STFC Early Stage Research and Development Scheme Guidance Notes

Contents

The Early Stage Research and Development scheme is one of two new knowledge exchange schemes offered by STFC to support the PPAN community, which are designed to fund projects from initial research and development through to commercialisation. The PPAN community is defined as particle physics, particle astrophysics, astronomy, nuclear physics, accelerator physics, solar and planetary science, and computing that underpins these areas.

Both schemes are designed to facilitate the transfer of STFC PPAN funded research into an industrial setting over different stages of commercialisation: -

- **Early Stage Research and Development**
  - To fund research and development with a focus on technology development in the PPAN community from technology readiness level (TRL) 1-5. In partnership with industry as appropriate.

- **Late Stage Commercialisation**
  - To fund commercialisation (TRL 5-7/8) developed from STFC PPAN funded research in partnership with industry as appropriate.

Early Stage Research and Development Scheme

The main aim of the early stage research and development scheme is to support technology development addressing current and future challenges facing the PPAN community. This includes technologies or ideas originating from the core STFC funded areas of particle physics, particle astrophysics, astronomy, nuclear physics, accelerator physics, solar and planetary science, and computing that underpins these areas.

A secondary aim of the scheme, during the lifetime of the award is to further develop products and technology (move them through the TRL) working with industry where appropriate.

The scheme provides funding for a maximum of £200,000 a year fEC for three years per project. Receipt of funding for year three of the award will be dependent on a light touch stage gate assessment. It is expected that most of the development work will take place in year three. The scheme will therefore operate on a 2 plus 1-year funding model to retain flexibility.

As this scheme is aimed towards technology development, working with a Small or Medium-sized Enterprise (SME) where appropriate in the project is encouraged, however applicants can choose to submit without industry involvement or start to collaborate with industry at any point during the lifetime of the award.

A project partner from a non-academic institution(s) (for example, government departments, charities, NHS foundations etc.) is also allowable. Any partner should provide either financial or in-kind contributions to the project and be committed to the success of the project.

ELIGIBILITY

Proposals for projects must clearly demonstrate that the science, technology, and expertise is aimed at the STFC core PPAN Science Programme. Standard organisational eligibility applies to this call. Applications will be assessed by the STFC External Innovations office staff for eligibility following submission and returned at this early stage if they do not fulfil the requirements.

Lead Applicants

Lead applicants/principal investigators (PI's) need to demonstrate that the project idea is aimed at PPAN STFC research. As such, the early stage research and development scheme is only open to

those who meet the eligibility criteria defined in the [Guidance for Applicants](#). If you have any queries on eligibility please contact the STFC office.

Lead Research Organisation

The RO must be eligible to hold UKRI grants, i.e. be an approved UK Higher Education Institution, Catapult, Research Council Institute or other Public Sector Research Establishments, an Independent Research Organisation or Catapult. Full details of approved RCIs and IROs can be found on the [UKRI website](#). For further information applicants should refer to [Guidance for Applicants.](#)

Non-Academic Organisations

Industrial organisations, including research/training organisations and not-for-profit operations, must collaborate with a lead academic partner and demonstrate that they possess the relevant technical capabilities and capacity to meet the scheme's aims. These collaborators are expected to be **Project 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 to the UK economy. The industrial support may be based outside the UK but it is expected that value should be added to the UK economy, both within the project timescale and after the award has completed.

In cases where the PI has current or former links to the project partner organisation(s) then this should be clearly declared in the cover letter, alongside details of their involvement and how it will be managed/mitigated. Furthermore, any contributions to the project should be clarified, so that (for example) any support is not being double counted as commitments by the academic leads.

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.

TIMETABLE

The early stage research and development scheme will be open for applications once a year. It is **Mandatory** for anyone wishing to submit to the early stage research and development scheme that you make STFC aware of your intention to submit by sending an email to KEGroup@stfc.ac.uk **prior to 8th August 2022**. Please give details of the PI name, area of PPAN you will be working in and title of the application in the email.

Applications will be assessed for eligibility and sent for peer review and the PI will be invited to respond to the comments. Please note, in accordance with UKRI guidelines, applicants have five working 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.

Proposals will be assessed by a panel of experts typically around 10-12 weeks after the closing date. Key dates can be found on the funding finder page and will be circulated to all applicants following submission. The call will close at 4pm on the date specified.

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 institution's 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.

All projects must start on or before 12th December 2022

Two Year + One Year Review

The three-year award will undergo a light touch review towards the end of the second year to assess the progression made towards the project's objectives and if it has reached a stage to warrant further development e.g. moving between TRL.

Assessment of the final year of the award will be subject to approval by peer review.

EQUIPMENT

There is a limited budget for Capital/Equipment in these schemes. Applicants must contact the office to discuss their request before applying. All equipment above £10,000 will be funded at 50%. Please see the Capital guidelines in the STFC Guidance for Applicants for further information. STFC reserves the right to not fund any equipment requests if no prior approval was granted. All requests will be considered by the panel to determine how the equipment will ensure the success of the award.

