

Announcement of Opportunity

CEOI Programme 2023 to 2025

Sixteenth Call for Earth Observation Instrument Proposals

1 INTRODUCTION

On behalf of the UK Space Agency (UKSA, the Centre for Earth Observation Instrumentation (CEOI) is pleased to announce a 16th Open Call for instrument development proposals aimed at significantly accelerating instrument concepts which are new or currently in development. Resulting projects are expected to begin in late summer early autumn 2023 and must be complete by 31st March 2025. We welcome small Pathfinder and intermediate Fast Track projects, as in previous Calls, as well as large Flagship projects to accelerate instrument concepts. Focus can be scientific, operational and/or commercial. Furthermore, technologies that have applications beyond climate monitoring and the environment (e.g., other civil applications, defence dual use) are also encouraged. As before, the guiding principles for the selection of proposals will be science excellence, societal impact, and/or commercial potential, but will also consider feasibility and affordability.

The CEOI has the objective to realise an excellent, internationally competitive, national Earth observation instrument technology research and development programme. It achieves this by building UK academic and industrial capability in EO, and by funding the development of advanced EO instrumentation through a series of themed and open calls.

Brief details of previous CEOI funded projects may be found on the CEOI website (ceoi.ac.uk).

The UK Space Agency has awarded the management contract to the CEOI, which is a partnership of Airbus Defence and Space Ltd, QinetiQ plc, the University of Leicester and STFC Rutherford Appleton Laboratory.

1.1 Background

UK Government has been working with the EO sector to produce national Strategic Priorities, which will be published in due course. See: <https://www.gov.uk/government/collections/earth-observation-eo>. For the 16th call, there has been a significant uplift of funding from government in the period to end Q1 2025, making a total of £15 million available for this Call.

NB: Bidders should be aware of three significant changes for this Announcement:

- The subsidy control regulations have changed¹ since our last call and are now defined by the Subsidy Control Act 2022, which is now in force. This Call must therefore comply with the Act. A full guidance document was published 30th June 2023 [RD3] and is

¹ Due to timing constraints on the Call, we must use the Streamlined Subsidy Scheme for Research, Development and Innovation [RD 4, 5]. UKSA may decide in due course to negotiate a subsidy control scheme specific to space R&D, but this must follow due process and will not be ready for this call.

supported by further clarification documents [RD4] and [RD5]. While intervention rates are similar to the past rates (but not the same), there are also restrictions on the amount of subsidy that can be given within a 3-year window. This only affects industrial and commercial bidders. See section 15 of this Announcement of Opportunity and [RD 3], [RD 4], and [RD 5] for further details.

- We will no longer be awarding contracts for our projects. The awards will now be made as grants. However, we will continue to manage the projects in a similar way with milestones and progress reviews. Accompanying this AOO are Cabinet Office Model Grant Funding Agreements that will be used as the basis of the funding agreement between CEOI and successful bidder.
- We encourage bids under Minimal Financial Assistance (MFA) regulations in appropriate cases.

1.2 Reference Documents

The following documents contain information that is relevant to this Call:

- [RD1] National Space Strategy:
<https://www.gov.uk/government/publications/national-space-strategy>
- [RD2] Companies House accounts guidance
<https://www.gov.uk/government/publications/life-of-a-company-annual-requirements>
- [RD3] Subsidy Control Act 2022: Statutory Guidance for the United Kingdom Subsidy Control Regime, 30th June 2023:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1163028/subsidy-control-statutory-guidance.pdf
- [RD4] Subsidy Control Act 2022: Research, Development and Innovation Streamlined Subsidy Scheme:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128056/research-development-innovation-streamlined-route.pdf
- [RD5] Subsidy Control Act 2022: Research, Development and Innovation Streamlined Route Guidance:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128060/research-development-innovation-streamlined-route-guidance.pdf
- [RD6] UK EO Technology Strategy:
<https://www.gov.uk/government/publications/uk-earth-observation-technology-strategy>
- [RD7] UKRI T&Cs and Guidance for Full Economic Costs (FEC) for academic Partners –
<https://www.ukri.org/wp-content/uploads/2020/10/UKRI-291020-guidance-to-fEC-grant-terms-and-conditions.pdf>
- [RD8] NERC Research Grants and Fellowships Handbook, Edition Oct 2021 - 2.0
<https://www.ukri.org/publications/nerc-research-grants-and-fellowships-handbook-guidance-for-applicants/>

2 16th Call Description

The total budget available for this Call will be in the order of £15.0M, with additional funding required from industrial bidders. The Call will accept proposals against these themes:

Theme	Funding and Duration	Eligible Activities
New and innovative ideas for EO technology development	Pathfinder grants of up to £75k, expected to be up to 6 months duration. Fast Track grants of up to £250k, expected to be up to 9 months duration;	Feasibility studies Industrial research Experimental development
Flagship proposals for higher TRL activities.	Flagship grants from £500k to £3M are expected but must be constructed to complete by 31 st March 2025.	Industrial research Experimental development

The following funding categories defined in the Subsidy Control Guidance [RD3, 5] are also eligible for the Call:

- Minimal Financial Assistance (MFA) (This legislation replaces the previous UK Special Drawing Rights and de minimis arrangements of the EU). More information is available from [RD3] Chapter 7. Note that anyone using this mechanism will need to conform fully with the reporting and notification processes for this category.

