STFC Challenge Led Applied Systems Programme (CLASP) Guidance Notes

Contents

INTRODUCTION

CLASP

STFC's Challenge Led Applied Systems Programme (CLASP) supports the application and commercialisation of core STFC research in four key global research challenge areas, Energy, Environment, Healthcare, and Security. The call runs yearly focussing on 2 of the challenge areas which rotate biennially.

CLASP is designed to support the de-risking of R&D processes for industry through the development of technology demonstrators and industry-ready prototype systems, raising the Technology Readiness Level (TRL) from 3 upwards, towards commercialisation. Project themes are suggested within each challenge area but are not dictated, allowing applicants flexibility when developing their applications. The total budget for this CLASP call is £2 Million, it is anticipated this will fund number of projects ranging from short feasibility studies to larger developmental projects.

Applicants should aim to address specific challenges in the thematic area in their application by working closely with end users. It is recommended that applicants strengthen their application by either partnering with a collaborator or obtaining letters of support from relevant parties (e.g. sector specific organisations/individuals and/or regulators) demonstrating their support. A project partner cannot receive funding directly and would be expected to contribute to the project through either direct or indirect contributions. Although this is not mandatory for this scheme, it is strongly encouraged. Furthermore, applications should also consider data ownership, ethical innovation practises, and appropriate regulatory pathways where needed. Prior to submitting a grant, applicants are encouraged to read the research grants handbook for details on STFC grants, as well as terms and conditions.

CLASP 2022: Security and Environment

The CLASP 2022 call key challenge areas have been identified as **Security and Environment**. Applications are invited which address a specific challenge within one (or both) of these themes.

This CLASP call has been developed alongside colleagues from DEFRA and the Home Office, and specific Challenge areas for these organisations can be found on the CLASP webpage. For broader government priorities, please visit the Department of Transport, Department for Food and Rural Affaires, the Home

Office, or the [Ministry of Defence](#) webpages. **Please note, these areas and challenges are just suggestions/examples, and any applications submitted within the Security and/or Environment remit will be accepted.**

CLASP encourages interdisciplinary collaboration, and we welcome Co-applicants/joint applications from other departments (especially social sciences) where appropriate. This is to encourage the exchange of technology/research and the unique expertise the STFC community have to offer. Industry and/or charity project partners who can contribute to projects are actively encouraged, but not essential.

ELIGIBILITY

Proposals must clearly demonstrate that the underlying science/technology behind the project originated from the STFC core Science Programme (Nuclear Physics, Particle Physics, Astrophysics, Space Science, Accelerator Science, or computing in support of these). Applications from the STFC facilities, CERN, ESO, UK Space Agency, or ESRF are also eligible for CLASP funding.

Applications will be assessed by office staff for eligibility following submission and can be rejected at this early stage if they do not fulfil these requirements.

Lead Applicants

The PI on any CLASP proposal must have a current or previous link to STFC funding in the above areas and meet the UKRI 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 PhD or post-doc position) then they are still eligible to apply for the CLASP scheme, provided they meet the [UKRI criteria](#). Applicants are encouraged to contact the office if they are unsure about their eligibility for this call.

Lead Research Organisation

The lead Research Organisation (RO) must be eligible to hold UKRI grants, i.e. be an approved UK Higher Education Institution (HEI), Public Sector Research Establishment (PSRE), 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.](#)

Co-Investigators

Co-Investigators are welcome and can be from different academic departments to the PI, and do not have to be in receipt of core STFC funding. Joint applications from different institutions outside of STFC's remit are welcome, so long as they have relevance to project delivery.

Non-Academic Organisations

Non-academic organisations are eligible to apply in collaboration with an eligible academic partner, so long as the meet UKRI criteria. Please see [the webpage](#) for a full list of current institutions.

