

Request for Information

Request for Information (RFI) on behalf of UK Space Agency
Subject: Earth Observation Instrumentation Programme
Sourcing Reference Number: UKSAC22_0055



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Section 1 – About the Contracting Authority

UK Space Agency (UKSA)

Founded in 2010, the UK Space Agency delivers key elements of the Government's National Space Strategy.

We use our expertise to:

- catalyse investment, supporting projects that drive investment and generate contracts for the UK space sector
- deliver space capabilities and missions that meet public needs and advance our understanding of the Universe
- champion the power of space to inspire people and offer greener, smarter solutions for business, and to support a sustainable future

Together, this enables us to harness the power of space to benefit our people and our planet.

Our professional staff include scientists, engineers, commercial experts, project managers and policy officials.

We have a track record of delivery: our programmes have propelled British technology across the Solar System and realised world-first innovations in spacecraft design and satellite applications.

We have a powerful global voice, partnering with institutions across the world, including the European Space Agency.

We support a thriving space sector, which currently generates an income of £16.4 billion each year and employs 45,000 people across the country.

Investment, including private and public, from the UK and overseas, will enable the space sector to deliver important research, develop new technologies and market applications, and keep pace with other nations.

www.BEIS.gov.uk/ukspaceagency

Section 2 – Working with the Contracting Authority.

Section 3 – Contact details

3.1	Contracting Authority Name and Address	UK Space Agency, Polaris House, Swindon, SN2 1SZ
3.2	Buyer name	John West
3.3	Buyer Contact details	Commercial@UKSpaceAgency.gov.uk
3.4	Estimated value of the Opportunity	£1m-£3m
3.5	Process for the submission of Request for Information	All correspondence shall be submitted to commercial@ukspaceagency.gov.uk

Section 3 - Timescales

3.6	Date of posting of Request for Information on to Contracts Finder.	05/09/2022
3.7	Date RFI available to Bidders on Contracts Finder	05/09/2022
3.8	Bidder conference	07/09/2022
3.12	Closing date and time for Industry to submit their response ('the deadline ').	19/09/2022 14:00

Section 3 – Draft Specification and about this procurement

Title of Request:	Earth Observation Instrumentation Programme (EOIP)
Duration of Engagement:	Twenty seven and a half (27.5) months with the option of yearly extensions, up to a maximum of three (3) additional years.
Required Commencement Date:	17 th December 2022

1. Introduction

Earth observation (EO) science is fundamental to humanity's understanding of our planet, its climate and natural processes. EO capabilities enable a wide range of public services, including meteorology, Earth imagery, climate monitoring, environmental management & agriculture, urban planning, and intelligence, surveillance & reconnaissance. These services are all underpinned by the instruments and technologies which enable satellites to gather data, which can take decades to design, build and mature.

In recognition of its strategic importance, Earth observation has been named in the 2022-2025 UKSA Corporate Plan as one of the UKSA's eight Priorities. The 2021 National Space Strategy pledges that we 'will strive to remain at the forefront of Earth observation technology and know-how'.

To build UK capability and develop the UK industrial/academic skill base, the UK Space Agency established the Earth Observation Instrumentation Programme (EOIP) in 2007. The programme has sought to develop UK capability in EO instrumentation by: providing and overseeing the delivery of match-funded grants; providing strategic, business and technical advice to project teams, the wider EO sector and UK government; and promoting close working relationships and knowledge transfer between the academic community and industry.

Since its inception, the programme has been delivered by the Centre for Earth Observation Instrumentation (CEOI), a consortium of EO experts consisting of Airbus DS, QinetiQ, University of Leicester and STFC/Rutherford Appleton Laboratory. The CEOI has run 14 funding calls to date, and has organised numerous events and workshops through a community building programme.

An evaluation¹ of the latest phase of the programme concluded in May 2022 and helped to successfully make the case for further programme funding.

¹ *Evaluation of the Centre for Earth Observation Instrumentation Programme*, WECD (2022)

2. Aims & Objectives

In line with our obligations to ensure value for money for the taxpayer, we are now looking to undertake a competitive retendering process to deliver the next phase of the programme. The next contract will provide continuity of the programme, whilst also providing an option to scale up the programme, should further funding become available as a result of ongoing National Space Strategy implementation planning.

