



Science and Technology Facilities Council

STFC Innovation Partnership Scheme (IPS) Guidance Notes

Please see website for link to the latest version of these notes. www.stfc.ac.uk/ips

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INTRODUCTION

STFC offers a diverse portfolio of knowledge exchange schemes, designed to allow funding of projects from initial development right through to commercialisation. These schemes are designed to facilitate the transfer of STFC funded research into an industrial setting over a number of different stages of commercialisation.

- **Innovation Partnership Scheme (IPS)**
 - To transfer technology and expertise developed through STFC funding to the marketplace in partnership with industry and other academic disciplines
- **Follow-on Funding (FoF)**
 - To support proof of concept for a project following on from STFC funded research. Partner not permitted
- **IPS Fellowships**
 - To develop an institution's capacity for knowledge exchange and commercialisation from STFC-funded research.

A full breakdown on the differences between the schemes is listed below. Please note, that each scheme has a separate application process/guidance details, and applicants are asked to ensure they have selected the right scheme when submitting proposals through Je-S and read the appropriate guidance document.

	IPS	Follow-on-funding	IPS Fellowships
Max duration	36 months	12 months	48 months
Max cost*	£450,000	£110,000	N/A
Max STFC contribution (80% FEC)	£360,000	£88,000	N/A
Industry support	Required	Not required	Not allowed
IP status	IP established	Plan to consider IP protection	Plan for identifying and assessing IP
Extension available?	No	No	Yes

* Please note the max cost does not include any capital requested. Capital/equipment costs should be listed on top of this.

Innovation Partnership Scheme (IPS)

IPS supports the transfer of technology and expertise from STFC research to the marketplace. This scheme provides funding for a maximum of £450,000 (£150,000 per year) fEC for up to 3 years to take existing STFC research and expertise into a commercial environment. This includes technologies or ideas originating from the core STFC funded areas of nuclear physics, particle physics & particle astrophysics, astronomy & space science, and accelerators & computing in support of these.

As IPS is aimed at higher TRL levels, one of the requirements for IPS funding is that there is a linked project partner from industry or other non-academic institution(s) (for example, government departments, charities, NHS foundations etc.). This partner should provide either financial or in-kind contributions to the project, and have a vested interest in its outcomes. For projects at a lower TRL level, before the market has been identified, then please use [Follow-on-funding](#) instead of an IPS grant.

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ELIGIBILITY

Proposals for projects must clearly demonstrate that the science, technology and expertise involved originated from the STFC core Science Programme or the STFC facilities and laboratories, CERN, ESO or ESRF.

Lead Applicants

Lead applicants need to demonstrate that the project idea is linked to STFC research. As such, IPS is normally only open to current or past STFC grant-holders (core research grants, or studentships only) who meet the eligibility criteria defined in the [Research Grants Handbook](#). If an applicant has received STFC funding, but not in his/her name (for example through a post-doc position) then they are still eligible to apply for the IPS scheme, provided they are attached to an eligible RO and can show they will remain under contract for the length of the grant. If this is the case, please contact the office with a grant reference number(s) so we can confirm eligibility. Industrial applicants are not permitted to be lead applicants, and should be listed as project partners.

STFC employees working at one of the national laboratories are fully eligible to apply, however must demonstrate the clear transfer of technology to commercialisation.

Lead Research Organisation

The RO must be eligible to hold UKRI grants; i.e. be an approved UK Higher Education Institution (HEI), Research Council Institute (RCI) or Independent Research Organisation (IRO) eligible for UKRI funding. Full details of approved RCIs and IROs can be found on the [UKRI website](#). For further information applicants should refer to the [STFC Research Grants Handbook](#).

Non-Academic Organisations

Industrial organisations, including research/training organisations and not-for-profit operations, must apply in collaboration with a lead academic partner and demonstrate that they possess the relevant technical capabilities and capacity to meet the scheme's objectives. These collaborators are expected to be **Support Partners** – donating funds or aid in kind to a project. Furthermore, as this scheme is UK funded, the organisation must have a strong presence and benefit the UK economy. The industrial supporter may be based outside the UK but the expected value added to the UK economy, both within the project timescale, and as a result of the work completed, will play an important part in the assessment of the worth of the project. The greater the value to the UK the more highly rated the project will be at the time of assessment for funding.

In cases where the PI has current or former links to the project partner organisation(s) (for example if the company is a spinout from their university), then they should declare this in their case for support.

