UKSA Space Domain Awareness Capabilities Request for Information

Document Version: 1.0

Date: 24/11/2024

Executive Summary:

The UK Space Agency plays a major role in delivering the government's National Space Strategy.

We support a thriving space sector in the UK, which generates an annual income of £16.5 billion and employs 47,000 people across the country.

Our staff includes scientists, engineers, commercial experts, project managers and policy officials who help to:

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

We are an executive agency of the Department for Science, Innovation and Technology (DSIT).

In 2024, UK Space Command, the Met Office and UKSA established the National Space Operations Centre.

Space domain awareness – the ability to understand and respond to what is happening in space – underpins all space activities and is a critical requirement for delivering a wide range of UK civil and military space objectives.

NSpOC combines and coordinates civil and military space domain awareness capabilities to enable UK space operations and protect our interests in space and on Earth from space related threats, risks, and hazards. With a combined annual budget of over £20 million and approximately 70 civilian and military personnel, NSpOC plays a vital role in ensuring space remains safe, sustainable and accessible for all.

Our mission sets include:

- protecting and defending the UK's space interests
- missile warning
- uncontrolled re-entry early warning
- in-space collision avoidance
- fragmentation alerting and monitoring
- support to licence monitoring
- space weather notifications and advice

NSpOC is currently considering future requirements to maintain and develop its civil capabilities as set out in the Cross-Government Space Domain Awareness (SDA) Requirements Publication. UKSA wishes to test with the market its appetite to meet some of these requirements and is publishing this RFI alongside a draft Specification of Requirements.

If you believe this opportunity will be of interest to you or your organisation, please complete the questionnaire below by 23:00 on Friday 17th January 2025 to commercial@ukspaceagency.gov.uk. Applicants can answer as many or as few questions as they feel are relevant to their organisation. Please note there is no template response form – you can structure your responses to the questions below as you see fit.

How the information you provide will be used and treated:

- Responses received together with wider available information will be used to guide UKSA's development of future funding opportunities within NSpOC and the development of procurements
- Information that you provide, not already in the public domain, will be treated as commercially sensitive information. This means that access to this information will be stored in a protected digital folder restricted to UKSA staff involved with the purpose of this RFI.
- The RFI participation process, including how to send your response appears in the section directly after the questionnaire below. Please do not hesitate to get in touch with UKSA via the following email if you would like us to take additional steps to receive or store your response: commercial@ukspaceagency.gov.uk
- All personal data will be protected according to UK General Data Protection Regulations (GDPR) rules.
- All responses collected will be deleted by 31 December 2029 when we expect all initial activities regarding the purpose would have expired. The information gathered will not be used beyond the stated purpose without explicit permission.

RFI Terms:

- **This RFI is intended to be a request for information only. No contractual obligation is expected to arise from this RFI process.**
- **This RFI does not commit the UK Space Agency to pay any cost incurred in the preparation or submission of any response to the RFI.**
- **Responding (or failing to respond) to this RFI will not prejudice you from participating in any future calls for information or to tender proposals, including those referenced below.**

RFI Participation Process:

- Please provide answers to the below RFI questions on a submission – there is no word limit and respondents are welcome to include supplementary annexes if this would be helpful
- Submissions should be sent as either a Microsoft Word or PDF (Portable Document Format) to: commercial@ukspaceagency.gov.uk with "UKSA SDA RFI" as the subject line.
- Respondents can answer as many or as few questions as desired.
- The deadline for responses is 23.00, Friday 17th January.
- If you have any questions/queries about the process, please contact commercial@ukspaceagency.gov.uk
- An email confirmation of receipt from UKSA will be sent within a one-week period to the designated point of contact.

SDA RFI Timings	
RFI Issued	25 November 2024
RFI Deadline	17 January 2025

Questionnaire:

Please provide answers to the following questions in your submission:

1. **Please provide a single point of contact for your company / organisation, as well as basic details about your company/organisation, including:**

    a. Location of company/organisation/institution
    b. Approximate number of employees in the company/organisation/institution

c. Primary activities (e.g. component manufacturers, academia, space applications etc.)

2. Space Domain Awareness Sensors

UKSA has provided alongside this RFI a draft Specification of Requirements (Annex B) that should be read alongside this section of the questionnaire.

