

703836451**PROVISION OF A HADEAN CLOUD DISTRIBUTED
SIMULATION CAPABILITY DEMONSTRATOR****STATEMENT OF REQUIREMENT****CONTENTS**

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1. PURPOSE

- 1.1 This Statement of Requirement (SOR) covers the delivery of a second technology demonstrator (TD) to inform the Collective Training Transformation Programme (CTTP) Full Business Case and de-risk the design phase with industry. Cloud distributed simulation has the potential to enable the Army to run larger simulations with remote participants for Multi domain Integration and Integrated Action. These capabilities are required to blend training environments and exploit areas of opportunity. For example, training a Brigade Combat Team in a live environment with support troops in the virtual environment with both groups remote from their headquarters. A TD, provided by Hadean, would provide industry with confidence in the MOD's approach to introduce a cloud-based simulation platform, inform requirements for services that will be acquired through Defence Digital's Defence Synthetic Environment Platform (DSEP), and support CTTP decision making. The TD will be supplemented by an Independent Technical Evaluation which will justify the findings of the TD.

2. BACKGROUND

- 2.1 The MoD may be referred to as "the Authority" hereafter.
- 2.2 The CTTP mandate directed the CTTP to design, develop and deliver a Future Collective Training System (FCTS) that will, through continuous evolution, transform Collective Training (CT) by 2025. Analysis has demonstrated that re-use of a Common Constructive Simulation (CCS) (which provides simulation platform that underpins all live, virtual and constructive CT to create a single Synthetic Operating Environment (SOE)) and delivery of cloud distributed simulation (which enables remote participants to contribute to CT exercises) underpin CTTP's value for money (VfM) proposition. Despite a successful TD with Improbable, specific challenges remain.

3. DURATION

- 3.1 The duration of the requirement is for a nine (9) month period, to begin on 24 Jun 2022, or as soon as possible after this date, until 31 Mar 2023.

4. OBJECTIVES

- 4.1 The TD will provide technical evidence to:
- 4.1.1 Provide industry with confidence in the MoD's approach to introduce a cloud-based simulation platform, through demonstration and independent technical evaluation,
 - 4.1.2 Inform requirements for services that will be acquired through Defence Digital's DSEP,
 - 4.1.3 Support CTTP decision making, understanding the technical risks, and cost drivers.
- 4.2 Following successful procurement, the TD should:
- 4.2.1 Confirm that an immersive and coherent simulation can be delivered with remote participants from across the globe. Assessed as responsiveness of the simulation environment to defined live (Tactical Engagement Simulation) and virtual (Defence Virtual Simulation 2) training audience inputs,
 - 4.2.2 Inform future development/design approach of distributed cloud simulation within a common constructive concept. This will enable reuse of existing services/products and reducing potential costs. Assessed through the change in assessed technical risk to delivery,

- 4.2.3 Demonstrate to potential industry bidders for CTTTP's Strategic Training Partner role that a Platform based approach can support the delivery of the CT. Assessed by number of potential Strategic Training Partner (STP) bidders engaging with the demonstration event,
- 4.2.4 Provide evidence to support integration of experimental Dismounted Situational Awareness (eDSA). This aspect would specifically show how Hadean would exploit situational awareness data from eDSA and a training audience using CivTak would receive synthetic wrap information using Cursor on Target data generated by Hadean.
- 4.2.5 Inform future international interoperability/re-use/collaboration considerations and opportunities, particularly related to NATO's development of Modelling and Simulation as a Service, and the US Army Synthetic Training Environment. Assessed by the multinational interest in the demonstration.