We welcome Pathfinder and FastTrack proposals as normal. For Flagship proposals, given the diverse activities identified in the EOMCR responses needed to bring a mission concept and its payload closer to the point where it could be built for spaceflight, we are broadening the range of activities in scope for Flagship projects as follows:

- *Subsystem TRL raising,*
- *Elegant breadboard development,*
- *Environmental testing, qualification, and access to facilities,*
- *Flight SWAP conformance,*
- *Business case development,*
- *Customer engagement,*
- *Selected studies,*
- *Instrument end-to-end software simulation,*
- *New Facilities (related to the mission concept under consideration),*
- *Field trials,*
- *Airborne demonstration - major campaign, data collection trials*
- *Cost model development for each step to spaceflight*
- *Roadmap to flight*

Note that we are unable to support funding for launch, funding for repeat build to grow constellations, or funding for full mission platform AIT.

The availability of any major funding after Q1 2025 is dependent upon the government spending review, and projects will need to demonstrate strong progress and impact in the meantime for

UKSA to build their business plan for submission to CSR. Project progress and impact will be evaluated by the UKSA's Monitoring and Evaluation contractor with this aim in mind. The Call is released on Wednesday 2nd August 2023 with a closing date of **Monday 18th September 2023 at noon.**

Successful proposals will identify the timeliness of the development and the potential to generate scientific, societal and/or commercial benefit with a substantial return on investment. They will identify implementation opportunities through a CubeSat, in-orbit demonstration, or more ambitious space mission, where targeted investment now will significantly improve the likelihood of adoption by a mission(s). Preference will be given to proposals that demonstrate an urgent need for funding, justified, for example, by an identified near-term space mission opportunity.

Proposals will need to be aligned to the National Space Strategy [RD1], released in September 2021, and the UK EO Technology Strategy [RD6], which was updated by CEOI on behalf of the UK Space Agency in October 2019.

The CEOI Call is open to industry, HEIs and other research organisations based in the UK. Additional funding will be required from industrial bidders as defined by the Subsidy Control procedures. See section 15. Eligible categories are limited to Feasibility Studies, Industrial Research and Experimental Development with and without collaboration. Proposals for work categorised as Fundamental Research will not be considered. Academic bidders will be funded to 80% FEC. Note that other government and/or institutional funded programmes cannot be used as the matching financial contribution to the CEOI project.

Of particular importance in the evaluation of proposals will be the track record of the applicants to manage projects successfully and their plans to ensure that the project will complete in line with the proposed timescale. Proposals from collaborative teams are encouraged and the CEOI welcomes combined industrial/academic teams (any organisation type can lead, but for Flagships, consortia shall deploy a professional project manager to oversee project delivery, either from within the organisation, or from outside.). We will also welcome bids from teams containing new entrants to the space technology field, provided this is justified in the bid, and risks are quantified. Section 15 Table 2 (and accompanying note) define eligible collaborations and the increased intervention rates available for collaborative activities. We will consider proposals for projects from non-collaborative single bidders, either academia or industry, if there is strong justification and funding is available.

We will also consider collaborative proposals that form part of a larger activity funded by one or more national or international organisations, provided that the proposed work falls fully within national programme objectives. This includes bilateral mission concepts in which the UK has a significant fraction of the noble work, and that overseas collaborators are providing their own funding. The CEOI proposed activity must form a self-contained programme of work that minimises dependencies on other programmes, with risks identified and mitigating action proposed.

These mission development projects should set out a clear and costed roadmap to flight. Funding options and/or arrangements for a future mission build, test, launch and operations should be described clearly, indicating status of any negotiations and credibility.

The CEOI will only award grants to proposals judged to be of sufficient quality. The CEOI reserves the right to re-issue the Call in a revised form if all allocated funds are not utilised.

We welcome enquiries from potential bidders for clarification of any aspect of the Call (See sections 3 and 11). Any significant clarifications or corrections arising will be published on the CEOI website.

3 BIDDERS' BRIEFING

Virtual Briefing for Potential Bidders

There will be a briefing by virtual meeting from **10:00 to 12:00 on 15th August 2023** to provide more information about the objectives of the call and provide an opportunity to ask general questions. Although attendance is optional, you are encouraged to join this meeting. All answers will be made publicly available on the CEOI website.

If you wish to participate in the Bidders Briefing, please email a request to CEOIAdmin@le.ac.uk the CEOI Technology Call Administrator by **10th August 2023**.

4 NOTIFICATION OF INTENTION TO BID

Applicants are required to notify CEOI of their intention to bid by email to the CEOI Call Administrator CEOIAdmin@le.ac.uk using the pro-forma at Section 12, by **25th August 2023 at noon**. The purpose of this is to gauge the size of the response and to inform the selection of reviewers. The notification and information therein will be held in confidence as described in Section 9. Note that failure to submit the intention to bid, does not exclude you from bidding.