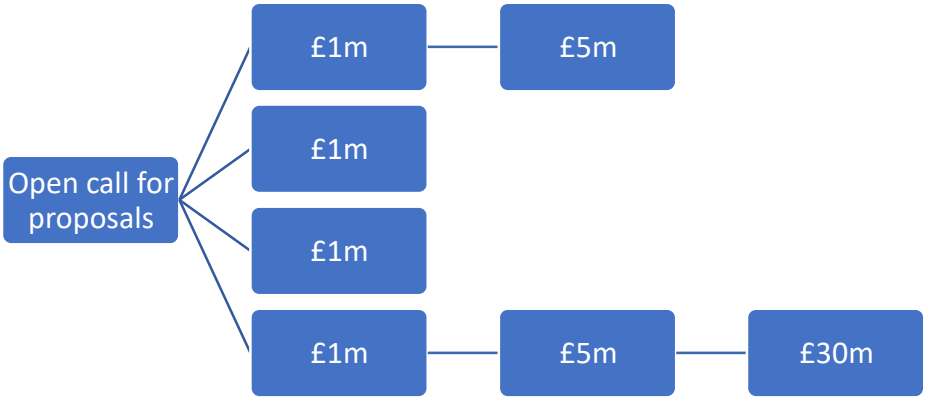
NSpOC currently has access to SDA sensors for monitoring purposes. Active consideration is being given to increasing the number of sensors and associated infrastructure within government ownership, as well as increasing the capabilities of both new and existing sensors. UKSA's intention is to ultimately procure a number of sovereign sensors for use. Our preferred approach is for suppliers to build and deploy sovereign sensors which are then taken into Government ownership for ongoing operation (recognising there may be a requirement for suppliers to provide maintenance).

The specific elements NSpOC is aiming to secure by 2030 will deliver capabilities for observing LEO and GEO that can operate in surveillance and/or tracking modes in order to tessellate across as wide a Field of View as possible, alongside a more exquisite capability that could provide a characterisation element. We have set out more detail about the objectives in the accompanying Specification of Requirements.

UKSA is exploring two different routes to market and is keen to gauge feedback from the sector on these. Please note we are also testing legal feasibility of these approaches internally, given the novelty of them, and there is no guarantee either option will be pursued.

Option A: One competitive flexible procedure under the Procurement Act 2023

a. UKSA is considering a multi-stage procurement process under a competitive flexible procedure set out in the Procurement Act 2023, structured to facilitate an initial desk-based feasibility study, followed by a prototype development stage, followed by a manufacture and deployment stage, as per the diagram below (please note budgets are provided as an example and are subject to change):



We are interested in this approach to ensure suppliers have the opportunity to suggest innovative solutions or systems that have not been considered. This could be an approach that proposes an entirely new system or adapts existing technologies, software and systems to deliver a new approach that satisfies the objectives above. Would your company be interested in participating in this kind of exercise?

Option B: Contracts for Innovation exercise for phase 1 (feasibility study) and phase 2 (prototype development) followed by full competition for phase 3 (deployment phase)

b. The second would be to run the feasibility study and prototype development phase as Contracts for Innovation (formerly Small Business Research Initiatives, SBRI), and then a full tender procedure to procure the operational system in phase 3. We would still intend to undertake Downselection between phase 1 and phase 2, and would then run a full Procurement Act 2023 compliant competition for phase 3, and will need to test whether this can be a restricted procedure or would be a fully open competition, open to those who did not participate in the initial two stages. Would your company be interested in participating in an exercise that involves Contracts for Innovation?

c. NSpOC is open minded about the potential delivery model, which could involve a single (limited subcontract model), prime solution (multiple subcontract model), delivery consortium involving partners or other models. What model do you believe offers the best benefit to industry and government in this proposed relationship and why?

d. UKSA anticipates this exercise will run for a period of 10 years, with 18 months allocated to feasibility study development, 30 months to hardware prototype development and 72 months for build, deployment and operational maintenance. Is this timescale sufficient to achieve the objectives set out above? If not, what do you believe an appropriate timescale to deployment looks like?

e. UKSA anticipates an available budget envelope of up to £36 million over all three phases for the development of the sovereign LEO sensor/system by the successful supplier, and up to £11 million over all three phases for the development of the sovereign GEO sensor/system. Would this budget be sufficient to cover anticipated VROM costs? Does it represent an underestimation of the technical complexity, resourcing and/or timescales required?

f. Is there anything within the specification that is unclear or you would like additional clarification or content provided by UKSA?

