PMOD Request for Information

GB-Bristol:

1. Contract Title: AC/DC Power Systems Trainer

2. Contracting Authority:
Ministry of Defence, Air Support OC,

MOD Abbey Wood, Bristol, BS34 8JH, United Kingdom
Email: Julia.Fox141@mod.gov.uk

3. Object of the Request for Information:
Contracting Authority's file Reference number: 701578778
Short description of requirement: School of Army Aeronautical Engineering is looking for a COTS/MOTS Generic Twin Engine Helicopter AC/DC Power Systems Trainer.
The Authority is requesting information on one topic:

•   Market information on existing solutions available and the ROM cost

Consideration will be given to anything in development or at concept with a VROM
CPV codes :

34152000 – Training simulators

48518000 – Emulation software package

80650000 – Training and simulation in aircrafts, missiles and spacecrafts

Time-limit: 01/10/2021

Information Requested:

Please note that this is a Request For Information (RFI) only. This request is not a commitment by the Authority to launch a formal procurement process and the requirement, described below, is subject to change, the objective of this RFI is to explore existing solutions available in the market.

Information shared at RFI may be shared at an Invitation to Tender (ITT) or Invitation to Negotiate (ITN) stage of procurement, if an ITT or ITN is pursued by the Authority. Information may be shared in relation to how the Requirement was prepared and developed. However, information, resulting from any RFI, marked 'Commercially Sensitive' by the respondent, will not be shared outside of the Authority. The Authority shall reserve the right to reject submissions marked as 'Commercially Sensitive'.

The Requirement:

Five AC/DC Part Systems Trainers (AC/DC PST) based on a Generic Twin Engine Helicopter for the delivery of electrical training to military avionics technicians. The training aid is to replace five existing DC PSTs that were built in 1999 and run on DOS based PCs. The requirement is to replace/modernise the current training aid to enable and meet the following:

* + Must be capable of demonstrating twin AC and DC aircraft systems
	+ Ability for the trainer to inject faults into the system so that trainees can identify symptoms of a fault and carry out fault diagnosis
	+ Ability for trainer to live monitor (snoop) on an individual trainee or group of trainees’ activities
	+ Must be representative of a modern generic twin engine rotary wing aircraft electrical system
	+ Must have an ability to emulate engine starting/power up
	+ Must have safe working voltages
	+ Requires associated suite of Test and Measurement equipment
	+ Capable of being upgraded easily to maintain currency over time
	+ Emulation of the hardware for conceptualising the entire system and in component parts
	+ Emulation for LRU/component replacement after diagnosis
	+ Ability to fault find to a specific point in a circuit ie broken wire, loose terminal, faulty LRU etc
	+ Requires in-built systems bite health monitor
	+ Software must be able to run on a Virtual Learning Environment network solution
	+ Must be able to virtually fault find using only the software through emulation on a laptop/PC – remote to the training aid
	+ Software should contain interactive wiring diagrams for the training aid and a suite of associated documentation
	+ Must be able deliver a fault log for the trainee to reflect on actions taken and errors made
	+ Ground power connection capable of simulating incorrect phase rotation and frequency

Information Requested

Based on the information above, there are key questions the Authority would like information and feedback on:

1. What COTS (Commercial Off-The-Shelf) and/or MOTS (Military Off-The-Shelf) options are available and what are the ROM costs? Costs to include licence/support options

2. What development paths are underway that may meet the requirement?

3. Who holds the Intellectual Property Rights?

4. What options are available for further consideration to meet the requirement with further R&D?

- Any responses should be sent via email to Julia.Fox141@mod.gov.uk . Responses should be limited to 4 pages of A4 in pt11 Arial font, and be sent by 1200hrs on 1st October 2021.