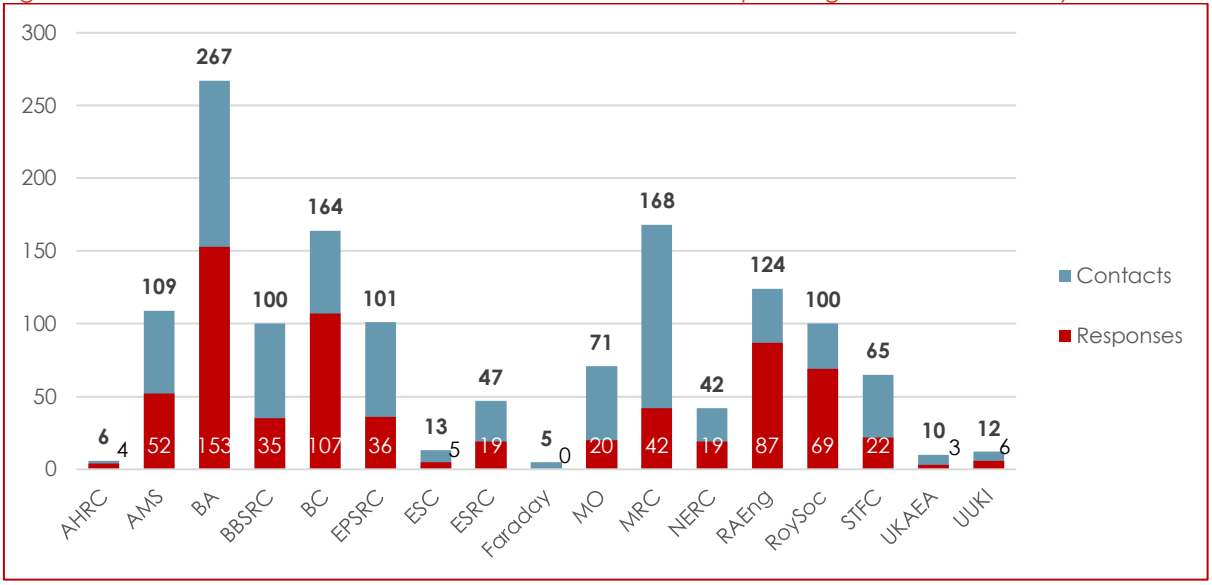
[23] Note that the Evaluation Framework suggested that 10 indicators would be captured at the baseline. However, in finalising the award holder survey it was concluded that it would be too early in the majority of cases to ask participants about increased income (compared with the start of the project) from the commercialisation of research and technology emerging from ISPF. The indicator for Outcome 10 ("Increased income from commercialisation of research & technology, incl. from new markets - UK & ODA beneficiaries) is therefore not included.

Type	Ref No.	ToC Element	Indicator	Sources	Baseline
		international collaborative research, MEL (among researchers, managers, industry)	international collaborative research, MEL (among researchers, managers, industry)		
Output	**O15**	New/improved understanding of available research capacity, capabilities & infrastructure among partners	Percentage of ISPF participants for whom participation on the ISPF project has led new/improved understanding of available research capacity, capabilities & infrastructure among partners	> Survey with ISPF project participants (UK and international)	Starting point at the point of application
Outcome	**OC6**	Increased research capabilities, incl. leadership (UK & ODA beneficiaries)	Percentage of ISPF participants for whom participation on the ISPF project has led to increased research capabilities, incl. leadership + examples	> Survey with ISPF project participants (UK and international)	Starting point at the point of application
Outcome	**OC7**	Improved connectivity between industry and academia (UK & ODA beneficiaries)	Percentage of ISPF participants for whom participation in the ISPF project has led to improved connectivity with industry / academia	> Survey with ISPF project participants (UK and international)	Starting point at the point of application
Outcome	**OC8**	Increased or sustained quality / competitiveness R&I in ISPF themes (UK & ODA beneficiaries)	Citation impact - as measured by Average of Relative Citations (ARC) and HCP (Highly cited papers) - of ISPF publications (total, broken down by ISPF themes, gender and field/sector).	> Bibliometric data / analysis	Citation impact (as described in the indicator) for UK (before ISPF)
Outcome	**OC12**	Increased or sustained reputation of UK as: R&I partner of choice; destination for talent	Percentage of international funders / delivery organisations for whom participation in the ISPF programme has led to a significant improvement in their own organisation's and other organisations' perceptions of the UK as an SRTI partner.	Survey with international project participants	Starting point at the point of application

A.2.1 *Survey of award holders*

All POs were asked to provide a list and basic details of all grant / award holders that had so far (as at April 2025) received ISPF funding. 17 of the 22 POs provided details of award holders, with 1,404 contacts provided in total. These contacts were approached by email with a request to participate in a short online survey. The survey remained open for four weeks, with regular reminders sent to those who had not yet responded. **In total, 679 responses were received, representing a response rate of 48%.** The figure below shows the distribution of contacts and responses across different POs.

Figure 36 ISPF – Number of award holders contacted for and responding to the online survey



Other relevant characteristics include:

- The majority of respondents (71%) indicated that they were based in an institution in the UK, while the remainder were based in other countries.
- Using information on relevant ISPF programme as provided by POs, we were able to classified 595 of the respondents, while 84 (12%) remained unclassified. 57% were supported through ODA and 31% through non-ODA programmes.
- The great majority of respondents (94%) indicated that they were researchers / innovators, while 7% were research / innovation / infrastructure managers or funders (and were asked a slightly different version of questions).