3. Contract Terms and Conditions

a. If the competitive flexible procedure is selected, UKSA is proposing to use the Mid-Tier Contract to set out the terms and conditions governing this requirement for phase 1 and phase 2, owing to the value. We anticipate phase 3 will be issued under the Model Services Contract owing to its increased complexity. Details of the Mid-Tier Contract (including the optional schedules) can be found here. UKSA does not anticipate varying any of the contract terms and conditions or those within the optional schedules in phase 1.

On IP specifically, there are five options available within the Mid-Tier Contract:
1. Buyer owns all new IPR with limited Supplier rights to all New IPR in order to deliver this Contract;

2. Buyer ownership of all New IPR with non-exclusive Supplier rights;
3. Supplier ownership of all New IPR with Buyer rights for the current contract only;
4. Supplier ownership of New IPR with Buyer rights for the current contract and broader public sector functions; and
5. As option 2, 3 or 4, plus Buyer rights to royalties

UKSA is minded to pursue option 4, given the nature of this procurement. We recognise the importance to prospective suppliers of being able to own the IP developed within the feasibility study and to be able to exploit this and use it for other activities. UKSA would like to retain the right to license the IP for future related purposes. However, we are open minded and willing to listen to feedback from suppliers on this point.

Is there anything in relation to the published terms and conditions for the mid-tier contract, either in relation to IP or more broadly, you wish to raise?

b. If the Contracts for Innovation route is selected, we would use the model terms and conditions which have been provided at Annex A. UKSA may also consider using these terms for phase 1 and potentially phase 2 in the event a competitive flexible procedure is pursued. There are a number of key differences between Contracts for Innovation and standard contracts. As this is pre-commercial procurement, it funds 100% of development costs and is exempt from Subsidy Control Act 2022 requirements and permits retention of all IP. However, in exchange for this, organisations are expected to undertake this on a no-profit basis and grant the funder certain royalty free access rights to the foreground IP.

Is this approach acceptable to you? Is there anything in relation to the published terms and conditions for the Contracts for Innovation approach you wish to raise?

c. Our indicative timescale for Phase 1 of this procurement is below. Timetables for subsequent phases will be set out to successful bidders at kick-off but would be built into the 18 months/30 months and 72 months set out above, rather than in addition to. Please note this is indicative and may be subject to change. Do you have any concerns about the timetable below?

Initial Request for Information launched seeking supplier feedback on approach	25/11/2024
Statement of Requirements and contract T&Cs published for feedback	25/11/2024
Pre-Market Engagement Closes	17/01/2025
Drafting of tender documentation and amends to contract documentation	17/01/2025- 31/03/2025
Tender Notice/Contracts for Innovation Competition Published	01/04/2025
Phase 1 bids received	10/06/2025
Evaluation Completed	18/07/2025
Phase 1 Award	31/07/2025

4. Other Services – Orbital Analysis and Sensor Data Provision

UKSA currently procures a number of services for NSpOC via the Space-Enabled and Geospatial Services Dynamic Purchasing System.

a. It is our intention to run at least two further procurements relating to SDA sensor data for surveillance purposes (contract for 5 years on a 1+4 basis, split into three lots across LEO, MEO and GEO) and the provision of orbital analyst services (contract for 5 years on a 1+4 basis, anticipated value of up to £5m over 5 years exclusive of VAT) on the Space-Enabled DPS.

b. Our space data requirement will be for Space Surveillance and Tracking data, with supplementary sensors that can be combined with existing sovereign sensors to improve UK SST capability. Both UKSA and MoD have an active interest in this data, with two civil lots (Lot 1: SST data in higher earth orbits, HO and Lot 2: SST data in lower earth orbits, LEO) and one military lot (Lot 3: SST data in geosynchronous, geostationary and graveyard orbits). We expect all lots will include both Routine tasking and Event-based tasking.