Project Partners

Organisations not eligible to hold UKRI grants, such as industry, research/training organisations and not-for-profit operations etc. must apply in collaboration with a lead academic partner and demonstrate that they possess the relevant technical capabilities and capacity to meet the projects objectives. These collaborators are expected to be **Project Partners**, either donating funds or aid in-kind to a project. Any collaborating organisation must have a strong presence in the UK and be actively contributing to the UK economy.

EQUIPMENT

This CLASP call has a limited budget for capital/equipment. Applicants **must** contact the office before submission to discuss the inclusion of equipment in their application. Failure to do so, may mean the equipment costs will not be funded. Any capital/equipment requested should follow standard STFC guidelines:

- Funds for equipment purchases costing £10k (inclusive of VAT) or less may be sought as a Directly Incurred cost, provided that the equipment is essential to the effective conduct of the research and is not already available to the host Research Organisation. Single items of equipment costing less than £10k should be included in Other Directly Incurred costs.
- Items of equipment costing between £10k and £138k (£115k excluding VAT) must include evidence that the option of using existing equipment has been investigated. STFC expects to contribute 50% the cost of such equipment items, and the remainder should be funded elsewhere.
- For single items of equipment over £138k (£115k excluding VAT), three quotes should be provided with the application. A 2-page business case outlining the strategic need for the equipment is also necessary.

Any requests for capital will be subject to first come first serve basis. STFC reserves the right not to fund the request, even if the project is funded.

COVID-19

UKRI recognises that the COVID-19 pandemic has caused major interruptions and disruptions across our communities and are committed to ensuring that individual applicants and their wider team, including partners and networks, are not penalised for any disruption to their career(s) such as breaks and delays, disruptive working patterns and conditions, the loss of on-going work, and role changes that may have been caused by the pandemic.

Reviewers and panel members will be advised to consider the unequal impacts of the impact that COVID-19 related disruption might have had on the track record and career development of those individuals included in the proposal and will be asked to consider the capability of the applicant and their wider team to deliver the research they are proposing. Where disruptions have occurred applicants can highlight this within their application, if they wish, but there is no requirement to detail the specific circumstances that caused the disruption.

UKRI acknowledges that it is a challenge for applicants to determine the future impacts of COVID-19 while the pandemic continues to evolve. Applications should be based on the information available at the point of submission and, if applicable, the known application specific impacts of COVID-19 should be accounted for. Where known impacts have occurred, these should be highlighted in the application, including the assumptions/information at the point of submission. There is no need to include contingency plans for the potential impacts of COVID-19. Requests for travel both domestically and internationally can be included in accordance to the relevant scheme guidelines, noting the above advice.

Reviewers will receive instructions to assume that changes that arise from the COVID-19 pandemic, post-submission, will be resolved and complications related to COVID-19 should not affect their scores.

Where an application is successful, any changes in circumstances that affect the proposal will be managed as a post-award issue.

The call will open for Outline applications on <u>18th November and close 4 pm 25th January 2021</u>. Any submissions made after this time will not be accepted. Key dates will be circulated amongst eligible applicants shortly after the outline call closes.

Applicants should be aware that submitting a proposal in Je-S sends the application to the institution's internal submitter pool, not UKRI. Please allow enough time before the deadline to allow for any internal processes.

APPLICATION PROCESS
CLASP is a two-stage applicant process. Applicants are invited to submit an initial Outline application which will be assessed by the CLASP panel on the following criteria:
- Technical excellence
- Impact on the challenge area and relevance to the scheme
- Dissemination and implementation plan

Following the Outline stage, shortlisted applicants will be invited to develop full proposals with mentoring available from the CLASP Panel members. Full stage applications will be sent for external peer review, followed by invited applicant (PI) response. Applicants may be invited to an interview panel meeting., where all proposals will be assessed and a final ranking list produced.

This CLASP call will trial the new **UKRI Funding Service**.

