TASKING STATEMENT

To: SECURE & INNOATE GROUP PTY LTD
Please provide a Quotation for the provision of Services as per the requirements set out below. Respondents are reminded that it is a Condition of Participation, that Respondents complete the Official Order when providing their response. Any additional tender or promotional material that Respondents feel is relevant and necessary to provide should be kept a maximum of 5 A4 single sided pages.
Deed of Standing Offer: ISREW Security Services Standing Offer Panel
Project Number/Title (If Applicable): s47E(d)
Security Classification (If Applicable):
Security Categorisation (If Applicable):
Security Guidance (If Applicable):
Labour Category (If Applicable):
Background: s47G   Defence is seeking the development and demonstration of a s47E(d) demonstrator that highlights varying levels of immersion for training and assessment of pilot candidate skills using modern synthetic technologies with maximised system reliability and efficiency.
Task Description: The Contractor is required to: 1. develop and provide one s47E(d) demonstrator that highlights varying levels of immersion for training and assessment of pilot candidate skills using modern synthetic technologies with maximised system reliability and efficiency. The requirements for the s47E(d) demonstrator are stipulated in the s47E(d) *Statement of Requirement* (attached).   2. develop and provide a sufficiently accurate flight model to provide flight stability whilst airborne to allow learning of work cycles, checklist execution and emergency procedures (Note – flight model should be representative of the s47E(d) and be suitable to allow a s47E(d) student to perform in-flight procedures but need not fully replicate s47E(d) handling characteristics).   3. develop and provide an accurate s47E(d) environment (replicated in form and function), including autopilot and FMS as per the s47E(d) aircraft, with associated databases able to be kept current in line with s47E(d) currency requirements (Note – the database update function should be demonstrated, the actual database contents may be limited in content as per para 4).   4. develop and provide a terrestrial navigation aids database (i.e. TACAN/VOR/ILS) that will be able to be interrogated by the aircraft avionics and display as per on the s47E(d) (the navaid database will be suitable to demonstrate the s47E(d) capabilities but will be constrained to a limited geographical area s47E(d) to reduce development costs

5. provide one Instructor Operator Station (IOS) to control the s47E(d) with suitable normal and emergency scenarios for demonstration

6. provide product support for the duration of the demonstration period (approximately 3 months)

7. Organise with s47E(d) a collaboration workshop with applicable Defence and industry partners to discuss and inform a Product Development Roadmap and Report, detailing how modern s47E(d) technologies can be used to enhance pilot/aircrew training as an informing document for s47E(d)

8. Provide a product development roadmap / report detailing how s47E(d) modern technologies can be used to enhance pilot/aircrew training as an informing document for s47E(d)

Task Objective: s47E(d) The assessment of current and future s47E(d) training needs will provide an assessment of how advanced technologies can enhance aircrew training throughput.	
Required Start Date: 27/05/22	Required Completion Date: 31/03/2023

Task Deliverables:
1. s47E(d)

2. Conduct of the workshop and delivery of the product development roadmap report (Aug 2022)

3. s47E(d) system Alpha Testing Report (Nov 2022)

4. s47E(d) system Beta Testing Report (Dec 2022)

5. Delivery and demonstration of the s47E(d) and IOS device (Canberra Jan 2023)

6. Delivery of s47E(d) system training to Defence personnel and the provision of ongoing product support (Feb-Mar 2023)

7. s47E(d) system Test & Evaluation Report (Mar 2023)

Allowances: Nil	
Supplementary Conditions: Nil	
Documents Enclosed: s47E(d)	Statement of Requirement
Date Quotation Required: 20 May 2022	
Payment Basis: Completion and acceptance of agreed milestones	

Authorised Officer Details:		
Name: s47E(c)		
Appointment: Director – s47E(c)		
Division/Branch/Section: s47E(c)		
Telephone: s22	Fax: n/a	E-mail: s47E(c)
Address: s47E(c) Richmond Avenue, Canberra Airport, ACT 2609		
Signature: s22 s47E(c)		Date: 10 May 22

s47E(d)

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STATEMENT OF REQUIREMENT

Note to respondents: The following importance ratings are included in the Statement of Requirement (SOR) for evaluation purposes only. The ratings communicate the relative importance to the Commonwealth of requirements.

<u>*Essential (E)*</u>. *Indicates a requirement that has the highest level of consideration without which Commonwealth considers that achievement of the capability would be very difficult. Provides a capability basis for considerations regarding the value for money judgement in solicitation evaluations.*

<u>*Important (I)*</u>. *Indicates a requirement that the Commonwealth considers is necessary to achieve the intended functionality and/or performance requirements of the capability. Where an Important requirement is included, it demonstrates its middle-order prioritisation within the capability requirement.*

<u>*Desirable (D)*</u>. *Indicates a requirement that is not a key factor in the achievement of the intended functionality and/or performance, but is perceived as beneficial.*

<u>*Advice (A)*</u>. *Provides information that is deemed important to the delivery of a system satisfying the stated requirements*

1. INTRODUCTION

1.1 [A] The s47E(d) seeks to demonstrate a synthetic training environment that augments pilot training and enhances subsequent training requirements and end user needs.