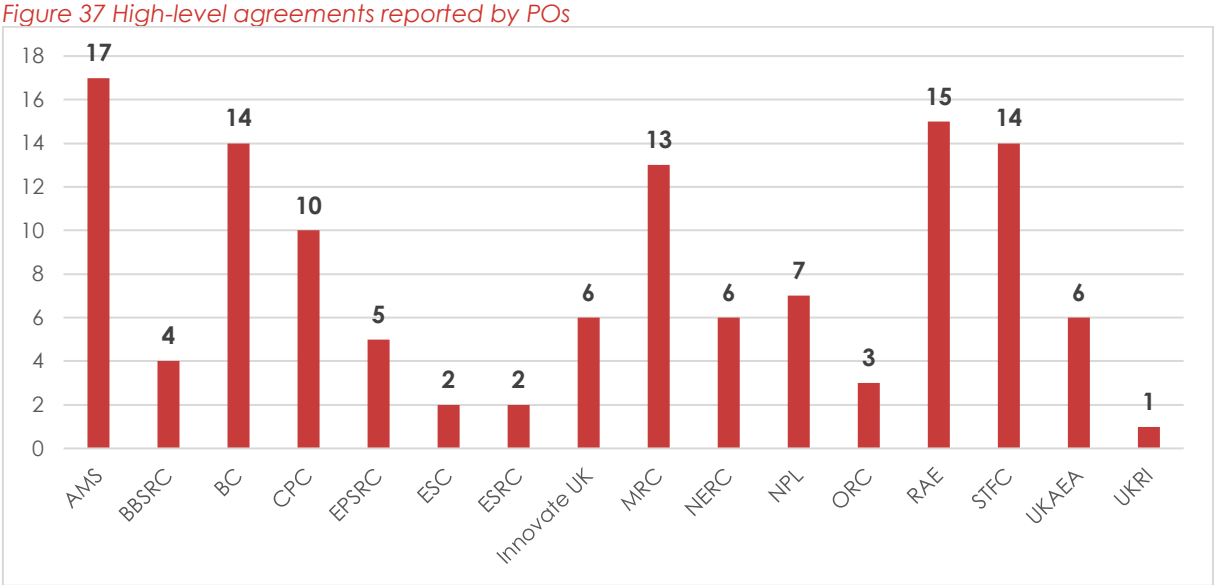
Table 4 Distribution of responses

Category	Total	Percentage
Location		
Based on a non-UK institution	198	29%
Based on a UK institution	481	71%
Total	679	100%
Programme focus		
Non - ODA	209	31%
ODA	386	57%
Not possible to identified	84	12%
Total	679	100%
Role		
Researchers or innovators	640	94%
Managers	39	6%
Total	679	100%

A.2.2 *Written request to POs (MoUs)*

One of the expected outputs from ISPF identified within the ToC is joint areas of interest / priorities established (at the country, funder and / or researcher and innovator level). The study sought to establish a baseline position for this output by asking all POs to provide details of any high-level agreements (such as Memorandums of Understanding) relevant to Science, Technology and Innovation that their organisation had in place with equivalent bodies in ISPF partner countries. A total of **16 POs reported details on such agreements** (counting UKRI and its constituent councils as separate entities), with 135 agreements reported in total. A summary of the number of agreements reported is presented in Figure 37 below.

Figure 37 High-level agreements reported by POs



Note, however, that there are a number of caveats to this dataset. In some cases, POs appear to have reported MoUs that were established under ISPF itself, rather than prior to its inception, limiting the usefulness of the dataset as a baseline. There were also varying interpretations of what constitutes an agreement; while some entries reflect formal partnership agreements, others refer to contracts, Memoranda of Cooperation (MoCs), or broader collaborative agreements. Additionally, some POs returned a blank response, and it was not always clear whether this reflected an absence of such agreements or simply an inability to identify or provide details on these. These issues have implications for the completeness and consistency of the data.

Looking ahead, if the exercise were to be re-run in future phases of evaluation, additional specificity could be added to the PO request, with more information also sought on the timing, scope and origins for the individual agreements provided. The VfM case studies also offer the opportunity to explore this area in more depth in relation to selected programmes, providing greater insight into how and why agreements were developed, and the extent to which POs attribute these developments to IPSF funding.

Noting these caveats, the information returned suggests that all POs who submitted data (n=16) reported having at least one agreement or MoU in place. Among these, the AMS reported the highest number at the baseline position, with a total of 17.

The reported agreements vary in formality, reflecting a broad interpretation of what this constitutes. Some are formal MoUs, while others take the shape of contracts, letters of intent, or more informal agreements to collaborate. Insights from interviews with POs (conducted as part of the case studies) suggest that this variation is largely influenced by two key factors:

uncertainty around long-term future funding and the nature of the programme being delivered, with some programmes lending themselves to more flexible or informal collaboration frameworks.

There is also a broad geographical spread in the reported agreements, covering both ODA and non-ODA ISPF partner countries. This reflects the international reach of ISPF and the range of approaches being used to formalise partnerships across different contexts.

A.2.3 *Bibliometric analysis*

A.2.3.1 Source

Bibliometric data was collected through the OpenAlex API. OpenAlex is a bibliographic catalogue of scientific papers, authors and institutions accessible in open access mode.

OpenAlex offers an open replacement for industry-standard scientific knowledge bases like Elsevier's Scopus and Clarivate's Web of Science. Compared to these paywalled services, OpenAlex offers significant advantages in terms of inclusivity, affordability, and availability.

Publications were collected for four groups:

- All publications with at least one UK-based author
- All publications with at least one UK-based author in collaboration with at least one author based in an ODA eligible ISPF partner country (Brazil, Egypt, Jordan, Kenya, Indonesia, Malaysia, the Philippines, South Africa, Thailand, Türkiye and Vietnam).
- All publications with at least one UK-based author in collaboration with at least one author based in a non-ODA eligible ISPF partner country (Canada, India, Israel, Japan, the Republic of Korea, Switzerland, the United States of America, Australia, China, France, Germany, Ireland, the Netherlands, New Zealand, Singapore, and Taiwan).
- Only publications from the first group were exported directly from OpenAlex, and the two latter groups were derived from this dataset.