APPLICATION PROCESS

All applications should be made *via* the Joint Electronic submission (Je-S) platform. To submit a proposal, applicants should navigate to the following:

1. Council: STFC
2. Document type: Standard proposal
3. Scheme: Standard
4. Call/type/mode: Early Stage R&D Call 2022

As part of the application process, the following documents should be uploaded through Je-S and labelled accordingly. Any documents not listed, such as CVs, extra results, list of publications etc. will be returned to the PI for removal.

- Je-S *pro forma*
- Seven-page case for support (Mandatory)
- One-page Gantt chart (Recommended)
- Two-page Data management plan (Mandatory)
- Letter of Support from Technology Transfer Office (Recommended if industry is supporting the application)
- Project Partner Letter of Support from each Project Partner (Mandatory if partners are present)
- Letter(s) of Support from organisations interested in the project (Recommended)
- Covering Letter (Optional. Please note, cover letters will <u>not</u> be been seen by external reviewers/the panel)
- Other (Optional. Please note, any document uploaded under "other" will <u>not</u> be seen by external reviewers or the panel)

All documents should conform to the guidelines described in the Je-S Handbook.

If a project partner is involved in the project 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, either direct or in-kind, should be as additional to the STFC's contribution and are not considered part of the fEC of the project. It is the responsibility of the PI to ensure that the total budget requested by all members of a project (i.e. joint applications) is within the financial limits of the award (200K per project per year across all members of the project).

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 PI, who is applying through Je-S, must submit this information on behalf of the supporting partner.

Subcontractors

A subcontractor, who is subcontracted by the host organisation to deliver a specific piece of work is permissible on projects. This is subject to the procurement rules of the host organisation. All costs that support the delivery of the subcontract are eligible and will be paid at 80% fEC, these should be outlined and fully justified in the proposal and will be subject to peer review. Entitlement to the outputs of the project and /or intellectual Property will be determined between the parties involved. For further information see guidelines

Case for Support

The case for support should be no longer than <u>seven pages</u> and conform to the font and margin guidelines in the Je-S help text. The case for support should be a self-contained summary of the

proposed work with the necessary context given to enable panel members to make an informed judgement on the overall quality of the proposal.

The case for support <u>must</u> be structured using the following headings.
The guidance notes underneath the headings are there to help shape any thinking and add detail to the case for support which is required to help carry out peer assessment of the proposal.

It is appreciated that not all guidance notes will be relevant to all applicants, as it will be dependent on the maturity of the technology.

Technical overview
An overview of the technology must be included as part of the case for support. This should include:
- A brief review of the underpinning research and context from the science area the opportunity arose from. Include details of previous funding where relevant.
- A technical overview of the current status of the innovation/technology, including any preliminary data/proof-of concept etc. which will explain the status of the technology development.
- A description of the current technology and its application along with a comparison of how your idea could improve on this.
- Inclusion of images and preliminary data are encouraged where relevant.

Case for support
The remaining pages should give further detail of the application. This should be structured using the following headings. The technical overview can be referred to as part of the case for support where relevant.

1. **Opportunity and Application**
What is the opportunity / challenge you are seeking to exploit/address, which could lead to the development and/or deployment of a new or improved product/service/technology?

You should use this section to:
- Describe the application area of the technology or need that this proposal will seek to address.
- Outline how your proposed solution will address the opportunity or need, considering the scalability of the proposed approach.

2. **Development Plan**
How has the idea/solution been developed to date and what is the proposed approach for further development? This section should expand on the technical overview section listed above to discuss the research and development.

You should use this section to:
- Detail the current understanding/maturity of the innovation/technology and how the proposed work will enable its development.
  You can reference back to the technical overview if required
- Include specific project milestones/deliverables, and the resourcing necessary to deliver the proposed work.

- Detail any necessary access to facilities, expertise, or consultancy essential to delivering the proposed work, including any regulatory requirements.
- If you plan to partner with businesses or other organisations, detail their contribution (intellectual/technical/financial) and highlight your freedom to operate.
- Please upload a separate Gantt chart (or similar) (Other Attachment: maximum 1 side of A4) to illustrate the project plan.
- A breakdown of how funding will be used.
- Detail of what happens after this award has ended, what are the next steps for the project.

Note 1: At the time of application, or during any subsequent grant, UKRI would not anticipate any business to have exclusive rights to the assets and IP arising from the funded project.

3. Wider benefits
What are the potential wider benefits of the proposed approach?

You should use this section where appropriate to:
- Explain why the proposed programme is appropriate for public funding.
- Consider the potential of the approach to impact on high-level societal and environmental challenges e.g. gender equality, diversity, social inclusion, and climate change.
- Consider the benefits to the wider scientific community including those of disciplines outside of the PPAN community.
- Consider the benefits to the wider population in the UK.
- Describe what steps will be taken to maximise any potential benefits and outputs from the award.