Note that if you are unable to bid due to for example: lack of resource, lack of facilities, or lack of access to matched funding, please submit the form and tell us the reasons that you are not bidding into this round.

5 GUIDELINES FOR PREPARING AN APPLICATION

Applications should take the form of a proposal in single-spaced typescript, minimum font size 12-point Times New Roman, minimum 1.5 cm margins all round, including diagrams and tables.

All Proposal Sections defined in the table and/or described in this section of the Announcement of Opportunity must be supplied in the proposal, unless indicated otherwise. Proposals that do not include all the Sections, unless explicitly indicated in Table 1 as optional, may be rejected. Should any part of the application overrun the specified page limit, the Assessment Panel will only consider material up to the designated page limit, in the correct format. No additional annexes or appendices will be considered. Bidders should note that neither the Agency, University of Leicester nor CEOI will not refund any costs associated with preparing proposals responding to this CEOI Call.

Section	Further Information	Proposal Maximum Page Count			Marks
		Pathfinder	Fast Track	Flagship	
Cover letter	See §5.1	2 pages			Mandatory
Application Form	See §13	1 page			Mandatory
Project Summary, + picture or diagram	See §5.2	1 page			Mandatory
Technical Case	See §5.3	4 pages	8 pages	14pages	30%
Exploitation Plan & Enhancement of National Capability	See §5.4	1 page	2 pages	6 pages	20%
Project Team	See §5.5	1 page	2 pages	2 pages	10%
<u>Annex A1</u> : Organisational background and track record		2 pages per organisation			
<u>Annex A2</u> :CVs		1 page each			
Project Management	See §5.6	2 pages	3 pages	7 pages	20%
<u>Annex B1</u> : Gantt Chart (landscape or portrait)	See §5.6	1 page	2 pages	2 pages	
<u>Annex B2</u> : Risk Table	See §14	1 page	1 page	2 pages	
<u>Annex B3</u> : Work Package Descriptions	CEOI template	1 page each			
Project Finances	See §5.7	4 pages			10%
CEOI Cost Schedule (Excel)	CEOI template	Separate Excel file; Summary sheet plus 1 sheet per partner			
Collaboration	See §5.8	0.5 page			5%
Grant Conformance	See §5.9, §8, §15.4, Table 4	+ Table as needed w.r.t. past subsidies			5%
Eligibility - (Proposal Annex C1)	See §8	2 page			
Letters of Support (Proposal Annex D)	See §5.10	1 page each			Optional

Table 1. Application Checklist

5.1 The Covering Letter

To ensure ease and speed of awarding the Grant following selection, the bids must include a covering letter containing:

1. A firm fixed price for the work to be carried out and committing offer to University of Leicester, who administer the grants on behalf of the Agency and CEOI.
2. A statement of acceptance of the terms of the Grant Funding Agreement (GFA) available on the CEOI website.
3. Reference (Industry only): The name of at least one customer contact in the UK who may be approached, with whom you have recently undertaken similar work. The CEOI reserves the right to seek a customer reference for consideration by the Review Panel.
4. The completed Application Form.

5.2 The Project Summary

The project summary should provide a brief overall description of the project in a form suitable for publication, if the project is funded (i.e., free of any commercially sensitive or IP material).

It should include a short plain-language description of the project, its objectives, and benefits to describe its purpose in a way that can be widely understood by non-experts. A relevant image, diagram or other graphic should be included, if possible, to enhance the description.

The project summary, plain-language description and graphic image may be included in a press release and published on the CEOI and the Agency websites when any award is made.

5.3 Technical Case (30% of assessment mark)

This section should justify the need for this technology development and describe the work to be undertaken. It should also provide an assessment of technical feasibility and innovation in the project and explain how the development fits into the wider technology development roadmap.

The section should include:

- An overview of the programme, including anticipated route to spaceflight opportunity(ies),
- An exposition of the science, commercial and/or operational need and drivers, including the relationship to relevant national space and EO strategies.
- A description of the technical work and the main activities to be undertaken.
- An assessment of the technical feasibility of the proposed work, identifying the technical risk and achievability vs. the novel and innovative aspects of the project.
- A description of any system-level benefits expected (e.g., cost, mass, size, resource requirement).
- A technology roadmap showing heritage, future evolution and the start and end Technology Readiness Level (TRL) of the proposed work.

For Flagship bids, you should include:

- A description of how the work supports the advancement of the mission towards flight readiness.
- Expected outcomes of all planned steps.
- A consideration of any fallback scenarios which would address availability or technical barriers which may be encountered.

- A roadmap to spaceflight, with expected stages and costs clearly articulated. This can be expanded upon in the next section.

5.4 Exploitation Plan and Enhancement of National Capability (20% of assessment mark)

This section should provide an exploitation plan detailing how the project will lead to an enhancement of national capability and catalyse investment. It should identify all potential space flight opportunities and the key steps required, beyond the requested CEOI funding, to successfully exploit the project outcomes. It should describe how the project will result in enhancement(s) to national capability in EO technologies, with a particular focus on climate, environmental, dual use, and societal applications.