Additional filters included a publication date between 2014-2023 inclusive, and whether the source is identified as a 'core source' by the CWTS[24]. Any duplicate DOIs were removed.

For each publication, the following information was gathered:

- Title
- Authorships
- Publication Year
- FWCI
- Topics
- Associated Sustainable Development Goal(s), if relevant[25]

OpenAlex assigns each publication up to three topics. These topics are relatively granular concepts, and each is associated with a higher level sub-field, field, and domain[26]. For the purposes of this exercise, FWCI was aggregated by Field, which is based on Scopus' Subject

[24] https://zenodo.org/records/10949671

[25] SDGs are tagged in OpenAlex using a machine learning model: https://github.com/ourresearch/openalex-sdg-classifier

[26] For more information on this hierarchy and tagging process see: https://help.openalex.org/hc/en-us/articles/24736129405719-Topics

Area Classifications[27]. There are many cases where more than one topic assigned to the publication falls within the same field, so any duplicates here were removed and only unique fields were kept.

Sub-section A.2.3.3 below further discusses comparability with other proprietary data sources.

In order to identify the gender of the authors, the 'gender_guesser' Python package was utilised[28]. This returns an estimate of each author's gender based on their first name. This allowed for publications with at least one female author to be identified. However, this classification will include some margin of error, and it is important to note that the names assigned 'androgynous' likely included some female authors who would have therefore not been counted in this analysis.

A.2.3.2 Findings

Volume

The bibliometric analysis identified a total of 1,932,803 UK publications in the decade preceding ISPF. The data shows that the UK has a long standing tradition of co-publication with non-ODA countries, with 41% of all UK publications including at least one author affiliated to a UK institution and authors affiliated to an institution located in a non-ODA country, during the period of analysis.

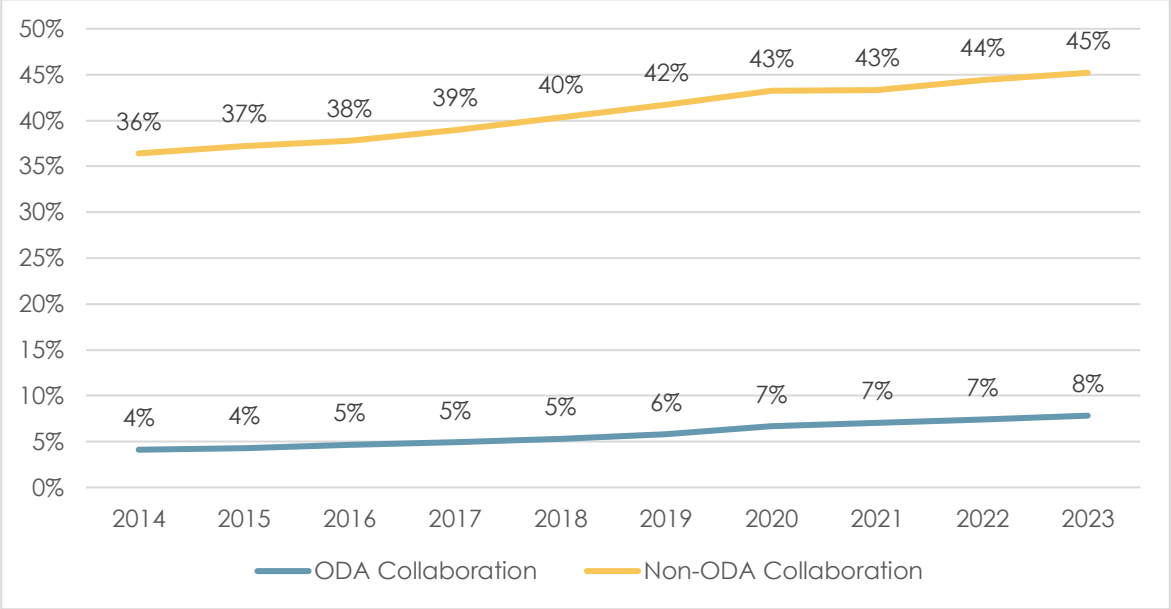
Co-publication with authors affiliated to an institution located in an ODA country is less common (6% across the period of analysis), but it also shows a steady increase over time (albeit there is a period of no growth in 2017-2018 and 2021-2022).

This baseline position showcases the importance of drawing comparisons with appropriate benchmarks to assess the potential effect of ISPF in increasing (or sustaining) the degree of co-publication with countries participating in ISIPF (as suggested in the Evaluation Framework).

[27] https://service.elsevier.com/app/answers/detail/a_id/12007/supporthub/scopus/

[28] https://github.com/lead-ratings/gender-guesser

Figure 38 Proportion of co-publications (as a percentage of total volume of UK publications)



Source: Technopolis (2025), based on data from OpenAlex.

Fields of research and SDGs

Table 5 explores the distribution of publications per field of research for all UK publications. To provide insights into the degree of collaboration across fields, we calculate the ratio that shows the distribution of UK publications in a given field and the distribution of publications with ODA and non-ODA collaboration. A ratio higher than 1 means that collaboration happens to a relatively high degree. For instance, in the field of medicine, 40% of all UK publications relate to that field while 43% of all co-publications with authors affiliated to institutions based in ODA countries are also in this field (i.e., a ratio of 1.06). This indicates that collaboration with ODA countries is particularly concentrated in this field.

To aid the analysis, the table below marks in amber if the ratio is below 0.95, in light green if it between 0.95 and 1.05, and in dark green if it is 1.06 or above.