The Requirement will entail assuming responsibility for a small number of ongoing projects, in addition to managing new funding calls, organising events, and providing expert advice to the UK Space Agency through the Added Value programme. Programme objectives are as follows:

Stimulate the development of satellite Earth Observation instrumentation (Primary objective) for the duration of the current Spending Review period (until March 2025), through provision of grant funding alongside expert technical, PPM, commercial and business development advice, to fuel a pipeline of cutting-edge UK-based EO capabilities.

Prepare the UK EO community to win global market opportunities, including those resulting from CMin22 and from the implementation of the National Space Strategy over the current Spending Review period (until March 2025).

Strengthen ties and increase knowledge exchange between the academic and industrial community, via incentivising collaboration and through hosting a series of community-building events in 2022, 2023 and 2024.

Promote the capabilities, technologies, and achievements of the UK EO sector, by running two technology showcase events between January 2023 and March 2025, and through representing the UK EO sector in technical discussions in international settings if & when directed by the UKSA, including opportunities resulting from CMin22 and from the implementation of the National Space Strategy over the current Spending Review period (until March 2025).

Provide neutral, expert advice on Earth Observation technologies and related UK capabilities to the UK Space Agency, to support planning for the implementation of the National Space Strategy over the current Spending Review period (until March 2025) and beyond, including potentially running a new EO Mission Capability Review, and in planning for CMin 2025.

The primary aim is to maintain and grow UK capability in Earth Observation instrumentation, strengthening the position of UK-led teams and promoting close working relationships and knowledge transfer between the academic community and industry. Applicants will have to demonstrate a strong knowledge of the domestic and international Earth Observation instrumentation sectors, with an ability to position the UK to exploit opportunities at European and international levels. The supplier will need to set out how they will interact and respond to ESA's Earth Observation Programme, and other technology development programmes.

The supplier will conduct themed and open calls under the guidance and direction of UKSA, or its nominated steering board, including letting, managing and delivering these calls on behalf of the UKSA. The UKSA has a requirement for a supplier to design and deliver a process on its behalf,

which can be seen by the wider community as suitably independent and working to develop world-class EO instruments.

The process will be required to evaluate technology development in order to recommend and deliver funding solutions which will fill key instrument technology or capability gaps, in order to maximise mission exploitation opportunities and deliver on any emerging strategic priorities. The supplier will then award UKSA funds in a cost effective manner, managing them and delivering value for money in accordance with HMT Green Book Managing Public Money principles to an agreed timeframe.

This process must engage with as wide a cross section of the EO community as possible in order to develop, forge and strengthen the links between the academic community, SMEs and Industry. The supplier must set out how they would enable this to happen and the benefits they would bring to the process.

The UK Earth observation community is diverse, vibrant and works across a wide range of technologies targeted at a wide range of opportunities. The supplier must be able to encourage and support collaboration with and across all sectors. This must include understanding the priorities and pressures affecting new space SME companies in order to nurture and sustain growth and healthy competition within the sector.

A regular and formal feedback mechanism into the UK Space Agency will be necessary to ensure that the public organisations who need to know the UK portfolio of technology and export markets and opportunities are given ample opportunity to do so.

The UKSA and CEOI intend to launch another call for proposals in October 2022, inviting proposals which the UKSA will retain until the EOIP management contract tender process has concluded. Once the new management contract begins, the proposals will be handed over for the supplier to begin the review process, before making recommendations to the Agency on which to fund, and then awarding contracts once the final decision has been made.

3. Background to the Requirement

Since 2007, the EOIP has operated via services contracts with the CEOI consortium of industry suppliers and universities. Building on previous success, the programme has been renewed several times, most recently in 2016, and in recent years the UKSA has allocated approximately £2M per annum for the technology funding programme. Since inception the programme has placed approximately £13M worth of Earth Observation instrument development grants, which has funded 66 different projects across a wide range of EO technologies, with most projects being delivered by academic/industrial partnerships.

Many recent UK successes in Earth Observation have been built upon CEOI-funded projects, including the ESA TRUTHS mission led by the UK, and high commendations for many UK concepts in recent ESA Earth Explorer calls. Case studies of some of the projects funded by CEOI

to date are available on the CEOI website: <https://ceoi.ac.uk/technologies/ceoi-case-studies/> and at the end of the 2022 CEOI Evaluation.

