Planning

# Inter-Agency Space Debris Co-ordination Committee (IADC) Studies 2025-26

UK Space Agency

UK3: Planned procurement notice - Procurement Act 2023 - view information about notice types
Notice identifier: 2025/S 000-027832
Procurement identifier (OCID): ocds-h6vhtk-052741 (view related notices)
Published 27 May 2025, 3:56pm

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## Scope

### Reference

UKSAC25_0044

### Description

The Office of the Chief Engineer within the UK Space Agency is intending to procure delivery partners across different studies that feed into Inter-Agency Space Debris Coordination Committee (IADC), which is currently spread across four working groups. expected to span 5 locations. The UK is a global leader on space sustainability providing the technical backing to space sustainability decisions. The Inter Agency Debris Coordination Committee (IADC) has 13 member states that conduct technical research to inform their publications on how to measure, database, protect from and mitigate space debris. The primary purpose is to exchange information on space debris research activities between members, to facilitate opportunities for cooperation in space debris

research, to review the progress of ongoing cooperative activities and to identify debris mitigation options. The UK has been a member for nearly 30 years and has been helping to guide the international policy over this time. The IADC consists of a steering group and four working groups - Measurements, Environment and Database, Protection and Mitigation.

UKSA is seeking suppliers to perform technical studies of relevance to the four IADC working groups. We will require the supplier to fulfil the specification, including defining framework/model where needed and putting theoretical metrics into practice.

The total value of this contract including all four lots shall not exceed £300,000 (inclusive of VAT). UKSA intends to award a minimum value of £25,000 (inclusive of VAT) per individual lot, with indicative values per lot below (all values inclusive of VAT):

• Lot 1: Up to £25,000

• Lot 2: Up to £150,000

• Lot 3: Up to £75,000

• Lot 4: Up to £50,000

Prospective suppliers to note the deadline to complete the work shall not exceed 31st March 2026. Beyond this point, activity will not be funded.

Full details will be available in the forthcoming specification.

## Total value (estimated)

- £250,000 excluding VAT
- £300,000 including VAT

Above the relevant threshold

## Contract dates (estimated)

- 1 September 2025 to 31 March 2026

- 7 months

### Options

The right to additional purchases while the contract is valid.

UKSA has set out a number of different studies within lots 2, 3 and 4, which may not all be taken forward. UKSA will set out in its specification how it will decide which of the options will be awarded.

### Main procurement category

Services

### CPV classifications

- 73000000 - Research and development services and related consultancy services

### Contract locations

- UK - United Kingdom

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## Lot 1. Measurements

### Description

Lot 1.1: Analysis of the data from EISCAT Beampark Campaign

Total Contract Value: Up to £25,000 (inclusive of VAT)

Total Contract Duration: 6 months

Characterisation of the Small Debris Space Environment remains an ongoing critical challenge for addressing space sustainability. NSpOC has previously funded a 24 hour beampark campaign using the EISCAT UHF radar system with the raw data analysed through an ESA contract. At the recent IADC, it was discussed that shorter follow up beamparks targeting specific fragmentation events would also be very beneficial. As a result of this, NSpOC has arranged for a further 24 hours of time but split up over 6 x 4 hr sessions targeting the recent CZ-6A fragmentation. The campaigns target 200-2000 km with a 75E pointing direction. We require a supplier to analyse the raw data to pull out detections and use the circular orbit assumption to extract an orbital inclination and altitude and make an assessment of object size based on the signal strength.

### Lot value (estimated)

- £20,834 excluding VAT
- £25,000 including VAT

### Same for all lots

CPV classifications, contract locations, contract dates and options are shown in the Scope section, because they are the same for all lots.

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## Lot 2. Environment and Database

### Description

Characterisation and modelling of meteoroid and debris around the Earth and storage and access of the data by electronic means, including meteoroid and debris models, short and long-term evolution, collision prediction and risk assessment.

Lot 2.1: Assess the utility of existing metrics and develop new metrics for space environment

Total Contract Value: Up to £50,000 (inclusive of VAT)

Total Contract Duration: 6 months

Review the formulation of existing proposals of metrics for the space environment to identify their strengths and weaknesses. Develop environment-level metrics that can be used to quantify the status of the orbital debris environment and define its sustainable use. Compare proposed metrics against other indicators and metrics of the space environment to understand their respective strengths and weaknesses and to establish their utility in understanding sustainable space activities.

Lot 2.2: Develop software and tools to assess the environment

Total Contract Value: Up to £50,000 (inclusive of VAT)

Total Contract Duration: 6 months

Develop key software components and tools to establish further UK capability to model the long-term evolution of the space environment. Apply to software and tools to benchmark cases against other internationally developed models.

Lot 2.3: Timelines for End of Life (EOL) disposal

Total Contract Value: Up to £50,000 (inclusive of VAT)

Total Contract Duration: 6 months

Quantitative assessment of the impacts of reducing the lifetime of the spacecraft at End-of-Life considering residence time in congested areas e.g. constellation shells, space stations. An assessment of risk and approaches to orbit design which may minimise risk and improve sustainability of the missions.

