

**RFI0023**

**REQUEST FOR INFORMATION**

**NavyX Autonomy Assessment Evaluation and Training Simulator (A2ETS)**

**RFI Title:** NavyX Autonomy Assessment Evaluation and Training Simulator (A2ETS)

**Issue Date:** 10 July 2023

**Reference:** RFI0023

**Version:** 1.0

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# Introduction

This RFI is not a bidding opportunity but a means by which industry and other organisations can provide information. Any resulting procurement activity will be conducted competitively.

**Please note:**

**This RFI is an information gathering exercise, no further discussions with industry are planned at this stage however any future procurement activity will be advertised in line with public procurement regulations on the Defence Sourcing Portal and Contracts Finder.**

1. Background

NavyX, as the RN’s innovation, lethality, and autonomy accelerator, has 3 surface platforms XV PATRICK BLACKETT, MADFOX and an Autonomous Pacific 24 Seaboat (APAC 24) which can meet the aims of NavyX by hosting, demonstrating, and aiding in the evaluation of autonomous systems. These systems may include, but not be limited to, ground control stations, intelligent tactical navigation systems, AI command advisors, and remote engineering and payload management. Whilst the availability of these platforms offers increased opportunity for RN trials and experimentation, it remains limited by crew capacity, geography, and legislation. The climatic, topographic, and tactical environment for experimentation is limited to the real-world conditions and scenarios largely available within the range of the assets and is largely restricted to the Solent and South Coast Naval Exercise Areas. The ability to control and influence otherwise uncontrollable variables means that true comparison of systems in representative environments is not possible as the ability to test hypothesis and conduct true comparison in an unbiased and transparent manner is compromised.

To enhance NavyX’s capability a system enabling experimentation and assessment in a synthetic environment would be beneficial. It would enable NavyX to offer the ability to assess and evaluate full and partial autonomy systems or elements of such systems alongside, and complimentary to the capabilities offered by NavyX’s live surface assets.

The Royal Navy are seeking information on simulation systems and projects at all levels of technological readiness from companies and non-commercial organisations and institutions that are potentially capable of meeting the following objectives:

* 1. To complement the NavyX existing surface assets by offering the ability to assess and accelerate assurance of full and partial autonomy packages, individually and in tandem, within diverse simulated environments and scenarios, enabled through the application of innovative high-powered computing capabilities.
	2. To enable experimentation in dangerous or high-risk scenarios that would otherwise be impossible or intolerable to duplicate in real-life. To build resilient systems, the ability to test to failure in challenging environments is desirable.
	3. To provide a training and mission rehearsal facility to aid in accreditation of autonomous surface assets and operators to recognised international standards.
	4. To aid in the development of Royal Naval Concept of Operations for surface autonomy.
	5. To offer the opportunity to fully explore and exploit innovative solutions within the broader simulation community including Virtual and Augmented Reality, Gaming, and Defence simulation.
	6. Where necessary to align with broader RN and defence simulation development and standards as defined within the Defence Management of Simulation Capability (DMASC) regulations.
1. RFI intended outcomes

This RFI aims to achieve the following outcomes:

1. Understand the ‘art of the possible’ in fully or partially meeting the specified objectives subject to further refinement of requirements.
2. To understand if appropriate where mutually beneficial partnerships may be established between MOD (NavyX) and organisations to further the understanding and development of solutions relevant to the objectives.
3. Align the MOD requirement with industry capability and processes for procurement of the required solution.
4. Develop a procurement strategy that will deliver best value for money for Defence.
5. To inform a Procurement Strategy that enables the implementation of an enduring solution.
6. RFI Procedure

Responses to this RFI will be reviewed by subject matter experts from different functional areas within Navy Command Headquarters.

If upon review of your submission any clarifications or additional information is required, you will be contacted using the details provided in your RFI response.

Any details provided in response to this RFI will be used for information purposes only and will not be used to determine the potential Suppliers who will be invited to bid, should the Authority proceed to tender.

The results and analysis of this RFI shall not constitute any form of pre-qualification exercise.

Any formal procurement process will be undertaken in accordance with the relevant Procurement Law.

Nothing in this RFI, or any other engagements with Industry prior to a formal procurement process, shall be construed as a representation as to the Authority’s ultimate decision in relation to the future requirement.

1. How to submit responses to this RFI

Respondents should provide responses in accordance with the format provided in **Annex A** quoting the RFI reference on all documentation and emails**.**

Organisations may submit multiple solutions, one solution per form.

Please do not submit additional documents such as company overviews, the purpose of the RFI is to collect information related to the technical solution, any additional documents will not be included in the review process.

Any responses received after the deadline will be passed to the subject matter experts for information, however they may not be included in the RFI review meetings which are to be held immediately following the deadline.

Once completed, please return electronically to the e-mail address(es) shown below in **section 9,** no later than **12:00, Monday August 7th 2023**.

Responses will be acknowledged electronically by return e-mail.

1. Confidentiality & Proprietary Information

No information included in your response, or in discussions connected to it, will be disclosed to any other third party.

Proprietary information, where included, should be kept to minimum and must be clearly marked.

**For the purposes of this RFI, any documentation submitted should be classification OFFICIAL**.

1. Costs of preparing your RFI response

Any costs relating to the preparation and submission of a response to this RFI are the sole responsibility of the respondent.

## Insurance

Not used

## Contact

Quoting the RFI reference, please submit

1. any requests for clarification
2. all responses to this RFI and
3. any questions regarding Classification of document(s) intended for submission, to:

NAVYCOMRCL-RFI@mod.gov.uk

1. Annex A

**RFI0023 NavyX Autonomy Assessment Evaluation and Training Simulator (A2ETS)**

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| --- | --- |
| **Question** | **Answer** |
| Company/Organisation Name |   |
| Company/Organisation Address |   |
| If the respondent is not a company, please specify the nature of the organisation (i.e. Academic institution, enterprise group, research group etc.) |  |
| Is the company a Small - Medium Enterprise (less than 250 employees)? |  |
|    |
| Name of Company/Organisation representative completing the RFI |   |
| Contact details (e-mail and telephone number) |   |
| Company/Organisation web site address |   |
|    |
| How would you propose to meet the objectives specified? Max 300 words.  |   |
| In meeting the objectives specified would you be proposing a high TRL Commercial of the Shelf (COTS) solution? Please provide as much detail as possible. Max 500 words – include TRL of proposed solution. |  |
| Or: |
| In meeting the proposed objectives would you be proposing a solution that through partnering with MOD would enable further development? Please provide as much detail as possible. Max 500 words – include TRL of proposed solution |  |
| If proposing a solution, would this fully or partially meet the objectives specified? Please provide as much detail as possible, max 500 words. |  |
| If proposing a solution would the company or organisation be able to provide ongoing technical support and training.Please provide as much detail as possible.Max 500 words. |  |
| To understand ROM Costs please specify within which cost bracket any proposed solution may fall including any ongoing support and training that may be provided. | a) <£100Kb) £100K-500Kc) £500K-£1Md) £1M-£5Me) >£5M |
| **Innovative solutions are most welcome, even if they do not meet all the requirements above, we would welcome the opportunity to consider the positives and negatives.** |
|  |