STAGE 1: Outline Application
What follows is a copy of the sections and questions you'll need to complete and answer for your Stage 1 application on UKRI's Funding Service. <u>You cannot apply for Stage 1 of this Opportunity on the Je-S system.</u>

Applicants will need to take the following steps to apply:
1. Select the 'Start application' button toward the start of this page.
2. This will open the 'Sign in' page of UKRI's Funding Service. If you do not already have an account, you will be able to create one - a 2-minute process requiring you to verify your email address and set a password.
3. Start answering the questions detailed in this section of 'How to apply' – you can save your work and come back to it later
4. Once complete, use the Service to send your application to your research office for review – they will check it and return it to you if it needs editing
5. Once happy, your research office will submit it to UKRI for assessment – only they can do this.

Make sure you get any necessary approval from your organisation in advance and give your research office plenty of time before the closing date.

<u>Please note</u>, if you are submitting a proposal as a joint application, then only the lead organisation should submit a proposal at this stage.

Details and summary section

Question: Briefly describe your research idea

Guidance:

Ensure you describe your idea and its relevance to CLASP 2022's focus on Security and Environment – this is to give assessors an overview of your proposal.

You should also:
- provide a brief overview of the challenge you are looking to address
- include an explanation of why your idea is different and/or an improvement to current technologies or processes.
- mention co-applicants, contributors and other organisation who you plan to work with and underpinning science
- summarise how long it will take and how much it will cost.

Word count: 500 words

Case for Support section

Question: Enter your Case for Support in the text box below, making sure to include the information provided in the 'what the assessors are looking for in your response' guidance provided

Guidance:
Applicants should make sure they include enough information for assessors to decide whether to invite them to Stage 2.

Use the 4 questions in bold as subheadings to your answers:

Provide a technical outline, including why your research idea is new or different
> Explain the technical background of the project, its link with STFC funded research, and the degree of novelty or improvement, or both, over current technologies or processes. You are encouraged to include any proof-of-concept data that has already been developed. Up to 3 images can be referenced to and supplied in a PDF file as detailed at the bottom of this guidance.

Describe the impact your idea will have on the challenge areas of Security and Environment
> Make clear the ultimate goal of the project and give detail of the way in which development of this technology will address the societal challenge(s) identified.
> You should:
> - clearly explain the challenge, and how the proposed technology will help address it, compared to how it is currently done
> - describe the societal and economic impacts that the project is expected to deliver to those inside and outside of the consortium and the timescale for the deliverables
> - describe the current technology available and give details of how this technology is an improvement
> - describe the social and environmental benefit to the UK that will arise from the proposed work.

Provide a dissemination and implementation plan
> Outline the route or potential route to exploitation in order to meet the impact target.
> Include:
> - further development and financing requirements if anticipated
> - any regulatory alignments required

- the identification of end user beneficiaries
- the names of co-applicants who will make significant contributions to your research

Provide a timescale, outline work plan and risks associated with the project

Together with a Gantt chart (to be included in the single overall attachment for this section) detail the time scale of the project including what steps will be taken to develop the technology over its course. Include justification for any collaborations, any anticipated risks, and project partners also involved in the project.

Uploading images and a Gantt chart
You can include up to 3 images to support your provision of a 'Technical 'Outline. We suggest you label them Figure 1, Figure 2 and Figure 3, referring to them accordingly in your written response. Create these images and import them into a Word doc – you may write up to 20 words under each as an additional explanation. Also import your Gantt chart as an image into the same Word document before saving it as PDF file. Use the unique application number the system gives to your proposal when you start creating an application as the file name, followed by the word 'attachments'.

Word count: 1,500 words

Resources and costs section

Question: Ensure your costs accurately reflect the funding you will need. Reviewers will scrutinise them as part of their overall assessment of your application.

Guidance:
A degree of estimation is expected for some costs, such as consumables and travel, but carefully work out the other costs, like staff and equipment. We recommend that you work with your Research Office for this part of your application, as they will be familiar with the process. At least make sure you leave enough time for them to review this section before submission.

Directly incurred costs arise as a direct consequence of your project taking place. They must be actual, auditable and supported by invoices.