The section should include:

- A description of the main exploitation opportunities targeted, together with an assessment of the potential and accessible market(s) (this may include civil and defence dual use), and identification of key customers in the global marketplace.
- A description of the main exploitable products and/or outputs from the project, including identification of the potential scientific and/or commercial breakthroughs, and future steps that will be taken to improve the probability of successful use of the results of the CEOI activities.
- A description of how the proposed work takes advantage of UK strengths and/or unique capabilities, and where and how the enhanced development in national capability will occur.
- An assessment of the national and international competition, showing the benefits this technology offers over alternatives, and the timeliness of the proposed work in relation to external opportunities and gaining a competitive advantage.
- The potential scientific or commercial return and the overall expected impact on UK national economic growth, job creation and export opportunities.
- An explanation of how the proposed project will ultimately address the needs of users of resulting downstream services and data.

For projects targeting future operational or scientific EO missions, such mission(s) should be clearly identified, the possible route to achieving flight should be described, together with how the benefits for any related opportunities will be achieved. In the case of projects targeting commercial opportunities, the proposal should include a brief business plan.

For Flagship proposals, applicants should provide evidence of the total revenue and capital investment at stake because of CEOI funding. This could include:

- **How CEOI funding leverages other investment** – what additional investment and contracts does the Grant funding directly unlock? This can be directly evidenced by organisations through match-funding agreements and letters of intent or other evidence from investors and customers.
- **Prospects for follow-on fundraising and commercial revenue** – what investment and future contracts will ultimately be realised by the Grant funding and when? This will require market and investment projections based on an appreciation of market trends and the organisation's need for capital.
- **The strategic value of the technology being developed** – is the investment in a potentially game-changing space technology, or one with wide application outside the

space sector? What is the risk, should the project not go ahead, that important technology or concepts would be developed by an overseas competitor?

5.5 Project Team (10% of assessment mark)

This section should describe the team that will be undertaking the work, highlighting the strengths of the project lead organisation and the capability that is offered by each Partner. Key individuals, their project roles and technical/management contributions should be identified.

The section should include:

- A description of the overall team structure, including justification for inclusion of each Partner organisation and justification if there are no partners.
- A brief summary description of each of the organisations involved with the project.
- A list of the key individuals, their position, technical/management responsibility in the project team, effort required and confirmation of their availability for the required work.
- The track record of the applicants in managing similar projects successfully.

For each of the Partners, background information about the company/organisation should be provided in Annex A1 of the proposal, including diversity and inclusion policies. CVs of key staff should be provided in Annex A2 of the proposal.

5.6 Project management (20% of assessment mark)

This section should provide information about the approach to the management of the project, including planning, the actions that will be taken to maintain the schedule, and the assessment and control of risk. (“Risk” is defined here as the probability that the project will meet its stated technology and business objectives).

This section should include:

- A description of how the project will be managed and the management measures proposed to ensure on-time completion.
- A project plan, including a summary of the work, work break down structure and a project schedule.
- A table of outputs from each work package, clearly identifying their scope and the delivery schedule.
- A clear identification of which institutions and individuals will be performing which functions, the lead organisation for each task and the resources required for each task.
- An assessment of the major project technical, schedule and commercial risks and the approach to managing, tracking and mitigation of these risks.
- For Flagships, consortia shall deploy a professionally qualified project manager, supported by CV, to oversee project delivery, either from within the organisation, or from outside.
- In addition, for this Call we will accept proposals that mix project categories as defined by the Subsidy Control Act 2022. However, you must clearly define the split such that work packages reside in one category only, and do not straddle categories. [RD 5]

The following information should be included as Annexes to the proposal:

- Gantt chart as Annex B1, of the proposal showing the scheduling of main work packages, their inter-dependencies and major project events (progress review meetings, technology development milestones). No template is provided for this.
- Risk Table as Annex B2 of the proposal using the CEOI template provided in Section 14. Where possible, the impact of a risk occurring should be expressed in terms of potential schedule slippage.
- Work package descriptions (WPD) as Annex B3 of the proposal (The WPDs should use the CEOI template or equivalent, with a one-page limit on each WPD).

For FastTrack and Flagship projects, if a project is successful, we will expect project teams to generate a full Project Management Plan (PMP) including a comprehensive Risk Management Plan at the project Kick-Off meeting. CEOI guidelines for the PMP are available on request from CEOI. We do not need the full PMP at proposal stage.

Bidders should assume a starting date early October 2023 for the project schedule and finance spreadsheets.

5.7 Project Finances (10% of assessment mark)

This section will describe the project finances, summarising the cost of each work package, the major items of expenditure with justification and propose a milestone payment plan. It will allow an assessment of the value for money of the project and whether this is a good investment for the Agency.

