SERAPIS TASKING FORM

COMPLETE SQUARE BRACKETS AND REMOVE COMMENTS BEFORE SENDING TO THE SUPPLIER

Tasking Form Part 1: *(to be completed by the Authority's Project Manager)*

To:	Lot 4 QinetiQ Plc		From:	Dstl

REQUIREMENT				
Proposal Required by:	ASAP – no later than 14/04/21	**Task ID Number:**		AII56
Project Manager:	[REDACTED-PERSONAL INFORMATION]	**Technical Point of Contact:**		[REDACTED-PERSONAL INFORMATION]
Task Title:	IBSA Testing at CWIX 21	**New Task** ☒		**Change** ☐
Required Start Date:	Mid-April	**Required End Date:**		31/07/2021
Requisition No:	1000162521	**Budget Range**		£400k (inc Serapis Mgmt Charges)

TASK DESCRIPTION AND SPECIFICATION	
Serapis Framework Lot	☐ Lot 1: Collect ☐ Lot 2: Space systems ☐ Lot 3: Decide ☒ Lot 4: Assured information infrastructure ☐ Lot 5: Synthetic environment and simulation ☐ Lot 6: Understand

Statement of Requirements (SOR)

SOR Background Information

This Statement of Requirements is to deliver IBSA Testing at CWIX 21 against the following DCS CWIX Objectives:

> 5. eXplore and eXperiment passing of DCS Objects through a Guard/Gateway Solution.

> 10. eXplore DCS and PCN: Interoperability of two Federated IBSA DCS systems across a Protected Core Network.

> 12. eXplore cryptographic protection of Data Centric objects (Confidentiality).

> 13. eXplore the use of cryptography for ensuring the integrity of Data Centric Objects.

CWIX 21 will be held between 7 and 25 Jun 21.

For Dstl, all CWIX preparation and testing will be virtual.

Testing will use the latest build version of IBSA, which is a deliverable under Serapis Lot 4 AII46 IBSA Phase 5. This will be installed in the existing IBSA Cloud-Based Test System that is currently under support as deliverable D6 of Serapis Task AII36: IBSA Bold Quest.

CWIX21 Testing will be carried out on the NATO unclassified networks. The IBSA Cloud-Based Test system will be connected to the NATO JFTC Unclassified VPN Enclave, the Layer 2 VPN Enclave, and the UK-PCN infrastructure.

Testing will include both positive and negative tests (see definitions below).

Further details on the DCS CWIX Objectives can be found at the Capability Configuration CC-329 on the CWIX 21 wiki: https://tide.act.nato.int/mediawiki/cwix21/index.php/CC-329

Dstl will manage the CWIX Capability Configuration CC-329 and raise Test Cases on the CWIX Wiki prior to CWIX21.

Definitions

'Secure Transfer of DCS Objects' is defined as:

The transfer of DCS Objects between two DCS systems over a specified network, where System A and System B are either side of the Network, such that a User on System A can search the object store of System B and retrieve a DCS Object. The user should then be able to edit and save the encapsulated document, which is then sent as a DCS Object back to original object store on System B. The file must travel across the network at the specified DCS Level (see below) at all times (eg for Secure Transfer of Level 3 DCS Objects the DCS object must travel across the network at DCS Level 3 at all times).

DCS Levels of Encryption are:

- DCS Level 1 (L1) – Basic Labelling: Binding and verifying confidentiality labels (no cryptographic mechanisms)

- DCS Level 2 (L2) – Enhanced Labelling: Data and MetaData are cryptographically bound. Data and MetaData and not encrypted.

- DCS Level 3 (L3) – DCS Object Cryptographic protection: Data and MetaData are cryptographically bound. Data and MetaData are encrypted.

With respect to this SOR, examples of 'Negative Testing' are:

- The DCS system does not display a DCS object to an End User, where the end user doesn't have the requisite permissions

- An end user can't open a document they don't have the correct admin permissions for

- IBSA will detect and take requisite action if a DCS Object has a corrupted cryptographic binding.

Requirements

The Requirements of this SOR are split into 4 sections:

R1: IBSA Trials at CWIX 21 – Planning: Testing aims and Trials preparation

R2: Virtual Environments: Details of IBSA systems and VPNs to be set up under this SOR

R3: IBSA Trials at CWIX 21 – Execution.

R4:   Maintenance of IBSA Cloud Based Test System post CWIX 21: Costed option for ongoing support of the IBSA Cloud Based Test Environment post CWIX 21.

R1: IBSA Trials at CWIX 21 - Planning

R1.1   PCN/Guard SME

Provision of PCN/Guard SME to support the IBSA Team throughout the lifecycle of this SOR.