The table also shows that there is a high degree of concentration of collaboration with ODA collaborators in: Agricultural and Biological sciences (1.85), Nursing (1.74), Dentistry (1.60), Immunology and Microbiology (1.52), Environmental Science (1.51), Pharmacology (1.48), Energy (1.33), Physics and Astronomy (1.13), and Business, Management and Accounting (1.11).

The areas of strong concentration are different when looking at co-publications with non-ODA collaborators. In this case the relative stronger collaboration takes place in the fields of Neuroscience (1.85), Earth and Planetary Sciences (1.41), Mathematics (1.35), Materials Science (1.34), Physics and Astronomy (1.26), Computer Science (1.25), Engineering (1.18); and Biochemistry, Genetics and Molecular Biology (1.17).

This exemplifies how different countries and collaborators offer different strengths, knowledge and research resources, that support the advancement of a variety of research fields.

Table 5 Field distribution of publications

Field	All UK	ODA Collaboration	Non-ODA Collaboration
Medicine	39%	1.08	0.91
Engineering	17%	0.93	1.18
Biochemistry, Genetics and Molecular Biology	15%	0.98	1.17
Social Sciences	14%	0.71	0.91
Environmental Science	10%	1.51	0.78
Psychology	9%	0.77	1.05
Health Professions	8%	0.87	0.79
Computer Science	7%	0.84	1.25
Physics and Astronomy	7%	1.13	1.26
Materials Science	6%	0.91	1.34
Neuroscience	6%	0.57	1.85
Agricultural and Biological Sciences	5%	1.85	0.59
Economics, Econometrics and Finance	5%	0.98	0.96
Earth and Planetary Sciences	5%	0.96	1.41
Business, Management and Accounting	4%	1.11	0.78
Immunology and Microbiology	4%	1.52	0.78
Chemistry	3%	0.97	1.11
Arts and Humanities	3%	0.41	1.11
Mathematics	2%	0.80	1.35
Decision Sciences	2%	0.90	1.08
Energy	1%	1.33	0.87
Nursing	1%	1.74	0.58
Chemical Engineering	1%	1.02	1.02
Pharmacology, Toxicology and Pharmaceutics	1%	1.48	0.65
Dentistry	1%	1.60	0.43
Veterinary	1%	1.05	0.76
Total Number	1,932,803	113,780	794,352

Source: Technopolis (2025), based on data from OpenAlex. Table marks in amber if the ratio is below 0.95, in light green if it between 0.95 and 1.05, and in dark green if it is 1.06 or above.

Similarly to the above, there is also a different concentration in areas of focus when it comes to the Sustainable Development Goals (SDGs).

Overall, around one fifth of all UK publications across the three groups were aligned with SDG 3: Good Health and Well-being. The remaining publications were distributed relatively evenly across the other SDGs, reflecting a broad engagement with global development priorities.

Co-publication with researchers affiliated to institutions based on ODA countries tends to be more concentrated in the areas of Life on Land (1.82), No poverty (1.47), Responsible consumption and production (1.47), and Life below water (1.30).

In turn, co-publication with researchers affiliated to institutions based on non-ODA countries tends to be more concentrated in the areas of Peace, justice, and strong institutions (1.40), Reduced inequalities (1.25), and Affordable and clean energy (1.24).

Table 6 Sustainable Development Goal (SDG) distribution of publications

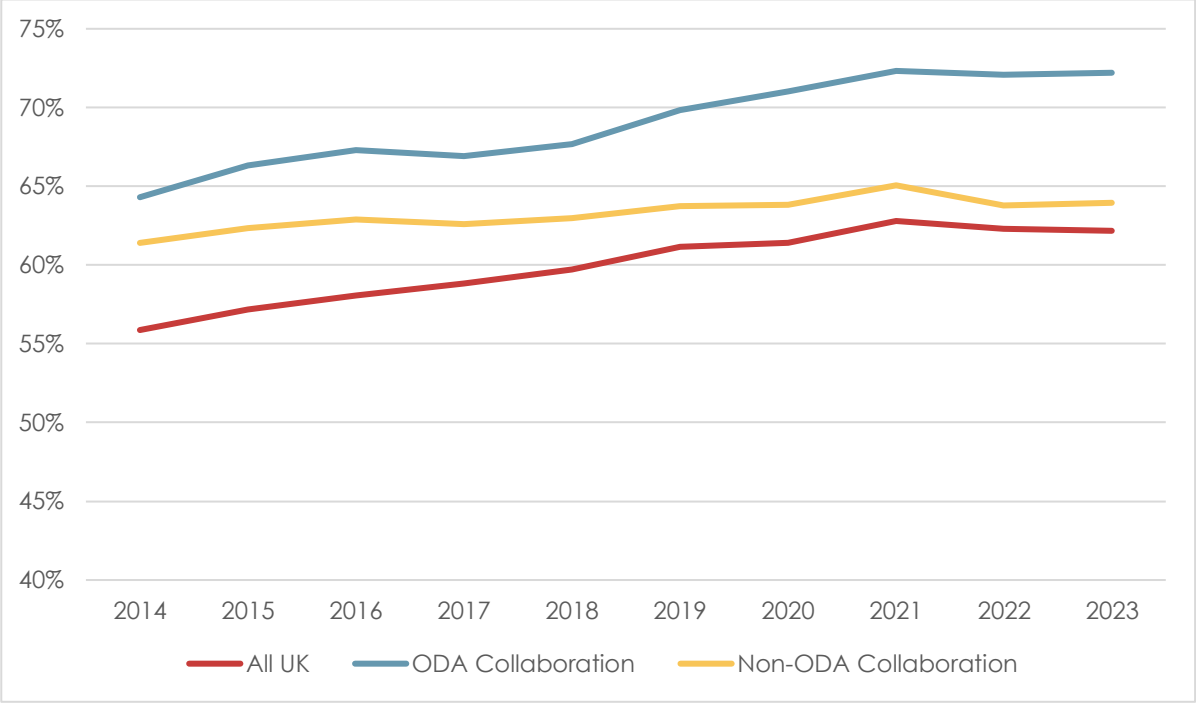
SDG	All UK	ODA Collaboration	Non-ODA Collaboration
Affordable and clean energy	5%	0.98	1.24
Clean water and sanitation	2%	1.29	0.84
Climate action	2%	1.27	0.92
Decent work and economic growth	2%	0.74	1.11
Gender equality	2%	0.71	0.86
Good health and well-being	21%	1.10	0.95
Industry, innovation and infrastructure	3%	0.98	1.01
Life below water	4%	1.30	1.03
Life on land	3%	1.82	0.65
No poverty	2%	1.47	0.62
Partnerships for the goals	2%	1.53	0.74
Peace, justice, and strong institutions	4%	0.56	1.40
Quality education	4%	0.60	1.18
Reduced inequalities	4%	0.62	1.25
Responsible consumption and production	1%	1.47	0.70
Sustainable cities and communities	2%	0.89	1.05
Zero hunger	3%	1.15	0.78
Total Number	1,932,803	113,780	794,352

