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RFI009

**REQUEST FOR INFORMATION:
MARITIME THREAT SIMULATION BY UAV**

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RFI Title: MARITIME THREAT SIMULATION BY UAV

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1. Introduction

This RFI is not a bidding opportunity but a means by which industry can provide information.

The Royal Navy's DEVELOP Directorate leads the development of the Royal Navy's future warfighting capability and acts as the platform for the through-life capability for all maritime capabilities in order to achieve the optimum mix of present and future warfighting technologies for a modern, global and ready Royal Navy.

Ongoing RN Transformation is focused on Operational Advantage in the North Atlantic (OANA), Carrier Strike, Littoral Strike/Future Commando Force, Forward Presence and Tech & Innovation. Digital, Autonomy and Agility are key themes that run through all with the intent to improve global Availability, Sustainability and Lethality in an exponential world.

For un-crewed and autonomous systems, the RN is driving hard toward an Open Architecture, Plug & Play, payload-agnostic, globally deployable maritime network operating above, on and in the water, in the littoral and on land at range and in the most demanding and contested environments.

2. Background

The Ministry of Defence (The "Authority") is currently seeking information in order to qualify requirements and develop our understanding of the potential for the market to provide a low cost UAV able to provide Threat simulation from within a deployed Maritime Task Group (MTG), within 2 years, to support the development of the RN's un-crewed and autonomous network, with potential for spiral development to assist the creation of the Future Maritime Aviation Force (FMAF), the rapid transformation of crewed aviation roles (Intelligence, Surveillance, Reconnaissance, Communications, Lift and Strike) to uncrewed).

The Authority intends to use the responses to this RFI to inform future decision making regarding the potential supply of maritime UAV able to provide threat simulation.

3. RFI intended outcomes

This RFI aims to achieve the following three (3) outcomes:

- a. Develop further MoD understanding of the different technologies and capabilities available in the market, both current and emerging.
- b. Alignment of potential future MoD requirements with industry standards and processes for procurement of maritime un-crewed and autonomous capabilities; and,
- c. Enable the Authority to develop a procurement strategy that will deliver best value for money for Defence.

4. Requested Information:

The Authority wishes to assess potential maritime airborne un-crewed or autonomous UAS for use within the Royal Navy for threat simulation.

Potential suppliers and interested parties are invited to provide information in relation to potential solutions which could deliver threat simulation aligned to the following indicative requirements within 2 years.

Potential solutions ideally should offer:

- a. Autonomous / Crewless operation with over the horizon operation;
- b. One hour plus endurance
- c. Max operating altitude above 10668m (35000ft)
- d. Min operating altitude less than 5m (17ft)
- e. Speed in excess of 230 m/s (450kts)(830Km/h)
- f. Min 25Kg payload, with power supply options.
- g. High G maneuverability.
- h. Low observability.
- i. Suitable for launch from a ship and recovery via parachute to land and water, or net capture, or arrested landing on skids/wheels.
- j. Suitability for maritime environments (salt ingress, deck mobility)
- k. Suitability for use in a variety of environmental conditions ashore and at sea
- l. Rapidly interchangeable, multiple payload types;
- m. Open Architecture;

5. 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 and be limited to three pages per section.

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, Friday 26 March 2021**.

Responses will be acknowledged electronically by return e-mail.

6. RFI Procedure:

Responses to this RFI will be reviewed by subject matter experts from various functional areas within the Authority (including Navy Command Headquarters).

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If upon review of your submission any clarification 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.

7. 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 not exceed classification OFFICIAL.

8. 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.

9. Contact

Quoting the RFI reference, please submit i) any requests for clarification and ii) all responses to this RFI, to:

NAVYCOMRCL-RFI@mod.gov.uk

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Annex A to RFI009_MARITIME THREAT SIMULATION BY UAV

Required:	Response
Company Name	
Company Address	
Is the company a Small - Medium Enterprise (less than 250 employees)?	
Name of Company representative completing the RFI	
Contact details (e-mail and telephone number)	
Company web site address	
Main products/services/line of business	
Main market sector	
Number of years in this market sector	

RESPONSE:

1. Current Technical Solution:

Please Indicate:

(Note: We recommend a response of up to 10 pages):

Description of solution:

Maximum airborne duration (hours and minutes):

Maximum operating pressure altitude:

Minimum operating height:

Speed – Min, Max and max sustainable for quoted endurance:

Maximum payload and method of carriage (internal or external):

Power available to payload and any effect on endurance:

Launch and recovery method:

Manoeuvrability:

Is the system suitable of use in a maritime environment?

Further Information / Solution assumptions, dependencies, exclusions and constraints:

Link to product catalogue (if applicable):

2. Technical solution(s) which could potentially be available within the next 24 months:

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Please Indicate:

Description of solution:

Maximum airborne duration (hours and minutes):

Maximum operating pressure altitude:

Minimum operating height:

Speed – Min, Max and max sustainable for quoted endurance:

Maximum payload and method of carriage (internal or external):

Power available to payload and any effect on endurance:

Launch and recovery method:

Manoeuvrability:

Is the system suitable of use in a maritime environment?

Further Information / Solution assumptions, dependencies, exclusions and constraints:

Link to product catalogue (if applicable):

Innovative solutions are most welcome, even if they do not meet all of the indicative requirements.