R1.2   Design Workshops (Costed options)

R1.2.1   Conduct a Design Workshop with Stakeholders (primary UK STRATCOM) to understand the UK's current position with respect for DCS Supporting Services (eg IDAM, Key Management). This will inform the design of the IBSA System for CWIX21 .A Stakeholder list will be provided by Dstl.

R1.2.2   Conduct a Design Workshop with the Norwegian DCS Team understand their current position with respect to DCS cryptographic bindings and DCS Supporting Services (eg IDAM, Key Management). This will inform the design of the IBSA System for CWIX21.

R1.2.3   Conduct a Design Workshop with the NATO DISG Team to look at the DISG DCS-SDK and how this could be used to implement DCS Level 3 Objects in DCS. This will inform the design of the IBSA System for CWIX21.

R1.3   DCS Level 3 Objects

R1.3.1   Design and implement a technical solution for secure instantiation and delivery of DCS key in the IBSA Cloud Environment. The solution must be based on industry best practice. This must take input from R1.

R1.3.2   Design of DCS cryptographic bindings in IBSA such that IBSA is fully DCS L3 compliant. This must address the following:

- Issue of whether to encrypt data/metadata then cryptographically bind, or vice versa

- When should bindings be validated (on import from another system, during ABAC process prior to or release to end user ?)

- What actions will be taken if the binding check shows that the DCS Object is corrupted (eg audit, alert to user, alert to Sys Admin ?).

- This must take input from R1.

R1.3.3   Implement DCS cryptographic bindings in IBSA such that IBSA is fully DCS L3 compliant, as per the design in R1.1.2.

R1.3.4 Production of Trials Plan to demonstrate the secure transfer of all Levels of DCS Objects:

- CWIX Trial 1:   The Secure Transfer of all Levels of DCS Objects (ie Levels 1,2&3). This demonstration must include the validation of cryptographic bindings as per R1.1.2.   This is a precursor to all other testing.

R1.4   DCS across PCN and Tactical Networks

Production of Trials Plans to look at the impact of passing all levels of DCS Objects across a PCN and Simulated Tactical Network. It is expected that the PCN and Simulated Tactical Network will be the UK-PCN, the UK Simulated Tactical Network, and the Fraunhoffer DEU TacPCN. These will primarily be provided under CC-363 GBR Dstl-PCN TB2021 and the delivery of these are therefore outside the scope of this SOR.

- CWIX Trial 2:   Secure Transfer of DCS L1,2&3 Objects across a PCN.

- CWIX Trial 3:   Secure Transfer of DCS L1,2&3 Objects across a UK simulated Tactical Network. This will test the effect of a Denied, Disrupted, Intermittent, and Limited (DDIL) network on IBSA communications.

R1.5   DCS and Network Guards

Production of Trials Plans to investigate the impact of passing all levels of DCS Objects through a Network Guard (how does binding affect transfer across a guard – does the guard need to be able to check the binding), to include:

- CWIX Trial 4:   Secure Transfer of DCS L1,2&3 Objects across the DISG.

- CWIX Trial 5: (Stretch Goal) Secure Transfer of DCS L1,2&3 Objects across Infodas and Thales Guards.

- The Trials plan will be to transfer DCS Objects across the guards to facilitate testing of the Guard. Provision of Guards and Testing of Guard functionality is out of scope of this SOR. Guard Test cases are out of scope of this SOR.

- Costs should include the provision of PCN/Guard SME to assist in the analysis of the guard functionality and implementation of any retrospective updates to the IBSA systems to resolve identified issues.

R1.6   IBSA and Norwegian DCS System

Production of Trials Plans for Interoperability Trials with the Norwegian DCS, to include transfer of DCS L1,2 and L3 Objects and review/recommendations as to how 4778 Biding Profile should handle encrypted bindings.

- CWIX Trial 6: Initial setup and transfer of L1 DCS objects between the two systems

- CWIX Trial 7: Secure Transfer of DCS L2 Objects between IBSA and NOR DCS systems: .

- Trail 8: Stretch Goal - Secure Transfer of DCS L3 Objects between IBSA and NOR DCS systems.

R2: IBSA Test Environments

R2.1 Provision and support of the IBSA Cloud-Based Test System from 1 Apr 21 to 31 Jul 21. This is a continuation of the activities carried out under Deliverable D6 of Serapis Task AII36: IBSA Bold Quest. The IBSA Cloud-Based Test System is as defined in Task AII36, with continued licensing and patching as per the process defined in that task.