## Lot value (estimated)

- £125,000 excluding VAT
- £150,000 including VAT

### Same for all lots

CPV classifications, contract locations, contract dates and options are shown in the Scope section, because they are the same for all lots.

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## Lot 3. Protection

### Description

Design and technology of shielding against meteoroids and space debris and the associated test methods which include test facility and procedure, hypervelocity impact data, simulation software.

Lot 3.1: Explore options for simple thresholds to quantify the vulnerability of spacecraft to impacts

Total Contract Value: Up to £25,000 (inclusive of VAT)

Total Contract Duration: 6 months

The national and international standards dealing with space debris mitigation, requirements are provided based on the size of space debris that is likely to create a spacecraft failure in terms of probability of loss of functionality leading to the loss of collision avoidance manoeuvre capability and/or post mission disposal capability. We are looking for suppliers to address this topic to support the development of impact vulnerability-based thresholds that can be used in future as simplified metrics and provide an adequate and sound basis. The intention is to focus on design-dependent spacecraft vulnerability.

Lot 3.2: Define fragmentation event simulations for multiple simplified modern spacecraft designs (geometries, materials) and collision conditions (e.g. impactor properties, impact location, velocity, incidence angle) and characterise the fragments generated for different collision conditions

Total Contract Value: Up to £50,000 (inclusive of VAT)

Total Contract Duration: 6 months

The national and international standards dealing with space debris mitigation, assume on the size or energy of space debris that is likely to create a catastrophic break-up and

generate the related fragment distributions. In practice, the employed definition of "catastrophic" to justify the "critical" threshold of the space debris involved is often qualitative and limited by the availability of the state-of-the-art research. We are looking for suppliers to characterise fragments released in hypervelocity impacts that can be used in future for deriving fragmentation severity.

### Lot value (estimated)

- £62,500 excluding VAT
- £75,000 including VAT

### Same for all lots

CPV classifications, contract locations, contract dates and options are shown in the Scope section, because they are the same for all lots.

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## Lot 4. Mitigation

### Description

Study of all measures to reduce or avoid the creation of space debris or reduce the hazards created by space debris. This includes identification of space debris sources, design and operation of space systems to avoid or reduce the creation of space debris, guidelines for debris mitigation.

Lot 4.1: Lunar Debris Mitigation Guidelines - further work on disposal options

Total Contract Value: Up to £25,000 (inclusive of VAT)

Total Contract Duration: 6 months

Given the sustainability challenges that the Cislunar environment presents, the UK Space Agency is keen to support the development of new guidelines for the sustainable use of Cislunar space and is therefore commissioning this study to identify key research gaps and further develop the work carried out in the previous studies to feed directly into the a

forementioned international forums. The outputs of this study may also be used by the UK Space Agency and wider UK Government to inform new regulatory policy for future UK-licensed lunar missions.

Lot 4.2: Assessment of technologies driving post-mission disposal reliability

Total Contract Value: Up to £25,000 (inclusive of VAT)

Total Contract Duration: 6 months

Investigate the merits of higher post-mission disposal success rates, looking at reliability based on mass, collision probability, orbital location, propulsion reliability and other relevant parameters. Include analysis of constellations specifically to support recommendations that constellations have higher success rates.

### Lot value (estimated)

- £41,666 excluding VAT
- £50,000 including VAT

### Same for all lots

CPV classifications, contract locations, contract dates and options are shown in the Scope section, because they are the same for all lots.

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## Participation

### Particular suitability

**Lot 1. Measurements**

**Lot 2. Environment and Database**

**Lot 3. Protection**

**Lot 4. Mitigation**

Small and medium-sized enterprises (SME)

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## Submission

### Publication date of tender notice (estimated)

17 July 2025

### Enquiry deadline

24 July 2025, 2:00pm

### Tender submission deadline

8 August 2025, 5:00pm

### Submission address and any special instructions

This opportunity will be offered via the Jaggaer e-sourcing portal: To register on the Jaggaer eSourcing portal please use the link https://beisgroup.ukp.app.jaggaer.com/ and follow the instructions to register as a supplier.

When available, it will be possible to search for this requirement.

### Tenders may be submitted electronically

Yes

### Languages that may be used for submission

English

### Award decision date (estimated)

22 August 2025

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## Procedure

### Procedure type

Open procedure

### Reduced tendering period

Yes

Qualifying planned procurement notice - minimum 10 days

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## Contracting authority

### UK Space Agency

- Public Procurement Organisation Number: PRTY-4245-MTJY

Quad Two Building (1st Floor), Rutherford Avenue, Harwell Science & Innovation Campus

Didcot

OX11 0DF

United Kingdom

Email: commercial@ukspaceagency.gov.uk

Region: UKJ14 - Oxfordshire

Organisation type: Public authority - central government

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## Other organisation

These organisations are carrying out the procurement, or part of it, on behalf of the contracting authorities.

### UK Shared Business Services Ltd

Summary of their role in this procurement: Administrative delivery partner

- Public Procurement Organisation Number: PMPN-7535-GNTG

Polaris House, North Star Avenue

Swindon

SN2 1FF

United Kingdom

Email: policy@uksbs.co.uk

Region: UKK14 - Swindon

## Contact organisation

Contact UK Space Agency for any enquiries.