This section should include:

- A financial summary showing the cost of each work package and the major items of expenditure by each Partner (staff, travel, external contracts, procurements etc.).
- A description and justification of the resources requested, including travel plans and other expenditure.
- Any equipment proposed for purchase must be listed separately as required by State Subsidy guidelines.
- Table of proposed milestone payments with description, related project outputs and/or significant events by which milestone achievement may be measured, amount and dates. See Section 6.1 for further information.

All applications are required to provide a Cost Schedule as a separate Excel file using the CEOI supplied Excel template. The CEOI Excel Finance Table must be completed, using one worksheet (sheets P1-P8 in the Excel spreadsheet) for each Partner². Any support/consultancy/service to be procured should be itemised in the 'Direct Costs' section of the relevant Partner sheet. The template Excel spreadsheet is available on the CEOI website.

² 'Partners' are defined as entities/organisations which share and/or retain the Intellectual Property generated by the project. Industrial Partners will also contribute to the project costs in line with the Subsidy Control procedures. This is in contrast to 'Suppliers' and 'consultants', who supply goods and/or services to one of the Partners, and may incur VAT to be met from within grant funds.

Note that CEOI Grants arising from this call are intended to fund a specific programme of work and should not be used for the procurement of equipment unless they can be shown to be necessary for a specific project. If you want further advice on large expenditures for equipment or other purposes, then please contact the CEOI.

5.8 Collaboration (5% of assessment mark)

This section should describe the collaborative nature of the project, or justification if there are no Partners. The response should include:

- Declaration of the team, listing the academic and industrial partners
- A partner should have a significant role, of at least 10% of the work.
- Justification if there are no partners
- Information on collaboration between partner organisations and exploitation of Intellectual Property Rights.

5.9 Grant conformance (5% of assessment mark)

This section should provide the information required to show that the project finances conform to the UK Subsidy Control regime. The section should include:

- A clear statement of the Subsidy Control Category (see Section 15).
- Inclusion of a prior funding by individual partners in a declaration table using template. See section 15.4, Table 4.
- A table of grant funding requested by each partner in this proposal. See section 15.4, Table 5.
- Level and justification of any industrial or other private investment offered.
- A statement on eligibility of each partner to receive Subsidy funds and the financial viability of all the project Partners. See Section 8 for further information.

Supporting eligibility information should be provided as Annex C1 to the proposal.

5.10 Letters of Support (Optional)

Letters of Support (maximum one page each) may be included if appropriate, to show the interest of external organisations and potential users of downstream services etc., in the proposed development and/or its impact. Note that endorsements in LoS must be credible and may be followed up in the reviews. Bidders should note that including letters of support is not mandatory. Any letters should be included in Annex D1 of the proposal.

6 GRANT CONFORMANCE INFORMATION

The University of Leicester will issue grants on behalf of CEOI.

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

All relevant costs, including any taxes on procurements, must be included within the total amount of the grant application. Note that a direct procurement for services from another

organisation implies that they are not a Partner and may therefore attract VAT which must be borne from within the Grant funds.

Bidders should note that Grants cannot be provided to the project lead or dispersed through the project lead to companies in financial difficulties.

Subsidy Control

This Call falls under the Subsidy Control Act 2022. Before awarding subsidies, the CEOI must ensure that the subsidy scheme meets the terms of the principles set out in the Act as described in as explained in [RD3] and [RD5]. This call shall be issued under the Streamlined Subsidy Scheme for Research, Development and Innovation [RD 3, 5].. This Streamlined Scheme is similar to past schemes, but has some significant differences:

- There is a more advantageous intervention rate for Small Enterprises performing Industrial Research.
- There is a cap of £3 million on the amount of subsidy that can be awarded for a given project to a single enterprise within a 3-year window, and this is cumulative.
- Bidders must detail all related funding that has been received by a given project since the start of FY 2021-2022 (i.e., from April 2021), including all UK grants and other subsidies, but excluding international funding from e.g., ESA.
- A declaration of previous subsidy is required from each project partner. See Table 4 and Table 5 in section 15.4.
- Bidders are responsible for ensuring their proposal align to the guidance documents provided under this call and they should read them thoroughly to ensure compliance.

There are several significant changes to the assessment, regulation and award process which are described briefly in Section 15, and in more detail in the Applicable Documents [RD 3] and [RD 5].

6.1 Payment plan

The payment plan should be constructed so that no more than 20% is paid at/soon after kick-off against one or more outputs such as a Project Management Plan, and no less than 20% at the final review acceptance. Other milestone payments should be included, which should reflect major project stages and intermediate outputs.

6.2 Grants to Industry - Funding Contribution

Industry in receipt of a CEOI Grant as Project Lead or as a Partner in the team is required to provide a contribution to eligible project costs in accordance with the Subsidy Control requirements. Note that other funds from public sources are not eligible as a source of these contributions.

Bidders must identify and justify the Subsidy Category type of the work proposed, and this must be consistent with the work programme. Note that [RD5] Chapter 14 provides a clear definition of each Category. Note that the type of activity and company size defines the maximum 'Intervention' rate (and hence the minimum required contribution level) that is permitted for that activity. There are concessions for collaborative activities. See section 15.