Applications will be assessed by the STFC External Innovations office staff for eligibility following submission and can be returned at this early stage if not fulfilling the requirements of the scheme. These will be viewed as an office return, not as a panel rejection, and if submitted with revisions will be treated as a first submission in subsequent calls.

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TIMETABLE

All the KE schemes have two closing dates a year, and are assessed by a panel of experts typically around 10-12 weeks after the closing date. Key dates can be found on the [call webpage](#), and will be circulated to all eligible applicants following submission. Applicants should be aware that submitting a proposal in Je-S sends the application to the Universities Research Office, not UKRI. Please allow enough time before the deadline to allow the proposal to process through the Universities internal submitter pool. Please see the call webpage for more details on UKRI/STFC deadlines including the closing date and latest time for receipt of proposals. Proposals submitted after these deadlines will not be accepted.

Applications will be assessed for eligibility and sent for peer review, after which the lead PI will be invited to respond to the comments. Please note, in accordance with UKRI guidelines, applicants have 5 days to respond to these comments unless otherwise agreed with the STFC office. Proposals will then be sent to the panel for review, and final decisions made shortly after.

EQUIPMENT

There is a limited budget for Capital/Equipment in these schemes, and applicants should contact the office to discuss their request before applying. Please see the [Capital guidelines](#) in the STFC Grants Handbook for the latest terms and conditions.

APPLICATION PROCESS

All applications should be made *via* the Joint Electronic submission (Je-S) platform. Je-S is a web based system which allows you to enter information about the project overview, investigators and project finances. The required documents (listed below) should be uploaded through Je-S, and labelled accordingly. Any documents not listed, such as CVs, extra results, list of publications etc. will be removed and not sent for review.

- *Je-S pro forma*
- Six page case for support (Mandatory)
- One page Gantt chart (Mandatory)
- Data management plan (Mandatory)
- Letter of Support from Technology Transfer Office (Mandatory)
- Project Partner Letter of Support from each Project Partner (Mandatory)
- Letter(s) of Support from organisations interested in the project (Recommended)
- Covering Letter (Optional. Please note, cover letters will not be seen by external reviewers/the panel)
- Other (Optional. Please note, any document uploaded under “other” will not be seen by external reviewers or the panel)

All documents should conform to the guidelines described in the [Je-S help text](#).

A project partner is mandatory for an IPS project, as the schemes are designed to support knowledge exchange. This should be included under “project partners” in the Je-S form. Resources to be provided by any project partners, whether in cash or in-kind contributions, should be clearly identified in the proposal. STFC will pay up to 80% of the total costs of the project excluding the project partner contribution. Project partner’s contributions in cash or in-kind should be seen as additional to the

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STFC's contribution and are not considered part of the FEC of the project. It is the responsibility of the lead applicant to ensure that the total budget requested by all members of a project (i.e. joint applications) is within the financial limits of IPS.

Information for project partners

It is expected that project partners will contribute an appropriate level of support throughout the project, and have a vested interest in any outcomes. This information should be detailed in the Je-S application and through a letter of support. The primary investigator, who is applying through Je-S, must submit this information on behalf of the supporting partner.

Case for Support

The case for support should be no longer than six pages and conform to the font and margin guidelines in the [Je-S help text](#). It is the responsibility of the principal applicant to ensure that information is worded in such a way as to protect commercial, confidential, or sensitive data. STFC will assume that the applicant has obtained necessary permissions from any party that may be involved in the application. The six page Case of Support must include information under the following headings. Applications **WILL BE REJECTED** by the office for non-compliance with these directions.

- **Background and Aim**

What is the STFC funded research that will form the basis of the knowledge exchange with the project partner? What knowledge exchange has taken place between the applicants and the project partner to date? What is the aim of this application? Who will benefit from this project and subsequent commercialisation?

- **Technical Summary**

Provide a detailed account of the current status of the technology you are proposing and the plan for development with your partner. This should include justification of why you and your partner are best placed to carry out the knowledge exchange. The summary should provide sufficient detail for referees to assess fully the technical aspects of the proposed project.

- **Business Plan**

This should include a description of the target market, route to market, expected customers and projected sales. Describe the competitors in the market and how the proposed technology would offer a commercial advantage. Describe the predicted investment and mechanism required post-project to complete commercialisation, where possible. This should also include a summary of the IP position (further detailed in the Letter of Support from your Technology Transfer Office).