5. DELIVERABLES

Ser	Title and Description	Criteria	Location	Due
1	Contract Start			~24 th June 2022
2	Initial Capability Demonstration #1	Office environment demonstration with minimal functionality.	UK (London or Army HQ Andover TBC).	~22 nd July 2022 Payment Milestone Attached.
3	Capability Demonstration #2	Office environment with full functionality.	UK (London or Army HQ Andover TBC).	~23 rd September 2022 Payment Milestone Attached.
4	Capability Demonstration #3	Remote office environment with full functionality.	UK (London or Army HQ Andover TBC).	~21 st October 2022
5	UK-Germany Demonstration #4	Field demonstration with full functionality.	UK (London or Army HQ Andover TBC) and Germany (Sennelager).	~11 th November 2022
6	USA Demonstration #5	Public demonstration in conference environment with full functionality.	USA (Orange County Convention Centre).	1 st December 2022 Payment Milestone Attached.
7	Contract End			31 st Mar 2023

- 5.1 The timelines above are calculated backwards from the fixed date for the final demonstration (Capability Demonstration #5 at Ser 6), dates for the Demonstrations prior are TBC.

6. PAYMENT

- 6.1 Payments will be made upon completion of milestone serials 2, 3 and 6.
- 6.2 The payment method for this Call-Off Contract is through Contracting, Purchasing & Finance (CP&F) (Exostar).
- 6.3 All invoices are to be addressed to the Authority Project Manager whose contact details will be given following any subsequent contract award.
- 6.4 All payments are to be made in arrears, upon receipt of an undisputed invoice submitted via the Supplier against Purchase Order number(s) provided by the Authority.

7. TRAVEL AND SUBSISTENCE

- 7.1 Travel and Subsistence (T&S) must be in line with the MOD expenses policy. (see Appendix 1 within Annex A (SOR)).

8. PROGRESS MEETINGS

- 8.1 Commercial review meetings (frequency TBC) including contract start meeting.
- 8.2 Stakeholder brief after completion of Requirements 2 – 6.

9. SECURITY REQUIREMENTS

- 9.1 Hadean must ensure that they handle MoD provided data in accordance with the terms of the contract:
- a. Tactical Engagement Simulations (TES) equipment,
 - b. Access to MoD training areas,
 - c. Dismounted Situational Awareness (DSA).

10. INTELLECTUAL PROPERTY (IP) RIGHTS

- 10.1 IP will remain the property of the supplier.

11. GOVERNMENT FURNISHED SUPPLIES

- 11.1 Current TES Contractors and Equipment for supplier's demonstrations, but not issuing any for supplier's ownership. This TES kit will be used on a training area provided by MoD (undecided location). Supplier will also have access to DSA. Any participant soldiers in the trial will already have appropriate physical protection.

12. IR35

- 12.1 The MOD is required to inform the Supplier whether the off-payroll rules apply or not, and in so doing is also required to provide the reasons for reaching the outcome.
- 12.2 We have assessed that under the Intermediaries legislation, the Off-payroll working rules do not apply to this engagement.
- 12.3 This decision has been derived by assessing the requirement in full utilising the following criteria:

Consideration		Indicators of a supply of a managed service
1	How are the deliverables articulated?	Deliverables will be outcome based with the detail of the outcomes clearly specified in the contract with the Supplier.

2	Who do you articulate the deliverable to?	Deliverables will be articulated to the Supplier. The Supplier will tell the worker(s) what is required of them to deliver the contract.
3	Is the worker under the day to day direction or control of MOD or Supplier?	The worker will be under the day to day direction and control of the Supplier.
4	Who does MOD go to if there is an issue with the quality of service?	MOD will raise quality or non-delivery issues with the Supplier not the resource.
5	Where does the risk of failure sit?	The Supplier will be held accountable for non-delivery of the requirements specified in the contract.
6	Are you looking to hire a specific worker?	MOD will not care who the Supplier sends to perform the work / deliver the service as long as the appropriate SQEP resource is provided.

13. CONTINUOUS IMPROVEMENT

- 13.1 The Supplier will be expected to continually improve the way in which the required Services are to be delivered throughout the Contract duration.
- 13.2 Changes to the way in which the Services are to be delivered must be brought to the Authority's attention and agreed prior to any changes being implemented.