   Contract value will vary depending on the lot and budget availability. For reference, the previous annual contract values exclusive of VAT were £102,000 for Lot 1 (LEO), £196,800 for Lot 2 (MEO) and £1,800,000 for Lot 3 (GEO) – we currently anticipate values for the forthcoming opportunities to be broadly similar, but we would welcome feedback from the market on whether you would be interested in bidding for this value of opportunity.

c. Our orbital analyst requirement will be for the provision of orbital analyst services, to analyse and interpret SST data. This is a 24/7/365 service and is critical to NSpOC. We anticipate the contract value including all optional extensions to be £6m over the full five years. We anticipate that any suppliers bidding into this requirement will need to meet the following core capabilities:
   i. DV STRAP cleared staff who can work with Top Secret material in a Top Secret environment
   ii. Services provided through a UK registered company in which all strategic and security sensitive decisions are undertaken in the UK, by UK nationals on grounds of national security
   iii. Shift analysts will need to be based on-site at RAF High Wycombe at least 3 days per week (noting this location may change throughout the duration of the contract)
   iv. Capability to provide shift analyst cover 08:00 – 16:00 365 days a year, with an on-call option
   v. We anticipate the orbital analyst contract may be in scope of TUPE and will aim to provide bidders with the relevant information to inform pricing when we issue the Preliminary Market Engagement Notice.

d. Would you be interested in bidding for these opportunities as well as the sensor procurement detailed above? If so, which ones? This question is being asked so we can gauge the crossover between suppliers who are seeking to bid for multiple related opportunities and the need to ensure the timetable can accommodate this.

e. Is there any reason you believe we should not run these procurements for sensor data and orbital analysts via the Space-Enabled DPS? This question is being asked to test the appropriateness of the Space-Enabled DPS for these contracts and to ensure suppliers have the opportunity to register for the DPS ahead of these procurements being issued.

f. We plan to issue a Preliminary Market Engagement Notice for these activities on the 1st of April, with a view to commencing procurement via the DPS in mid-May. We anticipate services will be place by 1st of September, with the orbital analysts running in parallel with existing services for an initial month to minimise the risks of handover.

Privacy Notice:

This notice sets out how we will use your personal data, and your rights. It is made under Articles 13 and/or 14 of the UK General Data Protection Regulation (UK GDPR).

YOUR DATA

The data

We will process the following personal data:

Names and contact details of employees involved in preparing and submitting responses to the Request for Information.

Purpose

We are processing your personal data for the purposes of the Request for Information (RFI) described within the accompanying RFI.

Legal basis of processing

The legal basis for processing your personal data is Consent.

Recipients

Your personal data may be shared by us with other Government Departments or public authorities where necessary as part of the RFI exercise. We may share your data if we are required to do so by law, for example by court order or to prevent fraud or other crime.

As your personal data will be stored on our IT infrastructure it will also be shared with our data processors Microsoft and Amazon Web Services.

Retention

All responses collected including personal data will be deleted by 31 December 2028 when we expect all initial activities regarding the purpose would have expired. The information gathered will not be used beyond the stated purpose without explicit permission.

Automated decision making

Your personal data will not be subject to automated decision making.

YOUR RIGHTS

You have the right to request information about how your personal data are processed, and to request a copy of that personal data.

You have the right to request that any inaccuracies in your personal data are rectified without delay.

You have the right to request that any incomplete personal data are completed, including by means of a supplementary statement.

You have the right to request that your personal data are erased if there is no longer a justification for them to be processed.

You have the right in certain circumstances (for example, where accuracy is contested) to request that the processing of your personal data is restricted.

You have the right to object to the processing of your personal data where it is processed for direct marketing purposes.

You have the right to withdraw consent to the processing of your personal data at any time.

You have the right to request a copy of any personal data you have provided, and for this to be provided in a structured, commonly used, and machine-readable format.

COMPLAINTS

If you consider that your personal data has been misused or mishandled, you may make a complaint to the Information Commissioner, who is an UK independent regulator. The Information Commissioner can be contacted at:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF
0303 123 1113
casework@ico.org.uk

Any complaint to the Information Commissioner is without prejudice to your right to seek redress through the courts.

CONTACT DETAILS

The data controller for your personal data is the Department for Science, Innovation and Technology. You can contact the DSIT Data Protection Officer at:

DSIT Data Protection Officer
Department for Science, Innovation and Technology
1 Victoria Street
London
SW1H 0ET

Email: dataprotection@dsit.gov.uk

END