- **Work Plan and Risk Analysis**

Detail specific work packages, assigning responsibility between partners. Applicants should show that they have identified risks and developed alternative strategies to mitigate these. The applicants should consider both technical, programmatic and, where relevant, commercial risks.

- **Resources**

State the resources requested by the applicants and if relevant, the project partner, and provide justification for them. The IPS Panel can reduce resource requests if they feel there is insufficient justification.

- **Project Deliverables**

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Identify what the direct outputs will be at the end of this grant (please be specific).

Letters of Support

Project partners

Letters of support must be included from all named partners. In addition you can include letters of support from other relevant parties not directly involved in the project but who support the objectives, for example, potential end users. Letters should:

- Be on headed paper and signed by a senior member of staff or director (the capacity in which the supporter is signing off the letter should be stated)
- Be dated within 6 months of the submission
- Be no more than two sides of A4 in length
- Detail their interest and involvement in the project in terms of specific objectives and desired outcomes together
- Detail the projected market size, customers, and sales
- Describe how the company will commercialise the technology beyond the project
- Detail specific contributions to the project (either cash or in kind) with a justifiable monetary value. These contributions should also be stated in the Case for Support

Technology Transfer Office

A letter of support from an applicant's Technology Transfer Office (or equivalent) must be included with each IPS application. It should relate specifically to the proposal (i.e. should not be a generic letter of support) and explain in detail how the university sees the project being taken forward and how the university intends to support the work involved. It should also outline the current and anticipated IP position (has a patent been filed / granted) of any involved parties.

Please note, Je-S only allows a max of 3 letters of support to be uploaded, and so letters of support may be merged together into a single document if needed.

Data Management Plan

It is anticipated that all applications will produce or collect data during the course of the proposed project. The development of a data management plan as an attachment to the JeS pro forma is mandatory for all IPS applications. The plan should be no longer than two pages of A4. The plan, together with any costs associated with it, will be considered and assessed by the normal peer review process. The data management plan should explain how the data will be managed over the lifetime of the project and, where appropriate, preserved for future re-use. Applications that do not have a data management plan will not be accepted.

Collaboration Agreements

For all IPS projects a collaboration agreement between all named partners involved in the project must be signed and a copy sent to the STFC office before the project start date. This should include details of how IP will be managed. Grants will not be allowed to start until the agreement is seen by the office.

Example model research collaboration agreements that may be used as a basis for specific agreements between partners have been developed through the [Lambert toolkit](#) for collaborative research.

Data Protection

Grants submitted *via* Je-S are done so under their [terms and conditions](#). Please make sure you have

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permission from any relevant bodies before submitting any sensitive data. STFC will not be held accountable if data submitted has been done so without the relevant permissions sought.

Ethical considerations

Projects that involve holding sensitive information on individuals (for example facial recognition etc.) should ensure they conform to [UKRI's research integrity policy](#). Although an ethical statement will not need to be submitted alongside any proposals, all the involved researchers should have a consideration of such requirements. STFC reserves the right to suspend any grants that do not meet these requirements.

ASSESSMENT

Panel assessment

IPS applications are assessed by an independent panel comprised of members from industry and academia. View the current membership below. STFC reserves the right to make changes to the panel if required.

Mr Stephen McGeoch – Thales Group (Chair)
Dr Andrew Spencer – University of Liverpool
Prof. David Jenkins – University of York
Prof. Derryck Reid – Heriot-Watt University
Dr Cliff Weatherup – e2v
Dr Jon Burns – AWE
Dr Karen Aplin – University of Bristol
Dr Simon Aliwell – Zartech Ltd.
Dr Alexander Cherlin – Kromek Group

Confidentiality and Peer Review

STFC takes all reasonable steps to ensure that the contents of applications submitted to IPS are treated as confidential. All members of the Panel sign a non-disclosure agreement and peer reviewers must comply with the Research Councils Reviewer Protocols – details can be found on [Je-S](#). Referees and Panel members are asked to declare conflicts of interest in relation to an application before they are asked to assess.

Each proposal will be assessed by external referees, one of whom must be nominated by the applicant. The applicant's nominated referee should not be a current or previous collaborator, a personal friend or family member, neither should they be from the applicant's or collaborator's home institution. Should it arise the referee is in violation of this, the nominated referee will not be invited to review. Applicants can use Je-S to indicate the referees or include this in a covering letter attached to the application and uploaded through Je-S.