Bidders must ensure that they supply the correct information that allows CEOI to award Grants within the scheme and it is the responsibility of the bidder to ensure compliance with the relevant Subsidy Control requirements. Further guidance is available in Section 15 of this AO, and in [RD3], [RD4], and [RD5].

6.3 Academic contribution

Academic Partners will be funded at no more than 80% of Full Economic Cost (FEC). Refer to [RD5] for further information on FEC.

Grant applications for Academic partners should use the same method for calculating eligible costs as is used by the Natural Environment Research Council. This includes the rules regarding equipment purchases and sub-contractors. Bidders with Academic partners should ensure that their financial bid conforms to this approach. The reference document is the most recent published edition of the NERC Research Grants and Fellowships Handbook [RD6].

6.4 Type of Award

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

6.5 Intellectual Property

The IP generated during the project will belong to the originators.

6.6 Grant award Pre-conditions

If the project is selected for grant offer, the following conditions must be met before the CEOI will initiate preparation of the award:

- The company type (SE, ME, LE) and Subsidy Category are correctly defined.
- The source and amount of additional funding from other national funding bodies is fully defined, starting from beginning of FY21-22.
- The financial viability of all members of the project consortium and funding sources are established through a due diligence process.
- The consortium is judged by the UK Space Agency to be eligible to receive a Grant from UK government under HM Treasury regulations and Subsidy Control requirements.

7 PROJECT MONITORING AND REPORTING

Following an award and completion of formalities, the CEOI will assign to the project an experienced coordinator drawn from CEOI partner organisations. The coordinator will oversee the projects with the following methodology:

- The coordinator will initiate the project, by preference at a face-to-face meeting at the lead organisation's site. If a timely face-to-face meeting cannot be arranged, the kick off meeting can take place through a video or telephone conference.
- The lead organisation's project manager will report on progress to the coordinator using the CEOI report template at the end of every month by email. Any issues arising will normally be addressed by the coordinator by telephone or email.
- There shall be a progress review every 3 months, by preference face-to-face, with one of these designated as the mid-term review, held at an appropriate site. Where feasible, the reviews should be synchronised to significant project events and/or delivery of some of the project objectives.

- There will be close attention to progress against the agreed project schedule to ensure timely completion and to the effective application of the risk mitigation process. This is particularly important given the constraints of funding, which must be spent before end Q1 2025.
- During the project, consortia shall report periodically to the nominated UKSA project monitoring and evaluation function, on outcomes attributable to the CEOI project investment. This shall be continued for at least 5 years following project end. Note that consortia that fail to perform this function may be penalised in future rounds. A report proforma will be available at project KO. KPIs will include:
 - TRL status.
 - Training achieved.
 - Publications and presentations.
 - Jobs – creation and stabilisation.
 - Leverage – investment and contracts.
 - The number of ESA mission submissions and success rate with £ of funding secured (ideally including summary details on the mission and instrumentation).
 - Commercial outcomes.
- At the end of the project, a Final Report and Executive Summary both suitable for publication shall be produced. The project final report should contain the above KPIs at project completion, to set a baseline for the post-project reporting.
- The Executive Summary should include a short plain-language description of the project, its objectives, and benefits to describe its purpose in a way that can be widely understood by non-experts. There will be a formal project final review and there may also be a CEOI project final presentation day in which each of the projects will present a summary of work and achievements.

8 ELIGIBILITY

We welcome bids from a variety of organisations including academia, industry and government research institutes based in the UK. The details of some organisations may not be known by the UK Space Agency or the CEOI, especially for newer entrants. Such applicants should provide brief and relevant background information for the organisation, including areas of expertise and contact information including registration and official address.

Only those organisations in the proposed team, which have not previously received a grant from CEOI or the Agency, need provide full information in their bid. Organisations that have previously received a grant should reconfirm their basic company information such as company address, company registration number, and provide a title and date of a relevant previous award. Prior awards related to this current project should be tabulated as instructed at the end of section 15.

Following receipt of bids and before award of any Grant, new entrants may be required to provide additional eligibility details:

- It would normally be expected that 3 years of audited accounts are available for all project Partners. In the absence of 3 years of company accounts the bid response should

provide details of the specific measures that will be taken to protect the UK Space Agency's grant investment.

- 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.
- Micro SMEs and single-person (Sole Trader) companies will need to show robust risk mitigation against single point resource failure and the measures in place to protect the grant investment.

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 the significantly greater 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 Private Venture (PV) / match funding contribution, capability, or 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.

9 CONFIDENTIALITY

The procedure for handling and assessing the bids and notifications will be as follows:

- Bids will be submitted to the University of Leicester administrator who will act on behalf of the CEOI. The administrator will hold all bids in confidence and will not propagate the bids internally in the University or elsewhere.
- Copies of the notifications of intention to bid sheets will be provided to the CEOI Director and to the CEOI Technology Programme Director, who will retain these and handle them as confidential information.
- Electronic copies of the bid documents will be distributed to independent assessment panel members, to the new Director and to the Technology Programme Director. The UK Space Agency confidentiality rules will apply.
- Bids not recommended by the Panel will be destroyed. They will not be visible to the wider Leadership Team or to any others.
- Bids recommended by the Panel will be visible to the CEOI appointed project co-ordinator and to the CEOI Leadership Team.
- Bids selected for funding will remain confidential (i.e., will not be visible to staff of any of the CEOI Partners other than the project co-ordinator and the CEOI Leadership Team).