Source: Technopolis (2025), based on data from OpenAlex. Table marks in amber if the ratio is below 0.95, in light green if it between 0.95 and 1.05, and in dark green if it is 1.06 or above.

Gender

In line with the EDI commitments of ISPF, it is also expected that there is a proportional gender balance in the authorship across research outputs. As such, the bibliometric analysis explored the proportion of papers that have at least one female author at the baseline stage. Over the past decade, the proportion of UK publications with at least one female author has steadily increased, reflecting broader trends towards improved gender representation in research. Interestingly, UK publications co-authored with both ODA and non-ODA partner countries had a higher proportion of female co-authorship compared to UK publications overall. This suggests that international collaboration may be playing a role in supporting more inclusive research teams.

Figure 39 Proportion of UK publications with at least one female author



Source: Technopolis (2025), based on data from OpenAlex.

Citation impact

Over the past decade, UK publications have consistently had a field-weight citation impact (FWCI) above 2.00, meaning that they have been cited more than twice the global average for publications in the same field and year, indicating a high impact (uptake) of UK publications in further academic literature.

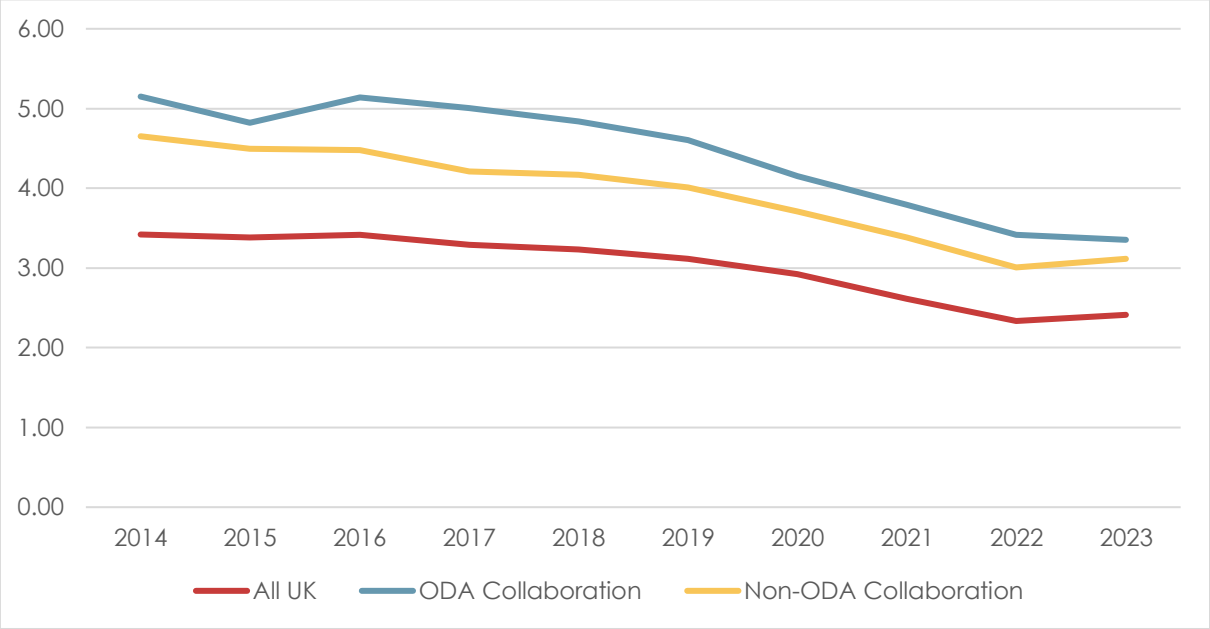
Furthermore, UK publications co-authored with researchers from ISPF partner countries (both ODA and non-ODA) have consistently achieved high FWCI, and this is higher than average FWCI for UK publications overall, indicating that these international collaborations have led to high impact (uptake) of UK publications in further academic literature.

Note that in all cases, FWCI has gradually declined over time (and that a similar trend as in the FWCI is observed in the average citations per year, see Figure 40 and Figure 41).

This is in part due to citation lags, but also consistent with findings from similar bibliometric exercises (including the analysis of UK publication in Engineering and Computer Science[29] and analysis of UK publications in the context of an assessment of UK participation In H2020 (upcoming)). FWCI is a relative measure, as it is pegged against a world-wide (standardised) average of 1. This general trend seems to reflect the fact that citations have increased across the board, with countries like China and India substantially increasing the pool of publications and citations, and consequently the overall (non-standardised) average, making it more difficult for countries likes the UK to achieve a high FWCI.

