

**WSRF Innovation Call**

Calling Notice text including Assessment Criteria

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**Title: WSRF Innovation Call – Generation After Next Propulsion Technologies for Enhanced Range Weapons**

**Request for Proposals Required by 6<sup>th</sup> Jan 2023**

This gives notice of and initiates a Weapons Sector Research Framework (WSRF) Innovation Call. The intention is for this exercise to be a focussed call for highly innovative research ideas that align with the following need.

UK MOD weapon systems currently utilise traditional propulsion systems technologies (such as Solid Rocket Motors (SRMs), Ramjets (RJ), Turbojets (TJ) and Turbofans (TF)). With ever increasing advancements in science, there is now a requirement to discover and investigate novel / disruptive technologies which could be utilised for innovative propulsion systems or to enhance traditional ones. The utilisation of these technologies would aim to enhance weapon propulsion systems capabilities providing UK MOD with increased operational advantage. Typical areas of interest include (but not limited to):

- Increased range
- Greater energy density per unit volume
- Controllable thrust
- Increased velocity
- System miniaturisation

We are looking for highly innovative research ideas that can help address these areas. We anticipate that the research would align with one of the following themes below, but this is not to be considered as a constraining list and we would be happy to consider any research proposals, from niche component improvements to entire subsystems that align with the objective set out above:

- Game changing development in current propulsion technologies (eg increased energy density fuels)
- Novel propulsion options and energy management

It is anticipated that proposals will initially be for short (e.g. up to ~6 months) precursor investigations, which could lead to follow-on work. We welcome bids from small to medium sized enterprises. Depending on the number of innovative ideas funded, the overall budget for this innovation call is approximately £600k. However, if there are potentially game-changing ideas that breach this budget we are happy to review them on a case-by-case basis.

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If you would like to submit a proposal, we request that you complete the attached 'WSRF Programme Innovation Proposal Template' and email back to the:

Supply Chain Manager ([wsrfcommercial@qinetiq.com](mailto:wsrfcommercial@qinetiq.com)) / ([wsrfcommercial@qinetiq.r.mil.uk](mailto:wsrfcommercial@qinetiq.r.mil.uk)); &

copy to the Delivery Lead ([wsrfdelivery@qinetiq.com](mailto:wsrfdelivery@qinetiq.com)) / ([wsrfdelivery@qinetiq.r.mil.uk](mailto:wsrfdelivery@qinetiq.r.mil.uk))

by 6<sup>th</sup> Jan 2023.

The following will be used as the assessment criteria for the submissions:

1. If successful and exploited, would the idea offer significant benefits?
2. Is it clear what the proposed work will deliver?
3. Is the idea innovative and significantly different from current methods?
4. How will the technical risks be managed and does the proposal demonstrate a strong scientific approach?
5. Is the proposer competent to undertake the work?
6. Exploitation potential.

The emphasis of the assessment will be on Benefits, Innovation and Exploitation.

Whilst not a discriminating factor during the assessment of the proposals received, please indicate what, if any, restrictions would be in place with respect to government-led International Research Collaboration (IRC).

Once we have received the proposals, an assessment based on the above criteria will be conducted. Feedback on all proposals received will subsequently be provided.

It is anticipated that feedback will be provided around the week commencing 20<sup>th</sup> Jan 2023.

If you have any question on the process please make contact. Otherwise we look forward to receiving your proposals.

Regards

Gavin Bishop, WSRF MOD Lead  
Mike Purnell, WSRF Programme Lead

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