4. Ethical considerations
Are there any ethical considerations associated with your product/service/technology, including those that are beyond formal regulatory and legal frameworks?

You should use this section to:
- Outline whether there any ethical considerations relating to the project or its impacts, including any potential impacts on the environment.
- Consider societal acceptance of your research where you think this might limit uptake, outline strategies that could be employed to address this.
- Are there any implications for trusted and responsible research and innovation practises? For example, dual-use (both military and non-military) applications to your research, which could limit the commercial potential.

More information on trusted research and innovation can be found on [UKRI's webpage](#) and the [Centre for the Protection of National Infrastructure](#).

Letters of Support
Project partners and other letters of support if relevant
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.
- Can be either letters or e-mails;
  - Letters of support 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)
  - E-mails of support should be from an appropriate person and clearly named alongside

their title.
- 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 joint desired outcomes.
- 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.

Note: If the PI has any current or former links to the partner organisation, then they should be declared in the cover letter, alongside the details on any such involvement and how the conflict will be managed/mitigated. This is only relevant where a named investigator has any formal connection with the partner organisation and a vested/financial interest in the commercialisation outcome (e.g. current or former employee, shareholder, member of an oversight/advisory board etc.).

Technology Transfer Office
A letter of support from an applicant's Technology Transfer Office (or equivalent) should be included with each application if you have a named industrial partner and the technology is sufficiently mature (for this scheme maturity is defined as TRL4-5). Please use the STFC Technology Readiness Levels definition to help determine the TRL of the technology.

The letter of support 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 three letters of support to be uploaded, and so letters of support may be merged into a single document if needed.

It is the responsibility of the PI 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.

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 Je-S pro forma is mandatory for all 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.

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 holding or using 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.

All projects and activities should conform to [UKRI Trusted Research and Innovation](#) practises. STFC reserves the right to terminate any grants if there are any concerns over the above considerations.

ASSESSMENT

Panel assessment

Applications are assessed by an independent panel comprised of academic members from the PPAN community as well as industry. Details of the panel membership will be shared with applicants once the call has closed.

Confidentiality and Peer Review

STFC takes all reasonable steps to ensure that the contents of applications submitted 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.

Each proposal will be assessed by external reviewers, one of whom can be nominated by the applicant. Any reviewers nominated by the applicant should not be a current or previous collaborator, a friend or family member, neither should they be from the applicant's or collaborator's home institution. Please see STFC's guidance on [confidentiality and conflicts of interest](#). Should it arise the reviewer is in violation of this, the nominated reviewer will not be invited to review.

Criteria for Assessment

As the early stage research and development call is designed to support research and development of technology, applications will be assessed against the following criteria. Each criterion will be assigned an equal 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:

Scientific and Technical Excellence
- The proposal should be feasible from a technical standpoint and build on strong underpinning quality science.
- Where possible the applicant should indicate the developing technology in terms of international and UK benchmarking.
- The proposed project must include a programme of excellent technical development.
- The proposal should build on solid and well-thought-out technical evidence.

Leadership planning and project management
- Capability of the project team and partner organisations on being able to deliver on the project.
- Capability of the project team to deliver the project milestones, manage resources and risk.
- Capability of the team to engage with industry.

- The extent to which the team have considered the next steps in the development of the project after the lifetime of this award.
- The extent that environment in which the project is being delivered is supportive of the research and development of technology.

Strategic Value within the STFC Programme
- 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.
- The added value the proposed research may have on the PPAN community.
- Consideration of the future of the project after this funding.

Social and Economic Impact
- The benefit/impact the proposed research may have on the wider scientific community outside of the PPAN community.
- The extent to which the outputs of the proposed work show direct potential for economic and societal benefit to the UK.
- The extent to which responsible research and ethics have been considered.

The individual nature of proposals submitted, means that the partner's contribution will vary in context and each application will be assessed on its own merit. The Assessment Panel will look for evidence of project partner commitment, which could be shown by direct funding and/or in-kind support. The Panel will consider 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 or the ESRF, then the extent to which the proposed project will enable CERN or ESRF technology to be exploited by UK industry or non-STFC academic sectors will be considered.

Response to reviewers
Each PI will have the opportunity to respond to the reviewer comments before the panel meeting. Applicants should be aware that we will request your response to reviewers approximately 4-6 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 standard Arial 11pt (the preferred font for STFC), Helvetica Regular 11pt or an equivalent regular 11pt sans serif universal font e.g. FreeSans. This should be submitted within 5 working days of receipt. PI response guidance.

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 reviewed again, by the same reviewers 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

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 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.

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) with any queries.

USEFUL LINKS

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

UKRI Principles of Assessment and Decision Making
Equality of opportunity
Unconscious Bias
JeS Handbook
UKRI Terms and Conditions
Guidance for Applicants
Researchfish
Peer Reviewers - why do we use independent reviewers?

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.

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 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 excluding

estates and indirect costs.

Successful 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.

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 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?

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.