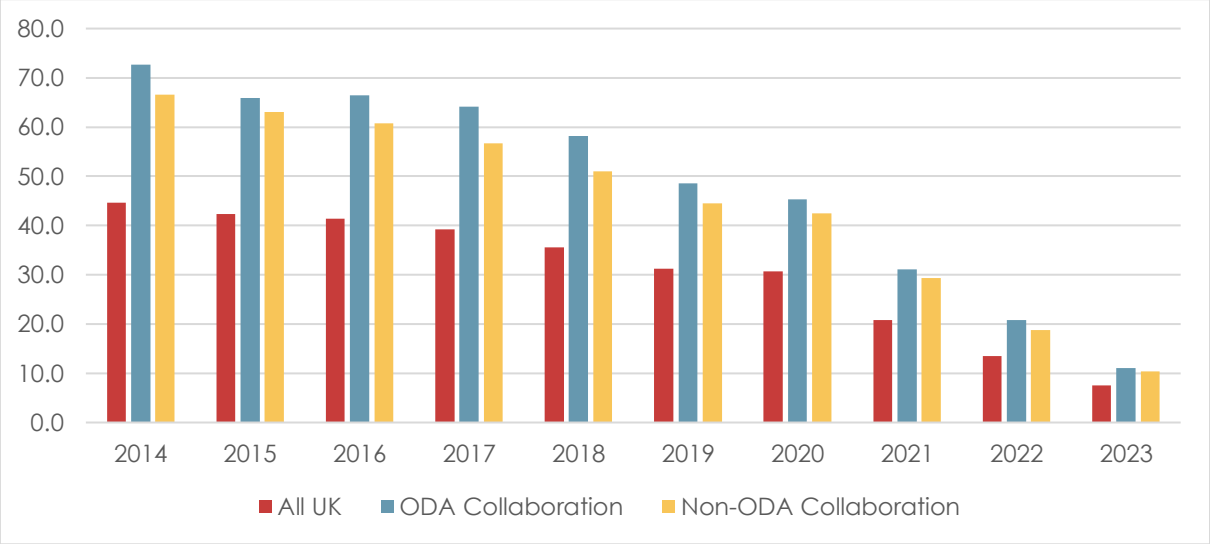
[29] https://raeng.org.uk/policy-and-resources/research-and-innovation/research-and-innovation-ecosystem/trends-in-engineering

Figure 40 Average (mean) FWCI per year



Source: Technopolis (2025), based on data from OpenAlex.

Figure 41 Average citations per paper, per year



Source: Technopolis (2025), based on data from OpenAlex.

Analysis per research field reveal that there are specific areas where the collaboration with researchers affiliated to institutions based on ODA countries, or non-ODA countries, or both, have a substantial effect on citation impact.

Results are presented in Table 7. The table marks in amber when the difference in FWCI with respect to all UK publications is 0.5 or lower, in light green if it is higher than 0.5 and lower than 1, and in dark green if it is 1 or above. Note that cells marked in amber or light green do not mean to say that citation impact is low, it just signals that it is not higher than the overall benchmark of UK publications.

A notable example is on the field of "Arts and Humanities", publications done in collaboration with ODA and non-ODA contributors increased the citation impact almost twofold the FWCI

for all UK publications. Another notable example if the field of Medicine. As reported above, a substantial proportion of UK publications are in this field (40%), and collaboration with researchers affiliated to institutions based on ODA countries, and with non-ODA countries substantially increased the citation impact of those publications, from 2.49 to 4.30 and 3.73 respectively.

Table 7 Average (mean) FWCI per field

Field	All UK	ODA Collaboration	Non-ODA Collaboration
Agricultural and Biological Sciences	3.30	4.16	4.12
Arts and Humanities	5.60	11.2	9.18
Biochemistry, Genetics and Molecular Biology	2.62	3.72	3.57
Business, Management and Accounting	5.15	6.23	6.59
Chemical Engineering	1.89	1.86	2.22
Chemistry	2.01	1.72	2.31
Computer Science	3.68	4.83	4.39
Decision Sciences	4.35	8.04	5.90
Dentistry	2.01	3.14	3.13
Earth and Planetary Sciences	3.34	4.46	3.93
Economics, Econometrics and Finance	4.30	6.08	5.49
Energy	2.84	3.16	3.23
Engineering	2.49	2.79	2.93
Environmental Science	3.39	4.67	4.15
Health Professions	2.90	4.70	4.28
Immunology and Microbiology	2.51	3.32	3.33
Materials Science	2.11	2.04	2.44
Mathematics	2.50	3.42	3.03
Medicine	2.49	4.30	3.73
Neuroscience	2.53	3.13	3.13
Nursing	2.65	3.89	3.75
Pharmacology, Toxicology and Pharmaceutics	2.11	2.60	2.62
Physics and Astronomy	2.47	4.31	3.00
Psychology	3.28	4.51	4.26
Social Sciences	4.95	6.82	6.78
Veterinary	2.22	2.58	3.12

Source: Technopolis (2025), based on data from OpenAlex.

A.2.3.3 Comparability with other proprietary data sources.

The FWCI shown here are higher than the scores found using some other proprietary data sources[30]. FWCI are not comparable across scholarly databases. This is mainly because each

[30] https://www.gov.uk/government/publications/international-comparison-of-the-uk-research-base-2025/international-comparison-of-the-uk-research-base-2025

database contains a different set of journals/publications which will inevitably lead to different indicators / values.

OpenAlex contains around 201M articles, compared to Scopus' ~71,6 M articles. (Beyond articles, Openalex has 267.8M documents and Scopus has about 102M).