R2.2 Upgrade all IBSA Test environments to the latest version (Serapis Lot 4 Task AII46 - IBSA Candidate System Pre-Production).

R2.3   Update of the IBSA Environment to enable the Secure Transfer of all Levels of DCS objects.

R2.4 Connection of the IBSA Environment to the UK-PCN VPN (to facilitate Trials 2-9) over the unclassified NATO Layer 2 VPN Enclave

R2.5 Connection of the IBSA Environment to the JFTC VPN connection point/enclave (this will facilitate connectivity to the DISG, Infodas and Thales Guards for Trials 6 and 7)

R2.6 Support of Dstl towards Accreditation for CWIX21.

R2.7 Support Dstl in technical input for IBSA CWIX 21 Wiki documentation.

R2.8 Costed option for connectivity of IBSA environment to NATO Layer 2 VPN Enclave (for onward connectivity to DEU TacPCN) (to facilitate Trials 4 and 5) over the NATO Layer 2 VPN Enclave connection

R3: IBSA Trials at CWIX 21 - Execution

R3.1   Execution of trials plans produced under R1.

R3.2 Update CWIX Wiki CC-329 with results of trials/testing.

R3.3 Report and Slide Pack from R3.1.

R3.4 Update of existing IBSA System Documentation to reflect changes made in the execution of this SOR.

R4:   Maintenance of IBSA Cloud Based Test System post CWIX 21

Costed Option for the maintenance of the IBSA Cloud Based Test System as a Test environment, to enable Dstl to carry out Interoperability Testing with NATO Partners 31 Jul 21 to 31 May 22 (similar to Deliverable D6 of Serapis Task AII36: IBSA Bold Quest).

Procurement Strategy

☒ Lot Lead to recommend   ☐Single Source / Direct Award

Pricing:

☒ Firm Pricing   ☐ Ascertained Costs*   ☐ Other*

Firm Pricing shall be in accordance with DEFCON 127 and DEFCON 643

Ascertained Costs shall be in accordance with DEFCON 653 or DEFCON 802.

*only at Authority's discretion

Task IP Conditions

Task IP Conditions (Follow the NIPPY guide to identify your information and IP requirements for each deliverable)	**Summary of the Authority's rights in foreground IP (IP generated by the supplier in performance of the contract)**
DEFCON 703 ☒	Vests ownership with the Authority
DEFCON 705 ☐	Enables MOD to share in confidence as GFI or IRC under certain types of agreements. Can be shared in confidence within UK Government.
OTHER IP DEFCONS: 14* ☐, 15* ☐, 16* ☐, 90* ☐, 91* ☐, 126* ☐	Generally only suitable for deliverables at TRL 6 and above.
BESPOKE IP Clause ☐ *	Details to be added and agreed by IP Group
* Do not use without IPG advice and approval	

DELIVERABLES

- D1. IBSA trials at CWIX 21
- D2 Update CWIX Wiki CC-329 with results of trials/testing.
- D3. Trials report and slide pack
- D4. Updated system documentation to reflect changes made in the execution of CWIX 21 Trials
- D5. Costed Option for maintenance of IBSA Cloud Environment post CWIX 21 Trials.

Deliverable: Acceptance / Rejection Criteria *(30 business days unless agreed otherwise)*

DEFCON 524 Rejection ☒ period [30] days   DEFCON 525 Acceptance ☒ period [30] days

ISSUE OF EQUIPMENT/MATERIAL/INFORMATION

- List of Attendees for R1.1
- Access to IBSA Cloud-Based Test System is as defined in Serapis Lot 4 Task AII36
- Access to Serapis Lot 4 Task AII46 - IBSA Candidate System Pre-Production
- Source Software Code for IBSA
- Deployment and configuration documentation from previous IBSA tasks
- Access to IBSA source code management environment (Bitbucket)
- Dstl to attend Task related events.

QUALITY STANDARDS

SECURITY CLASSIFICATION OF THE WORK *(A Security Aspects Letter (SAL) will be required for each Task above Official-Sensitive, Quotes are covered by the Framework SAL)*

The highest classification of this SOR

OFFICIAL ☒   OFFICIAL-SENSITIVE ☐   SECRET ☐   TOP SECRET ☐   STRAP ☐   SAP ☐

The highest expected classification of the work carried out by the contractor

OFFICIAL ☐   OFFICIAL-SENSITIVE ☐   SECRET ☒   TOP SECRET ☐   STRAP ☐   SAP ☐

The highest expected classification of Deliverables/Output

OFFICIAL ☐   OFFICIAL-SENSITIVE ☐   SECRET ☒   TOP SECRET ☐   STRAP ☐   SAP ☐

SAL Attached ☐

TASK CYBER RISK ASSESSMENT. *(In accordance with DEF STAN 05-138 and the Risk Assessment Workflow)*