The CEOI Director, the CEOI Technology Director and the CEOI appointed project co-ordinator will monitor the funded project through regular project reports and reviews. A standard CEOI Non-Disclosure Agreement can be used if required, to cover information exchange between the project participants and CEOI staff at any stage during the bid or project. A copy is available on the CEOI website.

10 TEAMING AGREEMENT

Should an award be made, the consortium will be required to establish a Collaboration / Teaming Agreement between its Partners, prior to the commencement of work. This should establish agreements regarding how the results of the work, including IPR and spinouts, will be exploited by the consortium members. A model agreement is available from the CEOI website.

11 SUBMISSION AND CONTACT INFORMATION

Only the lead institution should apply. Bids should be submitted by **Monday 18th September 2023 at noon**, as follows:

- Electronically in PDF format. **The bid should be contained in single PDF file (apart from the separate Excel format Finance Table).**
- In submitting a proposal, bidders accept that all information supplied as part of the bid will be handled under the procedures defined in Section 9, irrespective of any confidentiality markings.
- If you do not receive an acknowledgement of receipt within 48 hours, please contact CEOIadmin@le.ac.uk.

The electronic submission should be sent by email to the University of Leicester CEOI administrator at CEOIadmin@le.ac.uk

For further information and formal enquiries contact:

Dr Nicolas Leveque	Tel: 01438 773116
CEOI Technical Director	Mob: 07528 984315
Airbus Defence and Space Ltd	Email: nicolas.leveque@airbus.com
Gunnels Wood Road	
Stevenage SG1 2AS	

For a timely response when Dr Leveque is unavailable, contact:

Mr Chris Brownsword	Mob: 07825 762527
CEOI Director	Email: cbrownsword@QinetiQ.com
QinetiQ Building, A8 Room 1004,	
Cody Technology Park,	
Ively Road, Farnborough	
GU14 0LX	

12 Intention to Bid Pro-Forma

This form should be emailed, before the date and time specified in Section 3, to Ms Nicola Oldham at CEOIAdmin@le.ac.uk.

Title of the project	
Lead organisation	
Short description of the project	
Estimated Grant request (ROM value)	
Reasons for not bidding into this Call.	
Project Type	Pathfinder/Fast Track/Flagship (<i>delete as applicable</i>)

13 Application Form

The completed Application Form should be included with the Cover Letter when the full bid is submitted.

Title of Project		
Lead Organisation and Grant Requested for Lead		£
Project Partners and Grant Requested for each Partner		£ £
Address of Lead Organisation including postcode		
Lead Contact – Commercial (Name and e-mail)		
Lead Contact – Technical (Name and e-mail)		
Subsidy Control Category (see Section 15)		
Total Grant Funding Requested (£ and % of Total Project Cost)	£	%
Academic Contribution (£ and % of Total Project Cost)	£	%
PV Contribution (£ and % of Total Project Cost)	£	%
Total Project Cost (£)	£	100%
Proposed start date and duration		
Project Type	Pathfinder/Fast Track/Flagship (<i>delete as applicable</i>)	

14 Risk Table Template

Please use this table in your proposal.

Risk No.	Risk Description	Type	Impact	Potential Schedule impact	Probability	Overall Rating	Month retired	(1) Avoidance Strategy	(2) Mitigation Strategy
	Short description of risk and potential consequences	Technical, Commercial or Managerial	1-5	In months	1-5	L/M/H	mm/yy	Actions to be taken to avoid occurrence and/or minimise impact	Actions to be taken during project if risk arises
R1									

Impact and Probability 1 = Low; 5= High

Overall rating Impact x Probability
 where 1<Low<6; 8<Medium<12; 15<High<25

15 Subsidy Control

15.1 Introduction to Subsidy Control (and State aid where relevant)

UKSA supports UK based businesses to invest in research, development and innovation. The support we provide is consistent with the UK's international obligations and commitments to Subsidy Control. These include:

- [WTO rules](#)
- The Subsidy Control Act 2022
- in certain circumstances (e.g. under the [Northern Ireland Protocol](#)) EU State aid regulations may also be applied
- other bilateral [UK FTAs](#) (Free Trade Agreements) where relevant

15.2 What is a subsidy?

For the purposes of UK international commitments, a subsidy is a measure which:

1. Is given by a public authority. This can be at any level; central, devolved, regional or local government or a public body.
2. Makes a contribution (this could be a financial or an in-kind contribution) to an enterprise, conferring an economic advantage that is not available on market terms. Examples of a contribution are grants, loans at below market rate, or a loan guarantee at below market rate or allowing a company to use publicly owned office space rent-free. An enterprise is anyone who puts goods or services on a market. An enterprise could be a government department or a charity if they are acting commercially.
3. Affects international trade. This can be trade with any World Trade Organisation member or, more specifically, between the UK and a country with whom it has a [Free Trade Agreement](#). For example, if the subsidy is going towards a good which is traded between the UK and the EU this could affect trade between the EU and the UK. It is not necessary to consider whether the subsidy could harm trade, just whether there could be some sort of effect. Subsidies to very local companies or a small tourist attraction are unlikely to be a problem as this is unlikely to affect international trade.