Directly Allocated costs are incurred whether or not the project takes place and are estimated at project level. For example, Technician time and Estates costs.

Indirect costs represent the costs of central and distributed services shared by other activities that are not project-specific. For example, Human Resources and IT.

Exceptions can include travel and subsistence, equipment, biological costs, charge-out facilities and postgraduate students.

Justification of Resources section

Question: Provide a commentary of how and where your costs will be incurred, and what they will be used for.

Guidance: Ensure you provide details of project partners and what they're contributing. Any capital requests should also be stated.

Word count: 250 words

Supporting organisations section

Question: Provide any relevant letters of support from end users and partners

Guidance:
Use the text box below to detail each partner organisation's:
- organisation name
- registered office address or website address
- total amount of direct contributions, indicating the value in pounds. For example, cash, equipment, materials, seconding of staff or other direct contributions
- total amount of indirect contributions, indicating the value in pounds. For example, use of facilities, staff time and other indirect contributions

In addition, you must upload a single PDF containing all relevant letters or emails (from a significant and responsible person) of support. Each letter or email should:
- confirm their commitment to the project
- clearly explain the value, relevance and possible benefits of the work to them
- describe any additional value that they bring to the project
- detail the nature and equivalent value of any in-kind contribution, and period of support
- detail the nature and value of any cash contribution, and period of support
- state whether they wish to claim minor costs, such as small consumables specific to the project

Add copies of your letters and emails to a Word document using either copy and paste (for emailed letters) or by scanning and inserting images (for physical letters). Save the document as a PDF. To name the file, use the title of your application, followed by its unique Funding Service reference number and the words 'support letters'. Then use the 'Upload file' button below. Your PDF must be no larger than 8MB.

STAGE 2: Full application
Following the outline stage, successful applicants will be invited to submit a full proposal though Je-S. To submit an outline application, please select the following in Je-S:

       Council: STFC
       Document type: Standard proposal
       Scheme: CLASP
       Call/type/mode: CLASP Security and Environment 2022

This application should consist of:
- Je-S *pro forma*
- Six-page case for support (Mandatory)
- One page Gantt chart (Mandatory)
- Two-page data management plan (Mandatory)
- Two-page knowledge exchange plan (Mandatory)
- Letter of Support from Technology Transfer Office (Mandatory)
- Letter of Support from each Project Partner (Mandatory if a partner is listed)

- Letter(s) of Support from any interested organisations/potential users (Recommended)

All documents should conform to the guidelines described in the [Je-S help text.](#) Any additional documents such as CVs, additional results, list of publications etc. will not be sent for reviewers during our peer review process.

If this is a joint proposal where funds will be held by more than one institution, the PI from each institution must submit a separate Je-S application with the same title. Only the lead application is required to submit the Case for Support, Gantt chart, Data Management Plan, and any letters of support. See Je-S Helptext for setting up [joint proposals.](#)

Full application Case for Support
The case for support should be no longer than <u>six pages</u> and be in font Arial, size 11 with 2 cm margins. **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 the following;

- **Background and Aim**

Describe the STFC funded research that will form the basis of this project.
Detail the knowledge exchange has taken place between the applicants and industry/policy makers/any other relevant users (if any).
State the aim of this application
Describe 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.
This should include justification of why you are best placed to carry out the work.
Describe the novelty of the proposal and/or the expected improvement over current technologies or processes relevant to the chosen challenge.

- **Beneficiaries and Impact**

Explain the potential impact of the project, detailing who would benefit from the technology.

- **Work Plan and Risk Analysis**

Describe and give details of specific work packages, assigning responsibility for work packages between partners (if required). Applicants should show that they have identified risks and developed alternative strategies to mitigate these. Applicants should consider both technical, programme 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 CLASP Panel may reduce resource requests if they feel there is insufficient justification.

- **Project Deliverables**

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

- **Software development plan (if applicable)**

Where the proposal includes software development, a plan should be submitted with detail relative to the significance of the software development in the project, see Annex 2.

