

## UK Space Agency CREST Initiative Guidance Notes

### A. Scope

The main objective of CREST (Collaborative Research in Exploration Systems and Technology) is to position the UK community to secure the maximum scientific and technological return from participation in future planetary exploration projects and programmes. This may be from participation in the optional ESA exploration programmes but also includes potential bi-lateral partnerships, for example with NASA. Technologies can be developed through this programme that are relevant to the ESA mandatory science programme, if the developments are generic and not for a specific mission (there are specific funding schemes for the mandatory science missions.)

The scheme applies to the pre-construction phase of projects and seeks to pave the way for more:

- UK intellectual leadership in key work packages in international projects;
- UK industrial return on construction phase contracts;
- Knowledge transfer through collaborative developments, spin-outs, skills transfer and intellectual property licensing.

Although funds will primarily be provided for programme technology development, proposals should also show evidence of commitment to knowledge transfer. Plans for knowledge transfer will form part of the assessment criteria.

### B. Eligibility

We welcome bids from a variety of organisations including academia, industry and government research institutes. The details of some organisations may not be known to the UK Space Agency. Following receipt of bids and before award of any contract, new entrants may be required to provide additional eligibility details:

- Evidence of company legitimacy and financial solvency, supported by e.g. company Annual Reports;
- Details of company quality processes and accreditation;
- Track record, supported by reputation or by statements from referees and customer testimonials.

It is possible that some consortia bidding for projects may need to involve non-UK entities. This is allowable in principle subject to the following conditions:

- The UK must lead the consortium;
- The UK work must represent a substantial proportion of the whole project;

- The consortium must demonstrate that the proposed non-UK capability is essential and not available in the UK;
- The rules can be relaxed if the non-UK entity is supplying PV or capability, and resources on a no-exchange-of-funds basis.

Full details of the non-UK participation must be provided in the bid, appended to the eligibility statement.

### C. How to apply

Applicants must submit an application form <https://www.gov.uk/government/publications/collaborative-research-in-exploration-systems-tech-crest-ao>, a case for support, and a collaborative agreement where appropriate, along with the relevant annexes as listed below. These should be sent electronically as a PDF file to [SpaceExploration@ukspaceagency.bis.gsi.gov.uk](mailto:SpaceExploration@ukspaceagency.bis.gsi.gov.uk)

Applications received after 16:00 on 21<sup>st</sup> June 2017 will not be considered.

**Please note:** it is the responsibility of the proposal Principal Investigator to clear their submission with the relevant finance and research offices of their institution. Such clearance must be obtained prior to submission.

Proposals for collaborative projects must include a collaboration agreement, including details of the management of confidentiality/disclosure and intellectual property agreements. Awards will not be made until a collaboration agreement is in place. Note proposals without a signed collaborative agreement at the point of the review panel meeting could be disadvantaged.

#### 1. Case for Support

The completed proposal form should be accompanied by a self-contained Case for Support which should be no longer than 6 sides of A4 in 11pt font, covering the following:

- The objectives of the project, its relevance to programme objectives and anticipated achievements and benefits;
- Identification with justification of the European State Aid General Block Exemption Regulation (GBER) work category with a clear statement of the Private Venture (PV) investment offered
- The underlying rationale and scientific/technological issues being addressed;
- The programme and plan of research, showing what alternatives have been considered and why the proposed method is preferred;
- The proposed management of both the project and resources;
- The relationship to any earlier or current work of the applicants and any collaborating organisations and any relevant work elsewhere;

- A fully justified case for the staff effort, equipment, travel and subsistence and other costs requested;
- An estimate of the annual profile of expenditure;
- A statement of acceptance of the standard UK Space Agency/BIS Terms and Conditions (T&Cs). A copy of these T&Cs is available on the UK Space Agency website with the call documents  
<https://www.gov.uk/government/publications/collaborative-research-in-exploration-systems-tech-crest-ao>
- A description of how the results will be disseminated

## 2. Annexes

- The research experience of the investigators and any collaborators
- A "Pathways to Impact" document (of a maximum of one side) this should describe how the potential impacts of this research will be realised.
- In the case of collaborative projects, a copy of the collaboration agreement, including details of the management of confidentiality/disclosure and of intellectual property arising from the research. **A collaboration agreement must be in place for the proposal to be funded.** Note proposals without a signed collaborative agreement at the point of the review panel meeting could be disadvantaged. A model Technology collaborative agreement can be found at:  
<https://www.gov.uk/government/publications/collaborative-research-in-exploration-systems-tech-crest-ao>
- Proposed payment plan

A proposal without a case for support will not be accepted.