Criteria for Assessment

As IPS is designed to achieve impact, applications will be assessed against the following criteria. Each criteria will be assigned a score by the panel, based on the information provided by the applicant and feedback from external reviewers. This score will be used to determine which projects receive funding. These assessment criteria are:

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- **Technical Feasibility**

The proposed project must be based on STFC research and include a program of excellent technical development.

- **Knowledge Exchange and Commercialisation**

The extent to which the project has a clear, well defined mechanism for achieving its objectives in knowledge exchange and commercialisation.

- **Economic and Societal Impact**

The extent to which the outputs of the proposed work show direct potential for economic and societal benefit. Please note the emphasis will be on economic impact to the UK.

- **Added Value**

The extent to which the resources requested, relative to the anticipated outputs, represent an appropriate investment of STFC funds.

The individual nature of proposals submitted to IPS, means that the partner's contribution will vary in context and each application will be assessed on its own merit. The Assessment Panel will be seeking evidence of commitment from the project partner, through the use of direct funding and/or in-kind support, and whether this commitment is substantially justified. Applicants are advised to obtain the necessary clearances from collaborators with a commercial interest in the content of the application before submitting it.

If the proposal is from CERN, ESO, or the ESRF, then the extent to which the proposed knowledge exchange collaboration will enable CERN, ESO or ESRF technology to be exploited by UK industry or non-STFC academic sectors will be considered.

Response to reviewers

Each applicant has the opportunity to respond to the referee comments before the panel meeting. Applicants should be aware that we will request your response to referees approximately 4-6 weeks following the closing date of the call. All key dates (including an estimated date for this response) will be contacted to any eligible applicants following submission.

The PI Response should be no more than half a page of A4 per reviewer (MAX 2 pages), submitted in Arial font size 11. This should be submitted within 5 working days of receipt.

RESUBMISSION

Unsuccessful applications cannot be submitted again for at least 12 months after submission. Feedback will be given on all applications, and all decisions made by all panel members are final.

Proposals invited for resubmission may do so to the next call provided all concerns are addressed. Please note that resubmission requires an entirely new submission to Je-S and will be given a new reference number. It is NOT connected to the previous application and therefore must contain a new Je-S pro forma, Case for Support etc.

The panel will not have access to the original application during assessment. As such, the applicant should submit a cover letter in which they summarise the responses made to the panel comments, addressing the main concerns raised and how they have been addressed. The resubmission will be peer

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reviewed again, by the same referee's as the original proposal where possible, who will be asked to review the changes to the proposal and assess whether the changes have satisfied the request from the Panel.

SUCCESSFUL APPLICATIONS

Please note, a collaboration agreement between all collaborators must be sent to the STFC office, including details on the ownership of any IP, before funding can start. Failure to do so will mean the grant cannot become active. For further details please see the research grants handbook section [7.2](#) and [7.4](#).

Grants are awarded under the [terms and conditions](#) of UKRI. Please see [UKRI privacy note](#) for more details

RESEARCHFISH

All award holders are required to submit any outputs from their IPS project on the [Researchfish platform](#). Award holders are required to provide information about outputs arising from their work annually during the award period, and for at least 5 years after the award has terminated. The IPS Panel will monitor outputs on all IPS grants.

CONTACTS

We encourage potential applicants to contact the office to discuss their proposal, and the STFC office will be able to help and provide advice on applications where appropriate. Please contact the Senior Programme Manager Wendy Carr (wendy.carr@stfc.ac.uk) or Programme Manager, Ed Mansfield (edward.mansfield@stfc.ukri.org) with any queries.

USEFUL LINKS

Below is a list of links which applicants may find useful when applying for STFC grants:

[Peer review framework](#)

[Researchfish](#),

[Equality of opportunity](#)

[Unconscious Bias](#)

[JeS Handbook](#)

[STFC Grants Handbook](#)

[UKRI Terms and Conditions](#)

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ANNEX 1: CERN, ESO OR ESRF SCIENTISTS AND ENGINEERS

Any applications made by applicants working at international facilities should note that the project outputs must benefit the UK economy

IPS applicants from CERN, ESO or ESRF are welcome, and should be from a scientist or engineer performing one of the following functions:

- Research, development, or professional work including academic study and/or supervisory responsibility
- Leadership of research, development, or professional work involving a wide range of academic study and/or strategic responsibility
- Responsibilities of the highest level of scientific and/or management complexity, originality and wide distinction

All applicants from CERN, ESO or ESRF should provide a cover letter along with their proposal stating confirmation that they meet the eligibility criteria as set down above. Furthermore, the applicant's contract of employment with must cover for at least length of the grant. The Principal Investigator need not be a UK citizen.