1.2 [A] The demonstration shall provide a s47E(d) that highlights varying levels of immersion for training and assessment of pilot candidate skills using modern synthetic technologies with maximised system reliability and efficiency.

1.3 [A] The s47E(d) will be used to inform and demonstrate the following requirements:

a. [A] A cockpit arrangement that is a replication of the s47E(d) aircraft;

b. [A] Tactile instrumentation such as switches, handles, displays and data input devices as per the s47E(d);

c. [A] A sufficiently accurate flight model to provide flight stability whilst airborne to allow learning of work cycles, checklist execution and emergency procedures;

d. [A] Autopilot modelling integrated accurately enough to function as per the s47E(d)

e. [A] FMS display panel replicated as per the s47E(d) aircraft, and associated database able to be kept current in line with s47E(d) currency requirements;

f. [A] Terrestrial navigation aids (i.e. TACAN/VOR/ILS) must be able to be interrogated by the aircraft avionics and display as per on the s47E(d)

g. [A] Malfunctions must display and act as per the s47E(d) aircraft and corrective actions conducted by the pilot needs to interact with the malfunction behaviour (Defence will provide a defined list);

h. [A] s47E(d) (including malfunctions and injects) will need to be manipulated off board by instructors;

i. [A] Instructor interface needs to be simple, effective and intuitive to use (e.g. position resets, malfunction management, basic weather and time of day manipulation); and

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s47E(d)

j.   [A] Development of non-technical skills within an immersive environment.

2.   REQUIREMENTS

2.1   Overview

2.1.1   [I] The s47E(d) demonstration will be hosted in s47E(d) with any potential trial conducted at s47E(d)

2.1.2   [I] The respondent is to describe the proposed s47E(d) including products and/or technologies relating to simulation, emulation and synthetic learning environments.

2.1.3   [D] The response should consider the integration of the s47E(d) within the s47E(d) and any constraints.

2.2   Mission

2.2.1   [A] The s47E(d) shall enhance ground-based training for s47E(d)

2.3   Major Systems

Note to respondents. The below list is not definitive and does not preclude the use of devices not listed above to deliver a CPT demonstration and potential trial.

2.3.1   [I] The s47E(d) will comprise of a s47E(d) features with functional and representative s47E(d)

2.3.2   [I] The s47E(d) will include a s47E(d)

2.3.3   [I] The s47E(d) will be enabled by s47E(d)

2.3.4   [D] The respondent shall provide information on any associated control devices used to manage the delivery and assessment of training on the s47E(d)

2.3.5   [D] The s47E(d) and control devices shall have the capacity and capability to deliver training across multiple courses and modules concurrently.

2.3.6   [D] The s47E(d) and control devices shall have the capacity to concurrently support access for management, administrative, maintenance and instructors during candidate training.

2.4   Integration

2.4.1   [A] s47E(d) shall provide an integrated environment that reflects the major attributes of the current s47E(d) operational capabilities.

2.4.2   [A] The s47E(d) may be required to operate on a network that interacts with other Defence training systems and devices.

2.4.3   [A] The s47E(d) may eventually integrate within the s47E(d) to augment delivery of training and enhancement of learning objectives.

2.4.4   [A] The s47E(d) may automatically capture and store all training activity data for analysis and assessment.

3.   SUPPORT STRATEGY

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s47E(d)

3.1 [I] The respondent shall provide a proposal on their optimal support concept if Defence provisioned s47E(d) that interacts with existing defence logistics capability and infrastructure.

3.2 [I] The respondent shall include concepts for operating support, maintenance support, engineering support, maintenance support and supply support (including initial provisioning, replenishment, repair pipelines and support equipment).

3.3 Operating Support

3.3.1 [I] The proposal shall identify the personnel resources, facility requirements and any operational support equipment required to operate the s47E(d)

3.4 Maintenance support

3.4.1 [I] The respondent shall define the optimal maintenance concept and all services necessary to support, manage and maintain the s47E(d) including any proposed modifications and hardware or software upgrades that would assure mission effectiveness.

3.4.2 [D] Respondents are to identify support & test equipment required including specialist test/certification/diagnostic equipment as well as general hand tools.

3.5 Engineering Support

3.5.1 [D] Where the equipment uses software, respondents are to identify the configuration management practices in use.

3.5.2 [A] Respondents are to identify the engineering standards that the equipment will have to retain whilst in service.

3.5.3 [A] Respondents are to identify if the equipment is subject to the oversight of governing bodies such as CASA, DASR or other agencies / governments.

3.6 Training Support

3.6.1 [D] Respondents are to identify their capacity for design, developing and implementing a train-the-trainer program.

3.7 Reliability and Availability

3.7.1 [A] The respondent is to provide details on any reliability and availability data (if available); this can include live trial data and/or modelling.

3.8 Mobility and Detached Operations

3.8.1 [A] The respondent is to identify the requirements for the transportation of the s47E(d) to support a s47E(d) .