One of the main differences (and value added of OpenAlex) is that it includes a more comprehensive list of papers, including those that are open source. This should provide a better representation of scholarly production.

Many of these additional documents have zero citations, meaning that the calculated FWCI will be higher in OpenAlex and not comparable to other providers (see here for more information: https://help.openalex.org/hc/en-us/articles/24735753007895-Field-Weighted-Citation-Impact-FWCI).

The higher results for the UK using OpenAlex reflect the fact that once the larger 'population' of scholarly production is taken into account, the UK publications fare better than comparators.

Including more open-source publications provides a better picture in terms of knowledge flows, as these publications would then be used by a wider audience (without access to proprietary databases / journals), increasing their outreach and potential impact. This is particularly important for ODA countries.

There are other discrepancies between Open Alex and other databases, including the fact that they base their analysis on main discipline / field and that the date of publication is the year in which publication first became available online. More information can be found here: https://help.openalex.org/hc/en-us/articles/24735753007895-Field-Weighted-Citation-Impact-FWCI).

Note also that outliers can play a role in the results. To illustrate, the average FWCI for UK/ODA-eligible country collaboration in the area of Arts & Humanities is over 11. In addition to higher FWCI results due to the wider pool of publications considered (discussed above), there were only 1,436 publications in this group, making it vulnerable to skew. (Noting that this is not a sample size, but the size of the population). Several of these publications had FWCIs over 100 (including this paper with an FWCI of 801).

One could argue that outliers should be excluded, but this is debatable. Excluding your best performers will flatten out results, which would in turn disadvantage publications that have excelled.

A.3 Piloting of the Value for Money Rubric

Introduction and scope: In addition to the formal requirements for the baseline evaluation, the study team proposed to use this phase to also pilot some elements of the Value for Money (VfM) approach proposed in the Evaluation Framework. This recommend using a 'rubric-based' approach to VfM that can be applied to arrive to judgements where traditional approaches (e.g. cost benefit analysis or return on investment analysis) are challenging. This method uses evaluative reasoning and performance criteria to provide a transparent means to make robust VfM judgements from a range of qualitative and quantitative evidence.

For the pilot exercise we **focused on five sub-dimensions** that are most relevant at this stage of the Fund (the dimensions and the relevant performance standards are set out in Table 9).

The pilot exercise also **focused on a subset of 10 programmes** (listed in Table 8). These were chosen from the stratified sample of 21 identified in the evaluation framework, and selected using purposive sampling to cover 10 different POs, all ISPF Themes, and a diversity of main activities, as well as only programmes that are underway (i.e. reporting spend by March 2024).

Table 8 VfM Pilot - Programme Sample

Programme	Partner Countries	ISPF Theme(s)	Budget (£)
AI for Climate (AI4C)	South Africa (ODA)	Resilient Planet, Transformative Tech, Tomorrow's Talent	4.1M
International Writing Workshops	Brazil, Egypt, Indonesia, Jordan, Kenya, Malaysia, Philippines, South Africa, Turkey, Thailand, Vietnam + LDCs (ODA)	Tomorrow's Talent	2.2M
AI for Bioscience	Australia, Canada, France, Germany, Japan, Switzerland, United States (non-ODA)	Transformative Technologies	6.3M
Early Career Fellowships	Taiwan, South Korea (non-ODA)	All four themes	0.9M
Leaders in Innovation Fellowships	Brazil, Colombia, Malaysia, Mexico, South Africa, Thailand, Philippines, Vietnam (ODA)	All four themes	4.4M
Newton International Fellowship	Switzerland (non-ODA)	Tomorrow's Talent	1.0M
UK-Japan Civil Nuclear Research	Japan (non-ODA)	Resilient Planet	0.6M
Quantum Electronics Materials of Tomorrow (QEM4T)	Japan (non-ODA)	Transformative Technologies	0.14M
Clinical Research Pathways Policy	Brazil, Egypt, India, Indonesia, Jordan, Malaysia, Turkey, Thailand, Vietnam, Philippines, South Africa, Kenya + LDCs (ODA)	Healthy People, Tomorrow's Talent	0.5M
Developing Brazilian Use of ISIS	Brazil (ODA)	Transformative Technologies, Tomorrow's Talent	0.4M

Table 9 VfM sub-dimensions and performance standards for pilot (and sources of evidence)

Ref	Sub-dimension	Poor - 1	Adequate - 2	Good - 3	Excellent – 4
1.1.1.	*Relevance / alignment of the activity (its scope, focus & intentions) with key ISPF objectives: > Developing long-term strategic international R&I partnerships, at all levels*	There is **no evidence** that UK and international funders / delivery organisations or participants (researchers, innovators) involved see participation in the programme as part of a (potential) longer-term R&I partnership.	Evidence suggests that UK and international funders / delivery organisations involved **see the programme as helping to maintain existing R&I partnerships, or serving as a starting point for possible longer term R&I partnerships.**	As 2-Adequate… **AND** UK and international funders / delivery organisations involved **can articulate the strategic importance of the partnerships.**	As 3-Good… **AND** The programme was **designed/set up in the context of pre-existing or new agreements (e.g. MoUs)** between the UK and international funders / delivery organisations
1.1.2.	*Relevance / alignment of the activity (its scope, focus & intentions) with key ISPF objectives: > Delivering solutions that contribute towards addressing specific shared challenges (that fall within at least one of the ISPF Themes)*	It is **not possible to identify** how programme high level objectives and thematic focus align with existing strategies, needs assessments and / or identified challenges for both the UK and international funders or delivery organisations.	**It is possible to identify** how programme high level objectives and thematic focus align with existing strategies, needs assessments and / or identified challenges for both the UK and international funders or delivery organisations. **AND** The thematic focus **aligns with an ISPF Theme**	As 2-Adequate… **AND** There is evidence that programme objectives and focus have been **defined with consultation** between UK and international funders or delivery organisations.	As 3-Good… **AND** There is evidence that programme objectives and focus have been **jointly defined, with close coordination** between UK and international funders or delivery organisations.
1.1.3.	*Relevance / alignment of the activity (its scope, focus & intentions) with key ISPF objectives: > Strengthening R&I capabilities (UK & ODA), at all levels*	The **programme does not include activities** focusing on strengthening R&I capabilities at any level in ODA countries [ODA] / in the UK [non-ODA]	The programme **includes activities** focusing on strengthening R&I capabilities **at individual level** (researchers, innovators) in ODA countries [ODA] / in the UK [non-ODA] **BUT** There are **no planned activities to facilitate** (i.e. encourage / enable) **spillover effects** beyond those individual researchers & innovators	As 3-Good… **AND** **There are planned activities to facilitate (i.e. encourage / enable) spillover effects**	The programme has high level objectives and planned activities focusing on strengthening R&I capabilities **at institutional level** (organisation) in ODA countries [ODA] / in the UK [non-ODA]