## 3. Costings

The application form should display the full economic costs of the proposed project together with the amount requested from the UK Space Agency. The contribution of the Agency will depend on State Aid rules.

### Overheads

The full cost should include full overheads – covering costs that cannot be directly charged to specific projects– shown as *either*:

- part of a charge-out rate for staff time  
*or*
- a separate cost item (to be called *Indirect Costs*). If staff *charge-out rates*, rather than *staff costs*, are used, zero should be entered under Indirect Costs.

On any one proposal form, overheads should be shown in one or other of these two ways, not as a mixture of both. If the second method is used, then, if the amount of staff effort funded in the agreement is less than that in the original proposal, the UK Space Agency would expect there to be a corresponding reduction in indirect costs.

Direct costs

Direct costs – costs that will be specific to the proposed project, will be charged as the cash values actually spent and can be supported by an audit record – should be split into the following subheadings:

- staff costs or staff charge-out rates (depending on how overheads are charged)
- travel and subsistence;
- equipment;
- other costs.

All costings should be at current prices in pounds sterling, inclusive of VAT and other taxes the host organisation anticipates having to pay for materials/services acquired.

**4. State Aid**

Applicants are asked in the outline proposal to explain where their proposal fits within the State Aid framework for R & D. The information below summarises the position at publication the latest information can be found at <https://www.gov.uk/government/publications/state-aid-general-block-exemption-regulation>

**Fundamental research:** defined as “experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any direct practical application or use in view”.

**Industrial research:** defined as “planned research or critical investigation aimed at the acquisition of new knowledge and skills for developing new products, processes or services or for bringing about a significant improvement in existing products, processes or services” .

**Experimental development:** pre-competitive development category defined as “the acquiring, combining, shaping and using of existing scientific technological business and other relevant knowledge and skills for the purposes of producing plans and arrangements or designs for new, altered or improved products, processes or services”. This category extends to the development of commercially usable prototypes and pilot projects where they would be too expensive to produce only for experimental purposes; where there is subsequent commercial use of the prototype any revenue generated has to be deducted from eligible costs. This category does not cover routine or periodic changes to products and services.

**Technical feasibility studies** preparatory to industrial research and experimental development.

Aid Intensities – Project Aid	Small enterprise	Medium enterprise	Large enterprise
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Fundamental research	100%	100%	100%
Industrial research	70%	60%	50%
Industrial research projects involving collaborations* or where the results will be disseminated	80%	75%	65%
Technical feasibility study preparatory to industrial research	70%	60%	50%
Experimental development	45%	35%	25%
Experimental development projects involving collaborations*	60%	50%	40%

\* collaborations between businesses and research organisations where the research organisation bears at least 10% of the costs & have the right to publish their own research, or business to business collaborations which involve more than one member state of the EU/ EEA or involve at least one SME, provided that no one business partner carries more than 70% of the project costs.

## **D. Financial and Contractual Information**

Each award will take the form of a grant agreement between the UK Space Agency and the project's lead organisation. Bidders should note that the UK Space Agency will not refund any costs associated with preparing proposals.

This UK Space Agency activity has been assessed by HMRC as outside the scope of VAT, because no taxable supply is taking place and the IPR will not in the normal course of events pass to UK Space Agency or from the UK Space Agency.

Proposers should note that grants cannot be given to companies in financial difficulties.

### **Payment plans**

Payment plans should be constructed so that no more than 25% is paid at Milestone 1, and no less than 20% at the final review acceptance. Other milestone payments should be included, which should reflect major project stages and intermediate deliverables.

It should be noted that under the procurement rules for BIS/UKSA, milestone payments cannot be made in advance of need, and therefore will only be paid on successful completion of technical deliverables.

### **'PV' (Private Venture) Contribution**

Industry is required to provide a PV contribution to eligible project costs in accordance with the BEIS guidance to the European State Aid General Block Exemption Regulations (GBER).

Proposers must identify the category of work proposed, and this must be consistent with the work programme described in the technical case. Note that the type of activity and company size defines the maximum 'Intervention' rate (and hence the minimum required PV level) that is permitted for that activity (see Annex A), and that there are concessions for collaborative activities. Bidders will be expected to justify the category of work selected.