In recognition of its strategic importance, Earth observation has been named in the 2022-2025 UKSA Corporate Plan as one of the UKSA's eight Priorities. The 2021 National Space Strategy pledges that we 'will strive to remain at the forefront of Earth observation technology and know-how'. National Space Strategy implementation planning is ongoing.

4. Scope

The primary focus of the programme is to organise technology funding calls, awarding grants and monitoring projects to ensure the best outcome for the UK. The programme will be driven and aligned with UK Space Agency and BEIS priorities to grow and provide support to the UK Earth Observation community, as part of the implementation of the National Space Strategy and the UK Space Innovation and Growth Strategy. The successful supplier will have strong technical skills and an overall strategic knowledge of the Earth observation landscape to be able to add value through providing feedback to the community and advice to the UK Space Agency.

The UK Space Agency shall ensure the financial and commercial viability of the CEOI programme through reports compiled by the supplier which shall contain a summary of project progress, financial summary of spend to date and forecast spend, risk and issue register, and any other information that the UK Space Agency requests in relation to the delivery of the programme and the projects thereof.

Where necessary, the Agency shall recommend re-scoping of the programme or, in extreme cases, termination of the programme, if it believes that the programme will not deliver the agreed outcomes and thus represents too high a risk both financially and reputationally for continued public support.

The two main elements of the activity are as follows:

A: Technology Programme

Deliver a mechanism to launch and fund EO instrumentation development activities accessible to a wide selection of industry, academia and SME institutions. This should support a balance between scientific missions, operational institutional missions and those aimed at innovative commercial opportunities.

Design, sustain and grow cost effective satellite Earth Observation instrumentation through delivering challenging open and themed calls for ideas. This activity should always assess the likely ultimate market and ensure that project teams have access to advice on building business cases. The programme should always align with the UK's overall space policy and strategy.

In the context of this Technology Programme the Supplier will be expected to take on responsibility for technical project management, oversight, and monitoring of a small number of ongoing CEOI-

funded projects which have commenced prior to the start of this contract, ensuring the continuation of the EO knowledge base and that the funds expended to date are not lost or duplicated.

The expectation is that £2m per annum will be made available for grant funding awards. Size, duration, structure and theme of projects will be decided by considering supplier advice alongside wider strategic priorities governmental strategic priorities.

B: Added Value Programme

The UK Space Agency shall provide oversight of Added Value activities to ensure that they align with Agency strategy; however, concept, design and delivery shall be implemented by the preferred supplier.

Promote technologies and capability through engagement with the European Space Agency, Innovate UK, the Satellite Applications Catapult and other bodies.

Enable knowledge transfer and skills across a wide spectrum of UK academic, SME and industrial knowledge base as possible. This will be done through organisation of workshops and horizon scanning activities to engage, build and promote UK capabilities enabling young engineers, scientists and technologists to work with and learn from experienced colleagues across all sectors.

Carry out publicity events and conferences preparing and publishing articles for EO publications each year to communicate activities. The creation and management of a dedicated website to provide a one-stop-shop for the community and to keep stakeholders informed of activities not only past and present, but of future opportunities when they arise for technical and non-technical audiences.

Strengthen ties throughout the UK EO instrumentation community taking into account the wider landscape of operational EO facilities and infrastructure in the UK and worldwide. Promoting knowledge exchange with non-space sectors through industrial workshops and technology showcases.

Understand current and future national and international exploitation opportunities and position the development programme such that UK led teams are in strong bid positions through engagement with ESA, the National Centre for Earth Observation (NCEO) Innovate UK, Sat Apps Catapult, and other bodies including EUMETSAT.

Ensure that the UK Space Agency is fully informed of activity and progress as per an agreed reporting timetable.

Provide neutral, expert advice on Earth Observation technologies and related UK capabilities to the UK Space Agency and BEIS on an ad-hoc basis, such as ahead of ESA Earth Observation Programme Board meetings.

Optional scale-up

It is possible that up to an additional £15m in grant funding will be made available for the Technology Programme as part of implementing the National Space Strategy. Implementation plans are currently being developed, and there are no guarantees of whether or not additional funding will be made

available. We would therefore like to include an option in the contract that will enable the programme to quickly scale up if need be.

While we do not have certainty at this stage, we hope that we will know by the time the contract starts. If a decision to provide additional funding is made after that point, it is likely that fewer funds would be made available to ensure deliverability within the duration of the EOIP contract.