Ref	Sub-dimension	Poor - 1	Adequate - 2	Good - 3	Excellent – 4
1.1.4.	*Relevance / alignment of the activity (its scope, focus & intentions) with key ISPF objectives:* *> Strengthening SRTI quality through international collaboration (UK & ODA)*	The programme **does not explicitly explain** how international collaboration will strengthen the quality of the expected R&I outputs.	**The programme explains** why international collaboration is **important** in strengthening the quality of the expected R&I outputs.	The programme explains why international collaboration is **highly critical** in strengthening the quality of the expected R&I outputs, including why it could not be delivered nationally in the ODA country [ODA] / in the UK [non-ODA]. **AND** **Plans / processes are in place to ensure high quality SRTI is supported** (for example relating to scoring criteria)**.**	As4-Good…. **AND** The programme can **demonstrate that it is only supporting activities that are above a certain quality threshold**.
1.2.1.	Co-funding / contributions in kind for ISPF activities	[ODA] The programme **does not include any international co-funding** (cash or in -kind) at either the programme or sub-programme / project level	ODA] The programme **does include some** international co-funding (cash or in -kind) at either the programme and/or sub-programme / project level	[ODA] As 2-Adequate… - **equivalent to >25% of ISPF funding**	[ODA] As 2-Adequate… - **equivalent to >50% of ISPF funding**
		[non-ODA] The programme budget **does include** international co-funding (cash or in -kind) at either the programme and/or sub-programme / project level - **equivalent to <75% of ISPF funding**	[non-ODA] The programme budget does include international co-funding (cash or in -kind) at either the programme and/or sub-programme / project level - **equivalent to 75<125% of ISPF funding**	[non-ODA] As 2-Adequate… **equivalent to >125% of ISPF funding**	[non-ODA] As 2-Adequate… - **equivalent to >150% of ISPF funding**

Consultation: For the selected programmes, the relevant PO was asked to provide details of the programme manager or similar within their own organisation, plus an equivalent in one or more partner countries. The contact information for 57 individuals was provided, including at least one UK contact for each of the programmes. Only three programmes were able to supply international contacts, either because of the unilateral nature of the programme, or because the study team were requested to identify contacts through conversation with the UK lead.

For each programme, we sought to interview at least 1 UK programme lead and 1 lead from a partner country (i.e. 20 people in total), but with the option to speak with up to 30 individuals (to take account of the greater complexity of some programmes). Contacts were approached via email, with reminders sent and additional support from the PO and DSIT where necessary to secure interviews. **A total of 30 interviews were undertaken**, as summarised below.

Interviews were semi-structured around an interview guide, with a series of open-ended questions to guide the conversation and ensure it covered the relevant areas of evidence needed, while still allowing the flexibility to explore around these topics.

Table 10 VfM Pilot - interviewees

Programme	PO	Interviews with UK Leads	Interviews with Partner Country(ies)	Total
AI for Climate (AI4C)	MO	1	1	**2**
International Writing Workshops	BA	4	0 (unilateral)	**4**
AI for Bioscience	BBSRC	2	0 (unilateral)	**2**
Early Career Fellowships	BC	3	0 (unilateral)	**3**
Leaders in Innovation Fellowships	RAE	1	2	**3**
Newton International Fellowship	RS	1	1	**2**
UK-Japan Civil Nuclear Research	EPSRC	1	2	**3**
Quantum Electronics Materials of Tomorrow (QEM4T)	NPL	2	1	**3**
Clinical Research Pathways Policy	AMS	2	1	**3**
Developing Brazilian Use of ISIS	STFC	3	2	**5**
Total		**20**	**10**	**30**

Case study development: Evidence was collected through the interviews (with ISPF Partner Organisations, plus overseas partners), plus desk-based review of publicly available documentation. This was then presented in the form of a case study narrative (see separate case study annex). Each sub-section within a case helped to inform the scoring of a sub-dimension (with a justification), which has then informed the VfM rubric assessment.

The case studies followed a 2-stage calibration and QA process:

- Peer learning support and calibration: the cases were developed by 4 case study leads (including the project manager) who discussed emerging findings and the implementation of the VfM rubric in weekly meetings.
- Scoring (and justification) was then reviewed by the Project Director, to maintain consistency across all 10 cases.

VfM assessment: The results of the VfM assessment are presented in Section 0. In line with the proposed approach, the analysis of "Value" is not performed at the programme level but at the Fund level. The approach requires the evaluators to make (evidenced) value judgements for each individual unit of analysis, and as such, the initial assessment is done at programme level. However, the analysis is presented in an aggregate form, as the methodology is not intended to be used to judge individual programmes.

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