APPENDIX 1: EXPENSES POLICY

1. The Contractor's staff are required to travel as part of the requirements of this Contract and the Contractor will be responsible for booking transport, and any hotel accommodation required prior site visits. The Contractor will be responsible for ensuring that their staff settle all bills in full and obtain receipts to be submitted in support of the contractor's invoice.
2. In addition to claims for expenses as provided for in Clause 1 above, the Contractor's staff may also claim reasonable subsistence expenses when undertaking Site visits (see Clause 6.2.3). These expenses shall be in line with MOD travel and subsistence policy. The Authority (Designated Officer) shall provide the Contractor with extant MOD policy upon request. Claims shall be subject to production of evidence of actual expenditure.
3. Overseas expenses should be arranged in line with MOD policy and will vary depending on location. Such expenses will be paid in line with MOD extant policy (which broadly equates to the expenses available to Service personnel).
4. Where cancellation of a site visit by the Authority results in cancellation of non-refundable costs for flights, hotel or transport previously booked by the Contractor, the Authority shall reimburse the Contractor the actual receipted costs.
5. **Travel**
 - 5.1. All travel arrangements, including visas, vaccinations/preventative medical treatment and health insurance will be the responsibility of the Contractor.
 - 5.2. **Air Travel**
 - 5.2.1. Economy class must be selected for all air travel, unless there are exceptional circumstances which must be approved by the Authority in advance of booking. You should seek to obtain the most economical airline ticket.
 - 5.3. **Rail Travel**
 - 5.3.1. Standard Class must be selected. You should ensure that your journey is organised to achieve best value for money. If, for example, you hold a season ticket that covers part or the entire journey, it should be used. If you travel overnight on official business you are entitled to occupy a sleeping berth.
 - 5.4. **Eurostar**
 - 5.4.1. Standard Class must be selected.
 - 5.5. **Travel by sea**
 - 5.5.1. Standard, single-berth cabins must be selected.
 - 5.6. **Hire Cars**
 - 5.6.1. The Contractor will be responsible for booking hire car travel. You should ensure that your choice of hire car reflects best value for money.
 - 5.7. **Motor Mileage Allowance (MMA)**

5.7.1. There are a number of different rates which are related to vehicle travel:

- Motor Mileage Allowance (up to 10,000 miles) 30p per mile,
- Motor Mileage Allowance (over 10,000 miles) 25p per mile,

- Motorcycle 24p per mile,
- Pedal cycle 15p per mile,
- Passenger Supplement 3p per mile for first passenger;
2p per mile for second and additional passengers,

- Equipment Supplement 2p per mile (taxable).

6. **Accommodation**

6.1. **Service Mess**

6.1.1. If your business travel has taken you onto a base and you need overnight accommodation, it may be that staying in the Service Mess is more cost efficient than a hotel; and should be considered.

6.2. **Hotels**

6.2.1. MOD Hotel Capitation Rates apply:

- Andover – 97.50 GBP per night,
- London – 101.10 GBP per night,
- Orlando – 175.50 USD per night,
- Paderborn – 175.50 EUR per night.

6.2.2. Taking account of other factors such as T&S costs, staff should choose the hotel offering the best value for money and select the cheapest suitable room on offer.

6.2.3. The Contractor shall be responsible for arranging any expected or unexpected hotel accommodation outside of the scheduled visits.

7. **Subsistence**

7.1. You cannot claim for alcohol purchased whilst undertaking business travel, either as part of a meal or consumed in isolation.

7.2. **Subsistence cost limits:** You can claim for actual receipted expenditure, within the subsistence limits detailed below, (**not** at a flat rate). You must obtain and retain itemised receipts for all claims. If you do not have a receipt you will need auditable line manager approval, e.g. by email, before you claim, and you must keep the approval.

- Over 5 hours **£5.00**,
- Over 10 hours **£10.00**,
- Over 12 hours **£15.00**,
- Evening Meal **£22.50** (*overnight stay is required*),
- Breakfast **£10.00** (*when not included in the hotel/B&B rate*).