5. Requirement

The Supplier shall manage the **Technology programme** activity, which will include:

- Writing the Grant call documents for the grant funding calls in line with UKSA policy;
- Managing the submission of proposals through a supplier-managed website;
- Select and manage a transparent peer review process to identify successful proposals and placement of grants;
- Undertake all necessary Due Diligence for the award of Grants.
- Acquire UKSA sign off for proposals to be awarded grants
- Ensure grants are awarded in accordance with the UKSA Grant Policy (including subsidy control conditions)
- Manage the feedback mechanism to unsuccessful proposals;
- Award UK Space Agency funds in a cost effective manner, managing them and delivering value for money to an agreed timeframe.
- Provide strong and effective project oversight and leadership support from kick-off throughout the lifespan of the project - to support the development and progression of proposals to achieve success;
- Ensure that projects are closed when they reach their end-point.
- Undertake technical project management, oversight and monitoring to ensure maximum benefit.
- Continue management of a small number (<5) of on-going projects placed under the Current Contract;
- Capture and disseminate project outputs through call summary reports and review events;
- Maintain and deliver technology roadmaps and appropriate technology strategies to implement a long term vision of technology development in the context of UK industrial capabilities;

- Ensure that the UK Space Agency is fully informed of activity and progress as per an agreed reporting timetable.
- Agree and sign a Grant Funding Agreement with the UK Space Agency to enable the management of programme funds.

The Supplier will deliver the following **Added Value** requirements:

- Undertake regular engagement with associated bodies (ESA, Innovate UK, DSTL, NCEO etc) through ad-hoc engagement to promote technologies being supported under this contract, including semi-annual technology discussions with ESA and organisation of at least two science/technology workshops per year
- Undertake outreach activities to increase knowledge transfer across a broad spectrum of potential collaborators (i.e academics, young engineers, etc), including collaboration with NCEO on organisation of an annual UK conference on Earth Observation.
- Provide updates to UKSA during progress meetings on delivery of Added Value engagement and report on future planned activities.
- Provide expert advice on Earth Observation technology to UKSA through ad-hoc engagement with UKSA and attendance of UKSA's quarterly pre-PBEO meetings with industrial and academic stakeholders, as well as organisation of at least one industry consultation workshop per year
- Annual reporting on the status of the CEOI programme to UKSA's Earth Observation Advisory Committee (EOAC)

The supplier and the UKSA EO team will meet on a monthly basis to discuss progress and potential issues as they arise. A Management Board will meet quarterly for a more in-depth review of programme progress, at which the supplier will provide an profile of Grant funding required for the following quarter based on the predicted spend as project milestones are achieved. The Management Board will include representation from the Supplier and the UK Space Agency and will be responsible for the governance of the programme and ensure that the programme is delivered in a cost effective manner, to ensure the highest impact on UK EO instrumentation capability and international standing, aligning to the strategies of the UK Space Agency and wider Government.

The Supplier will submit written quarterly reports in conjunction with these quarterly progress meetings to the UK Space Agency to communicate progress, and attend meetings with the UK Space Agency as and when required. These reports will include updates on the previous quarter, including but not limited to:

- The status of the Technology Programme and all ongoing projects funded therein, including any major changes, progress, issues, and risks, and plans for upcoming funding calls as appropriate.

- The status of the Added Value programme, summarising meetings, events, social media activities that have taken place and future plans.
- The financial and contractual status of the CEOI programme

Reporting requirements may be subject to change if UKSA internal financial reporting is updated.

A separate monitoring and evaluation contract will be awarded alongside the EOIP contract, to gather evidence of the impact of the programme and help to make the case for further funding. The supplier will provide information to support this work as required.

6. Timetable

In addition to informal monthly meetings between the supplier and the UKSA EO team, the Management Board will meet at Quarterly intervals to consider and approve future plans for the programme.

As aforementioned, the UKSA and CEOI intend to launch another call for proposals in October, inviting proposals which the UKSA will retain until the EOIP management contract tender process has concluded. Once the new management contract begins, the proposals will be transferred to the supplier to begin the review process, before making recommendations to the UKSA on which to fund, and then awarding contracts once the final decision has been made.