A 2-page business plan should be submitted alongside the case for support. In Je-S, this should be attached as "Knowledge exchange plans," and should contain information on;

- **Freedom to operate**

Provide evidence that you have freedom to operate (e.g. a summary of the results from patent searches), identification of any IP and detail how it will be protected. Please note, a summary of the IP position should be further detailed in the Letter of Support from your Technology Transfer Office.

- **Market research**

Applicants should describe the size of the market opportunities which may open up as a result of this project. This should include details about; the current nature, size, and growth of the market, and the predicted market share taken by the outcomes of the project. Applicants are encouraged to seek advice from the Research Office and/or Technology Transfer Office on market research.

- **Competitor analysis**

Applicants should provide the details of any competitor technology, or alternate solution to the same problem. This should include name/location/size of the company, the name of the product/service and its cost, along with any strengths and weaknesses, and explain how the proposed project will offer improvement.

- **Route to market**

Applicants should list any exploitative outputs from the product (e.g. what you are going to sell, detail the projected sales and identify the target customers, including the customer profile (size of target market, geographic location etc.) the estimated Bill of Materials (BoM) should be included for the product and indicate what percentage this is likely to be of the selling price).

Provide evidence for your statements about the target market of any product developed based on the potential beneficiaries, and outline your strategy for developing market share and why you have chosen this market method, i.e. what is the proposed channel to market and what are the key barriers to allow entry to the market and how will they be overcome.

Describe the predicted investment and mechanism required post-project to complete commercialisation or successfully apply the technology into real practice, e.g. policy, regulation, improvement of existing process, etc. Explain the estimated costs required and timescale needed to have a product ready. Details on any regulatory requirements should be included.

For disruptive products/services, details on the route to market, the market size, and how the project will seek to explore the market potential should be provided.

Project partners
Letters (or e-mails) 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). All letters should:
- 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 joint outcomes
- 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 be also be stated in the Case for Support

More information on project partners and letters of support can be found in the research grants handbook.

Technology Transfer Office
A letter of support from an applicant's Technology Transfer Office (or equivalent) must be included with each CLASP application. It should specifically relate to the proposal (i.e. it 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 Intellectual Property (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 pdf document if needed.

Data Management Plan
It is anticipated that all applications will produce or collect data during the proposed project. The development of a data management plan which is submitted as an attachment to the JeS pro forma is mandatory for all CLASP 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. Please see the research grants handbook for more information.

Collaboration Agreements
All successful CLASP projects including more than one organisation (either academic, industry, or eligible research organisation), are required to submit a signed collaboration agreement between all named partners and include details of how IP will be managed. **This must be submitted to the STFC office before the project can start.** Grants will not be allowed to start until the agreement is received by the STFC 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 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 receiving or 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 consider the requirements. STFC reserves the right to suspend any grants that do not meet these requirements.

ASSESSMENT

Panel assessment

Both the Outline and full-stage CLASP applications are assessed by an independent panel, consisting of colleagues from academia, industry, and government. For this call, there will be representation from both the DEFRA and the Home Office representing the challenge areas.

Standing CLASP Panel:

Jim Wharfe – Independent environment consultant (Chair)
Giles Hammond – University of Glasgow
Harry Barraza – LGC Group
John Allen – Elekta Ltd.
Robert Thompson – Heriot-Watt University
Claire Jones – AWE Ltd.
Dhiren Kataria – University College London
Peter Dobson – University of Oxford
Paranjothy Karunaharan - Aerospace Medic Ltd
Jadu Dash – University of Southampton
Jim Halliday - UK Energy Research Centre
Carole Tucker – University of Cardiff
Adam Amara – University of Portsmouth
Stefanos Paschalis – University of York

Sector Specific Panel Members:

Giles Golshetti – DEFRA
Stephen – Home Office

Confidentiality and Peer Review

STFC takes all reasonable steps to ensure that the contents of applications submitted to CLASP 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. Reviewers and Panel members are asked to declare conflicts of interest in relation to an application before they are asked to assess. Please visit the webpage for details on STFC policy regarding peer review.