Cyber Risk Level	Very low	Risk Assessment Reference	

ADDITIONAL TERMS AND CONDITIONS APPLICABLE TO THIS CONTRACT

LOT 4 DSTL/AGR/SERAPIS/AII/01

Tasking Form Part 2: *(To be completed by the Lot Lead)*

To: The Authority FAO: Tel:	**From:** The Lot Lead

Proposal Reference   **Serapis Proposal AII56 IBSA@CWIX v1**   **(attached)**

Delivery of the requirement:

The proposal shall include, but not be limited to:

- A full technical proposal that meets the individual activities that are detailed in Statement of Requirements (Part 1 to Tasking Form).
- Breakdown of Deliverables and Interim Payments (Milestone/stage) due dates.
- A work breakdown structure/project plan with key dates and Deliverables identified including required delivery dates for Government Furnished Assets.
- A clear identification of Dependencies, Assumptions, Risks and Exclusions which underpin your Technical Proposal.
- Sub-Contractors Personnel Particulars Research Worker Form and security clearances (if applicable)

PRICE BREAKDOWN

A Firm Price Quotation of £424,653.28 (Four Hundred and Twenty Four Thousand Six Hundred and Fifty Three Pounds Twenty Eight Pence) ex VAT, is submitted for CORE Task AII56 and broken down as shown in the tables below.

A further Firm Price Quotation of £102,959.75 (One Hundred and Two Thousand Nine Hundred and Fifty Nine Pounds Seventy Five Pence) ex VAT, is submitted for OPTIONAL Task AII56 and broken down as shown in the tables below.

COMMERCIAL

As per the Serapis Limitation of Liability Discussion Paper Agreement, this task will fall under the band of a cap on liabilities of £1 Million for the core work, and if the optional work is taken up this will increase to a maximum total of £2 Million.

For the avoidance of doubt the handling and transfer of ITAR material, EAR or any other type of US proprietary material is excluded from this proposal.

Total Proposal Price in £	£424,653.28 (CORE) £102,959.75 (OPTION)	(ex VAT)
Start Date:	ASAP	**End Date:**	**31/07/21 CORE** **31/03/22 OPTION**
Lot Leads Representative	Name	[REDACTED-PERSONAL INFORMATION]
	Tel	[REDACTED-PERSONAL INFORMATION]

	Email	[REDACTED-PERSONAL INFORMATION]
	Date	21st April 2021
Position in Company	Assistant Commercial Manager	
Signature	[REDACTED-PERSONAL INFORMATION]	

[PRICING TABLES REDACTED IN ENTIRETY-COMMERCIAL INTERESTS]

[SUB CONTRACTOR PRICING TABLES REDACTED IN ENTIRETY-COMMERCIAL INTERESTS]

[SUB CONTRACTOR PRICING TABLES REDACTED IN ENTIRETY-COMMERCIAL INTERESTS]

[WORK PACKAGE BREAKDOWN TABLES REDACTED IN ENTIRETY-COMMERCIAL INTERESTS]

[SUB CONTRACTOR WORK PACKAGE TABLES REDACTED IN ENTIRETY-COMMERCIAL INTERESTS]

[T&S PRICING TABLES REDACTED IN ENTIRETY-COMMERCIAL INTERESTS]

[MILESTONE PRICING TABLES REDACTED IN ENTIRETY-COMMERCIAL INTERESTS]

TOTAL – Core Price					£424,653.28			

[OPTION MILESTONE PRICING TABLES REDACTED IN ENTIRETY-COMMERCIAL INTERESTS]

TOTAL - Options					£102,959.75			

Tasking Form Part 3:

1. Offer of Contract: *(to be completed by the Authority's Commercial Officer or Contract Manager and copied to the Authority's Project Manager)*		
Authority's Commercial Officer	Name	[REDACTED-PERSONAL INFORMATION]
	Tel	[REDACTED-PERSONAL INFORMATION]
	Email	[REDACTED-PERSONAL INFORMATION]
	Date	30/04/21
Requisition Number		R1000162521
Contractor's Proposal Number		Serapis Proposal IBSA@CWIX21v1.2
Purchase Order Number		DSTLX-1000158872
Signature		[REDACTED-PERSONAL INFORMATION]
Please Note: Task authorisation to be issued by the Authority's Commercial Officer or Contract Manager. Any work carried out prior to authorisation is at the Contractor's own risk.		