Completed research proposals must be approved by the appropriate Head of Department or equivalent at the host organisation. Applications from CERN should be submitted through the Director of Technology Transfer and Scientific Computing. Applications from ESO through the Head of Administration.

Please note:

- The collaborating organisation must have its research or manufacturing base in the UK.
- Funds requested should be given in pounds sterling only
- Estates and indirect costs will not be applicable to IPS grants awarded to CERN, ESO or ESRF. The estates and indirect costs addition is covered in the STFC subscription payment to CERN, ESO or ESRF, and so (if the grant is awarded), STFC will pay 80% of the full excluding estates and indirect costs.

Successful IPS awards to CERN, ESO, and ESRF will be subject to the standard terms and conditions of STFC awards, although additional grant conditions might be required on individual grants.

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ANNEX 2: SOFTWARE DEVELOPMENT PLAN GUIDELINES

Over the last 5-10 years, the software industry has reached the conclusion that the central problem regarding software quality and major software project failures is one of inadequate management. This annex provides some guidelines to the applicant in terms of planning (including cost and timescale estimation), management of the project, and the quality of the software deliverables. If a proposal is asking for public funding to develop a system, then a reasonable expectation of the application is to provide enough visibility to be assured that:

- The stated goal is to produce software that will be deployed and maintained as a semi-commercial product.
- There is an understood set of project objectives, sufficient to determine a reliable project cost.
- There is an understood development process with identified points for management review, using a methodology that provides some level of control and design evolution.
- There is an understanding of the project cost and its profile throughout the project.

A minimum requirement for any software development project should be:

- Identify a lifecycle model that will be used as a basis for the management of the project
- Identify the top-level requirements of the project
- Identify the deliverables of the project
- Identify the key lifecycle milestones of the project and their products (including documentation and the availability of any prototypes) and understood success criteria

The proposal need not necessarily identify all of the above, but should provide enough detail and justification to present a convincing case that the development process is understood. Included in the proposal, a software development plan is required for all software related projects. The detail and size of the plan should reflect its relevance in the project. Where software development is a minor part of the project, the plan need not be extensive. However, if it is critical to the success of the project and/or takes up a significant portion of the project time, then the detail should reflect this fact. The plan should be included within the six page case for support (and not submitted as a separate document), addressing the project management requirements including the key milestones. The milestones should have nominal dates assigned to them.

In addition to the development plan, there should be evidence of a cost estimation process and allocation of sufficient resources (including staff). If there is not enough visibility to this cost estimation, then it will be assumed that it has not been done adequately and that the project is at risk of not reaching its objectives.

Risks

This should relate to the relative priorities of the project deliverables/functionality - if there are specific areas of high technical/project risk (to be identified), how are these to be managed?

If the project needs to be de-scoped to complete on schedule or within cost, what measures will be taken?

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The measures that will be taken to minimise cost/risk should be stated: e.g. use of COTS equipment or commercial software, software design tools, software development tools, change management tools, configuration management tools, requirements tracking tools, defect tracking tools.

Project Governance / Oversight

The governance and oversight arrangements should be stated if the project PI is not suitably qualified to oversee software development. Otherwise it will be assumed that the PI is responsible for this section of work.

Development approach Methodology

There should be an understood development process with identified points for management review, using a methodology that provides some level of control and design evolution.

Examples of types of methodology include the "Waterfall" lifecycle model, a rapid prototyping / iterative or incremental delivery methodology.

Requirement analysis

The user needs should be clearly stated in the Case for Support and should encompass both functional requirements and non-functional requirements such as usability, resilience, performance and supportability.

The relative priorities of the project deliverables/functionality should be stated.

Design

The appropriate design activities should be stated, which may include conceptual, architectural, preliminary, or detailed design.

Testing approach/Quality Overview

The end product should be robust, practical and meet the needs of the users. Explain what measures will be taken to assure software quality: ideally a software development/quality plan.

Again, such a plan does not have to be a large part of the Case for Support, but it does need to address how the project will assure that it will meet its design objectives, as represented by the requirements. The testing activities may include coding testing, unit module testing, subsystem testing, software/hardware testing, system integration testing and user acceptance testing.

Implementation / Deployment

The implementation activities, and any post-implementation and maintenance activities should be stated.

Explain what software documentation should be produced – systems and user documentation.