The Subsidy Control Act 2022 is designed to prevent unfair advantages and distortion of trade in the award of subsidies. Information on the principles of awarding subsidies can be found in [RD3]. For the current 16th Call we shall use the Streamlined Scheme for Research, Development and Innovation as defined in [RD5]. It is similar to the previous schemes, and will be largely familiar, but there are significant differences which bidders must take into account.

15.3 Subsidy Control Categories and Intervention Thresholds

The Subsidy Control Act has similar, but different to previous definitions of small and medium enterprises as shown in Table 2. See section 5.10 onwards of [RD 5]. To qualify for any category (SE, ME, or LE), the company must meet at least two of the conditions (staff headcount, Turnover or Balance sheet total) within both the current financial year and the year previous. Anything above the limits for a medium sized company is designated as a large company. This is

a change from the EU definition³. For more information on company sizes, please refer to the Companies Act 2006 guidance.

NB: Under the Act’s Streamlined Subsidy Scheme for Research, Development and Innovation, each Enterprise is restricted to a maximum of £3 million for a particular development project within a 3-year rolling period. In this AO, the relevant window spans FY 21-22 (i.e., April 2021), 22-23, and runs to end of FY 23-24. Note that if the project overruns the 3-year window, the rolling period does not reset until the project completes. See section 6.29 of [RD 5]. This means that each bidding enterprise must declare in their application, all relevant UK subsidies received from any UK Public source must be declared and their cumulative effect calculated. Note that funding from ESA and other international bodies is not counted in the accumulated total. Note that the subsidy accrual only applies to industrial/commercial partners.

Table 2 summarises the maximum intervention thresholds and allowable level of support under this UKSA grant call for Financial Year 2023/2024. Note that other sources of public funding are not eligible as a Private Venture (PV) / match funding contribution. In all cases, the subsidy will be capped at £3 million, or capped by the limit indicated by the subsidy percentage, whichever is the lower.

See [RD 5] section 13 and 14 for specific definitions and regulations governing of Feasibility Studies, Industrial Research and Experimental Development. A definition of eligible costs may be found in section 14.6. Note that costs for equipment and facilities for Industrial Research and Experimental Development are only eligible for the period of, and the role played in, the project see [RD 5] section 14.8 onwards.

If a Feasibility Study is undertaken with support from a subsidy, and as a result of the study, a project is started under Industrial Research or Experimental Development, the study is not considered as part of that project for subsidy accrual purposes. See [RD5], Chapter 13.

Table 2: Subsidy Control Act definition of Small and Medium sized enterprises

Qualifying Criteria	Small enterprises	Medium-sized enterprises
Turnover	Not more that £10.2 million	Not more than £36 million
Balance Sheet Total	Not more than £5.1 million	Not more than £18 million
Number of Employees	Not more than 50	Not more than 250

³ If an application engages the Northern Ireland Protocol then the applicant should revert to the EU definition of SMEs, and EU intervention rates will apply.

Table 3. Subsidy Control Act categories and maximum allowable intervention rates

Subsidy Category	Allowable Level of Support		
	SE	ME	LE
Feasibility study	70%	60%	50%
Industrial research	70%	60%	50%
Industrial research projects involving collaboration/ dissemination*	85%	75%	65%
Experimental development	45%	35 %	25%
Experimental development projects involving collaboration/dissemination*	60%	50%	40%

**NOTE: The uplift for collaborations is valid if at least one partner is an SME, and /or a research and knowledge dissemination organisation See [RD5] section 14.21. Collaborations between businesses and research organisations where the collaborating SME or research organisation bears at least 10% of the costs. A valid collaboration with a research organisation implies their right to publish their own research. Procurement/supplier relationships do not qualify.*

15.4 Subsidy Control: Partner Past Subsidies Awarded and Cumulation

You must use the template below (Table 4) to declare the subsidies the consortium partners have received in the current 3-year period. Please provide a table for each partner. Note that the grants must relate to single coherent project line, avoiding ambiguity.

(Table 4: Past subsidies awarded to industrial/commercial project partners for the current project

Project Title					
Partner	Funding source	Date of award DD/MM/YYYY	Duration	Grant Value	Requested in this proposal
Grant	(NSTP, CEOI, NSIP etc.)			£	
Grant				£	
...				£	
Partner totals				£	

Please provide details of the grant sum requested by each partner using the template in Table 5.

Table 5: Grant request in this proposal by partner.

Partner	Requested in this proposal
Partner 1	
Partner 2	

...	
Totals	£