

UK Space Agency



**CREST-3 Announcement of Opportunity**  
**Collaborative Research in Exploration Systems and Technology**  
**Closing Date: 28<sup>th</sup> April 2015** (Outline Proposals)

CREST-3 is open to HEIs, other research organisations and industry however preference will be given to joint industry-academia proposals. The main objective is to position the UK community to secure the maximum scientific and technological return goals from future planetary exploration projects and programmes. The potential budget will fall over two financial years depending upon the size and quality of proposals.

**How to Apply**

All parties intending to submit a proposal should first complete an outline proposal form available on the UK Space Agency website, which must be submitted to [Charlotte.blakekerry@ukspaceagency.bis.gsi.gov.uk](mailto:Charlotte.blakekerry@ukspaceagency.bis.gsi.gov.uk) no later than 16:00 28<sup>th</sup> April 2015.

Proposals must be very clear about any funding already received or applied for from the European Space Agency, demonstrating that the proposal is for distinct but complementary work. Industrial companies will be expected to provide a contribution in line with state aid rules and should state in the outline proposal which aid intensity category the proposal falls within. (See Annexe A: State Aid Rules).

Industrial applicants must also fill in a Prequalification Questionnaire, unless one has been submitted to the UK Space Agency or STFC in the last 12 months. Short listed applications will be asked to submit a full proposal. Further details and guidance notes will be made available on the web page below in due course.

**CREST-3 Priorities**

There are three priority areas for CREST-3:

1. Sample Integrity;
2. Technology required for sample return missions
3. Activities that enhance the exploration facilities at the ESA ECSAT at Harwell.

**Sample Integrity**

Research into maintaining sample integrity from collection to analysis – whether this is in-situ or on Earth. An example would be the investigation of materials used in the sample handling chain, identifying potential contaminants and means by which this can be avoided, either through the use of alternative materials or coatings.

**Activities that enhance the exploration facilities at the ESA ECSAT at Harwell**

HRAF is a facility funded by the European Space Agency to provide advanced capabilities to support the development and testing of complex autonomous systems for the exploration of our Solar System. The facility has three elements; a flexible simulation environment allowing models and real hardware to be combined and compared in a plug and play mode, a service to run field trials and a data archive of the results acquired. HRAF is implemented incrementally and therefore activities supporting the development of a new group of HRAF capabilities would be prioritised.

**CREST-3 State Aid Summary**

**R&D project aid:** The framework allows state aid for the following levels of R&D:

**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.

<b>Aid Intensities</b>	<b>Small Enterprise</b>	<b>Medium Enterprise</b>	<b>Large Enterprise</b>
<b>Fundamental research</b>	100%	100%	100%
<b>Industrial research</b>	70%	60%	50%
<b>Industrial research projects involving collaborations* or where the results will be disseminated</b>	80%	75%	65%
<b>Experimental development</b>	45%	35%	25%
<b>Experimental development projects involving collaborations*</b>	60%	50%	40%
<b>Feasibility studies</b>	70%	60%	50%

*\*collaborations between businesses and research organisations, or business to business collaborations which are cross border or involve at least one SME, provided that no one business partner carries more than 70% of the project costs.*

**UK Space Agency Contact Point**

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