Immediate Technology Programme milestones:

- Saturday 17th Dec 2022 – EOIP contract begins
- Friday 23rd Dec 2022 – proposals handed over to the supplier to begin peer review
- Friday 17th Feb 2023 – panel review session following peer review of proposals
- Friday 24th Feb 2023 – recommendations provided for the UKSA to consider
- Friday 10th Mar 2023 – confirmation of successful projects
- Friday 17th Mar 2023 – notification of successful bidders
- Friday 24th Mar 2023 – transfer of grant funding
- Friday 31st Mar 2023 – contracts awarded

Projects awarded from this call will aim for completion before the end of the EOIP contract, i.e. end-March 2025.

Further Technology Programme and Added Value Programme milestones are TBC.

Section 4 – Questions for Industry

- 4.1 Information gathered through this Request for Information (RFI) will support the ongoing development of the EOIP requirements.
- 4.2 All responses to the question set will be treated as commercially sensitive and respondents may answer as many or as few of the questions as they wish. The UK Space Agency may wish to invite respondents of this RFI to one-to-one sessions to clarify their responses.
- 4.3 Only Official responses should be sent to the email address specified in the Contact section.

Question 01-UK Space Agency intends for the contractor to provide a forecast of Grant funding required for the following quarter at each quarterly Management Board meeting, based on a forecast of the value of upcoming milestones expected to be met and Grant funding distributed during the previous quarter, to enable the advance transfer of quarterly Grant funds. Please confirm your ability to meet this requirement, and please identify any challenges presented by this approach .

Question 02-Please explain whether you believe any financial incentives could be introduced to improve programme performance, and please identify any challenges which could be presented by incentives performance payments.

Question 03-Please identify whether you would adapt the service to improve returns on investment, baseline current returns, and improve outcomes, including how you could help to measure success.

Question 04-Please confirm your ability to meet any scope expansion, should additional Grant funding become available.

Question 05-In light of the information provided in this RFI, are there any other considerations that you believe UK Space Agency should take into account to deliver the intended outcomes for EOIP more effectively.

Responses

4.4 Responses to this RFI are requested to be provided by no later than 14:00 on 19th September 2022.

4.5 Multiple submissions are welcome if the answers to any questions can be made available prior to the deadline.

4.6 Please submit all responses to the contact email address below.

4.7. Please also use the contact email address if:

- a. You require any clarification of any of the questions;
- b. You wish to request more time to answer specific questions;

4.8 UKSA will publish any necessary clarification of the RFI questions set in a separate document on Contracts Finder.

Contact Email: commercial@ukspaceagency.gov.uk

Appendix ‘A’ Glossary of Terms

TERM	MEANING
“RFI Response”	means the formal offer in response to this Request for Information
“Bidder(s)”	means the organisations being invited to respond to this Request for Information
“Conditions of Bid”	means the terms and conditions set out in this RFI relating to the submission of a Response
“Contract”	means the agreement to be entered by the Contracting Authority and the Supplier(s) following any award under the procurement.
“Contracting Authority”	A public body regulated under the Public Procurement Regulations on whose behalf the procurement is being run
“Contracting Bodies”	means the Contracting Authority and any other contracting authorities described in the Find a Tender Contract Notice / Contracts Finder that are allowed to access the agreement.
“Contracts Finder”	The government portal for advertising publically funded procurement opportunities https://www.gov.uk/contracts-finder
“Customer”	means the legal entity (or entities) for which any Contract agreed will be made accessible to.
“Due Diligence Information”	means the background and supporting documents and information provided by the Contracting Authority for the purpose of better informing the Bidders responses to this Request for Proposal
“Find a Tender”	Means the UK Government Portal that superceded the OJEU as from 1/1/2021 https://www.find-tender.service.gov.uk/Search
“FoIA”	means the Freedom of Information Act 2000 and any subordinate legislation made under such Act from time to time together with any guidance and/or codes of practice issued by the Information Commissioner or relevant Government department in relation to such legislation
“Mandatory”	means a pass / fail criteria which must be met in order for a Bid to be considered, unless otherwise specified.
“Named Procurement person”	means the single point of contact for the Contracting Authority that will be dealing with the procurement
“Other Public Bodies” or “OPB”	means all Contracting Bodies except the Contracting Authority
“Request for Information” or “RFI”	means the applicable procurement procedure documentation and documents completed by Bidders at the first stage of selection in the procurement used to shortlist Bidders under this Procurement procedure
“Request for Information ” or “RFI”	means this Request for Informations documentation and all related documents published by UK SBS and made available to Bidders and includes the Due Diligence Information.
“Supplier(s)”	means the organisation(s) awarded the Contract.