Bidders must ensure that they supply the correct information that allows the UK Space Agency to award grants within the scheme and it is the responsibility of the applicant to ensure compliance with the relevant State Aid legislation. Further guidance is available on the BEIS website.

<https://www.gov.uk/government/publications/state-aid-general-block-exemption-regulation>

EC grants awarded on related projects or other public funding are not eligible for inclusion as a PV contribution.

### **Academic Funding**

Academic partners and Government institutions will be funded in all cases at 80% of Full Economic Cost (FEC).

### **Type of Award**

The award will be made on a firm fixed price basis.

## **E. Intellectual Property**

The research undertaken will need to further the particular field of science for the good of the UK as a whole. There will therefore be no defined service provided to the UK Space Agency. One of the conditions attached to the funding will be to provide the UK Space Agency with a final report to show what has been achieved with the funds provided and how the results have been disseminated.

The UK Space Agency does not normally make a claim to the intellectual property arising from the research it supports and, unless there is insufficient assurance at the outset that it would be exploited for the greater good, the intellectual property arising from CREST projects will be vested initially in the applicants organisation(s) who may choose to retain these rights or assign them to a third party under an exploitation agreement.

## **F. Assessment**

Proposals will be assessed on the basis of their technical excellence and alignment with programme objectives by suitably qualified expert peer reviewers from academia, government and industry. Overseas peer reviewers may be used, as well as those based in the UK. Proposals may be assessed by both individual referees, who will provide a confidential report, and by peer review panels. For independent referees and panel members –UKSA confidentiality rules will apply. They will be assessed against specific scheme selection criteria, which are likely to include:

- Scientific and technical excellence
- relevance to programme objectives
- novelty, timeliness, promise and feasibility
- management and planning
- cost effectiveness

Papers to referees and panel members are marked *In Confidence*, with the intention of ensuring that the contents of the proposal are not made more widely known than is necessary for proper assessment.

Referees and panel members are required to disclose conflicts of interest, personal or institutional, which relate to a proposal they have been asked to assess.

Applicants are invited, in the proposal form, to nominate one referee. If there are particular individuals you think should not be approached as referees, you should indicate this, with the reasons, in a covering letter.

Peer reviewers will make recommendations to UK Space Agency. The final decision on whether the proposed project will be funded rests with the Agency.

## **G. Data Protection Act 1998 / Freedom of Information Act 2000**

The UK Space Agency will use information provided on the proposal form in processing the proposal and any agreements subsequently entered into, including payments, maintenance and review processes. This includes:

- Registration of proposals
- Operation of UK Space Agency
- The acquisition of UK and possibly international referee comments on the proposal or preparation of material for use by peer review panels.
- Statistical analysis to inform the evaluation of the quality of the research undertaken and to study demographic trends.
- Policy and strategy studies.

To meet UK Space Agency's public accountability and information dissemination obligations, details of funded projects may also be made publicly available on the Agency's external website and other publicly available databases, and in reports and/or paper documents.

The following information contained in funded research proposals may routinely be made publicly available.

- Name of the host organisation
- Details of applicants (title, forenames, initials, surname, organisations and department)
- Name(s) of project partner organisations
- Project title
- Summary of the proposal
- Value and duration of proposal (and any subsequent agreement)
- Details of peer review bodies involved in the awarding decision.

This information will not be published for unsuccessful applicants.

Applicants should ensure that, where necessary, the title, summary and objectives of the proposed research are worded in a way that protects commercially confidential or sensitive

information. Applicants should obtain the necessary agreements from any collaborators with a commercial interest in the proposal for the inclusion of their material. Where information is “commercial-in-confidence”, it should be clearly identified as such and submitted as a separate attachment to the proposal form and the Case for Support.

## **H. Project Monitoring and Reporting**

Following an award and completion of contractual formalities, the UK Space Agency will assign a Programme Manager to the project. The Programme Manager will oversee the projects with the following methodology:

- The Programme Manager will initiate each project, by preference at a face-to-face meeting at the lead contractor’s site. If a timely face-to-face meeting cannot be arranged, the kick off meeting may take place through a telephone conference. AT this meeting the review plan will be agreed.
- The lead contractor’s project manager will report on progress prior to submitting a milestone payment invoice. Depending on the size of the project a mid-term review held at an appropriate site.
- At the end of the project, a final report will be produced (including an IP free Executive Summary) and there will be a formal project final review.

## **I. Further Information**

For further information, please contact:

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