Outline assessment

Following the Outline proposal submission deadline, all applications will be sent directly to the panel and do not undergo peer review. The panel will then decide which applications should be invited to make a full submission, and which should be rejected. Proposals will be assessed on:

Technical excellence
- Scientific quality and novelty
- Likelihood to deliver

Impact on the challenge area and relevance to scheme
- A clear and defined challenge in either the security or environment themes
- Potential for impact to arise from the project

Dissemination and implementation plan
- Consideration of how the technology will be exploited

- Strength of consortia
- Evidence of engagement with partners/end users

Full stage assessment

Invited applicants will be assigned a panel member to assist in the preparation of a full proposal. Following the submission deadline, full stage applications will be sent to external peer review. where each proposal will be assessed by external reviewers, one of whom must be nominated by the applicant. The applicant's nominated reviewer should not be a current or previous collaborator, personal friend or family member, neither should they be from the applicant's or collaborator's home institution. Should it arise that a reviewer is in violation of this, the nominated reviewer will not be invited to review. Applicants should use Je-S to indicate their suggested reviewer.

Following Peer Review a second panel meeting will take place, where applicants may be invited to give a brief presentation on their project which is followed by questions from the panel.

Full stage assessment criteria

Proposals must demonstrate that they draw on an area of expertise supported by the STFC core science programme (astronomy & space science, particle physics & particle astrophysics, nuclear physics and the computing and accelerator programmes supporting these) or STFC's staff in laboratories and facilities.

In the panel meeting, proposals will be assessed under the four assessment criteria listed below:

Scientific and technical merit
- Scientific quality (including current technology status, objectives and deliverables)
- Risk management
- Novelty regarding any existing technology
- Strategic fit to call including proposed TRL gains throughout project
- Implementation plan (Letters of support)

Societal Impact
- Articulation of societal benefit including non-monetary benefits (e.g. time saved, patients care improved etc.)
- Knowledge exchange plan, including dissemination of expertise into the challenge area
- Demonstrating commitment from end users
- Regulatory alignment/engagement (where relevant)
- Consideration of societal sensitivities (e.g. reduced plastic, data security etc.)

Economic Impact
- Likelihood of commercialisation and route to market; (including project partner support)
- Economic benefit, both UK and globally, including cost savings
- Business plan (e.g. need, size, competitors, value, and location)
- IP Management plan

Added value
- The extent to which the resources requested, relative to the anticipated outputs, represent an appropriate investment of STFC funds (value for money)
- Degree of support from Project partners both during research and after funding (if relevant)
- Future of the project after CLASP funding

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 reviewer's comments before the full proposal panel meeting. Applicants should be aware that we will request your response to reviewer comments approximately 5-7 weeks following the closing date of the call. All key dates (including an estimated date for this response) will be communicated 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.

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 will not be activated. 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 CLASP 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 CLASP Panel will monitor outputs on all CLASP grants.

CONTACTS

We strongly encourage potential applicants to contact the office to discuss their proposal. The STFC office will be able to help and provide advice on applications where appropriate. Please contact the Senior External Innovations 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
JeS Handbook
STFC Grants Handbook
UKRI Terms and Conditions
UKRI ethical Innovations practises

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.

CLASP 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 CLASP grants awarded to CERN, ESO or ESRF. The estates and indirect costs addition are 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 grant excluding estates and indirect costs.

Successful CLASP 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.

Please see website for link to the latest version of these notes.
https://stfc.ukri.org/funding/stfc-knowledge-exchange/challenge-led-applied-systems-programme/

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 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 it is a reasonable expectation that the application provides 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 of 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, how will this be done and what measures will be taken to carry this out?

Please see website for link to the latest version of these notes.
https://stfc.ukri.org/funding/stfc-knowledge-exchange/challenge-led-applied-systems-programme/

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.