703088454 SC2 Schedule 2 Annex A



MINISTRY OF DEFENCE

THE PROVISION OF CLOSE AIR SUPPORT AND INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE EMULATION FOR COLLECTIVE TRAINING GROUP (Project Valkyrie)

STATEMENT OF REQUIREMENTS

(SOR)

Version 1.1

Dated: 10 May 2023

UNCONTROLLED WHEN PRINTED

HQ Collective Training Group

Building 9

Waterloo Lines

Warminster

Wiltshire

BA12 0DJ

Skype: +44 (0)300 161 7075

CONTENTS

Part	Торіс	Page
1	General Description	2
	Background	2
	Single Statement of User Need (SSUN)	2
	Requirement	2
	Security	5
	Project Management	6
	Risk	7
2	Key Service Requirements (KSR)	9
3	Service Requirements (SR)	12
4	Reference Documents	30
5	Glossary	31
6	GFX support provided by the Authority.	A-1

PART 1 – GENERAL DESCRIPTION

Background

1. Close Air Support and Intelligence, Surveillance, and Reconnaissance (CAS/ISR) emulation on collective training exercises enables Air Land Integration¹ (ALI) training to occur. ALI forms part of the mandatory Collective Training Objectives (CTOs) that Field Army units are validated or certified against on collective training exercises in order to be assessed as capable of holding readiness or deploying on operations. [REDACTED]. CTG will require CAS/ISR emulation on concurrent collective training exercises held in different locations or continents at the same time.

Single Statement of User Need

2. The requirement is for a manned air platform or platforms and aircrew capable of operating to Visual Flight Rules (VFR) and Instrument Flight Rules (IFR) by day or night whilst performing CAS/ISR tasks, to emulate existing and future military manned & unmanned capabilities, in support of exercising troops on CTG exercises.

Requirement

3. The general scope of the contract requires a Supplier who is able to emulate UK and other Nations' CAS and ISR platforms, aircrew tactics and procedures for collective training exercises in the UK, Kenya, Germany and other potential expeditionary locations. The main areas of requirement are detailed below, in greater depth in Part 2 (Key Service Requirements) and in full in Part 3 (Service Requirements).

a. The Supplier is to operate in accordance with current policy governing CAS, ISR, Battlespace Management (BM) and Joint Fires Integration (JFI).

b. The Supplier is required to emulate voice procedure and tactics for NATO operated CAS and ISR platforms [REDACTED].

c. The Supplier must be able to handle, manage, store and safeguard UK military cryptographic material. Furthermore, the Supplier will be required to have intrinsic knowledge of UK aircraft capabilities and Tactics Techniques and Procedures (TTPs) which will fall under UK SECRET classification. Therefore, the Suppliers who will perform these duties must, currently or before the start of the contract, be vetted to UK SECRET. [REDACTED].

d. The Supplier is to accurately simulate weapon delivery profiles for air-surface guided (missiles/bombs) and unguided weapons.

e. The Supplier is required to maintain a working knowledge of other NATO air-surface weapons.

f. The Supplier is to provide a Line Of Sight (LOS) 'Detect, Recognise, Identify and Target' capability via Full Motion Video (FMV) with Joint Terminal Attack Controllers (JTACs) via means compatible with in-service FMV transceiver systems [REDACTED]. Downlinked FMV must be viewable on the full range of in-Service FMV receivers. Uplinked imagery must be viewable in the cockpit by the pilot and/or sensor operator. The contractor is to provide up to 5 x Remote Viewing Terminals (RVT), robust enough to be used in the field by deployed JTACs and capable of receiving HD colour FMV downlink/picture from the contract CAS/ISR aircraft. It is expected that the 5 x RVTS will be used as follows:

¹ According to JDP 0-30 Air and Space Power, Air Land Integration (ALI) maximises the combat power created by coordinating and synchronising complementary capabilities from the air and land domains.

- 1 x HICON/EXCON (located with the GLO)
- 1 x BGHQ (TACP)
- 3 x Deployed FST JTACs

Note: [REDACTED].

g. The BG TACP should bring their own RVTs, so the contract ones may not be routinely used during exercises, although it is expected that they will be employed for resilience where required.

h. The Supplier will be required to operate DaCAS systems and tactics in accordance with the latest version of the Variable Message Format (VMF) Documentation Set (VDS). The pilot and/or sensor operator must be able to establish and maintain a bi-directional VMF datalink with the JTAC and view, acknowledge and transmit digital messages accordingly. The Authority will provide ground based DaCAS systems for JTACs to use, [REDACTED].

i. The Supplier is to adhere to Joint Air Liaison Organisation (JALO) accreditation procedures (accreditation takes place after contract award). The Authority will facilitate accreditation between JALO and the Supplier. The Supplier shall attend a JALO STANEVAL accreditation event and demonstrate they are able to achieve accreditation within 6 months of contract award. If JALO require accreditation, flying hours will be funded as part of the contract cost.

j. The Supplier must have a thorough working knowledge of CAS and ISR requesting and reporting formats and mission briefs.

k. The Supplier must have a thorough working knowledge of and apply UK Air Command and Control (C2) tactics and procedures.

I. The Supplier will be required to operate with and use Defence generated cryptographic material.

m. The Supplier is to provide a Ground Liaison Officer (GLO) to any unit/location being supported by the Supplier. Additional functions (not necessarily delivered by the GLO) include Crypto Custodian, Security Officer and Flight Safety Officer to support the management of contract delivery. For the avoidance of doubt, the Authority does not expect these to be full time roles but ad hoc functions for the GLO or other Supplier staff.

n. The Supplier must contribute to the continuous improvement of exercise design and conduct.

o. The Supplier is required to comply with National Civil Aviation Authority (CAA) regulations including possession of current certificates of aircraft registration, airworthiness, and insurance.

p. The Supplier must operate a manned fixed-wing aircraft capable of at least 3 hours endurance on station, excluding transit to and from the respective training area. All aircraft and systems maintenance shall be scheduled outside of tasking periods.

q. The Supplier will be responsible for arranging all permissions and all clearances to operate in the UK and overseas, and for arranging use of all airfields and all airfield services required.

r. The Supplier and its equipment must be able to operate across the range of temperatures in the areas where the service will be delivered. (Approximately -10°Cc to +40°C, taking into account extremes in likely exercise locations). Equipment must also be capable of operating in demanding field conditions (wet, cold, dusty, hot, muddy etc).

s. When overseas, the chosen Supplier shall deliver the contract within the terms of Defence Cooperation Agreements (DCAs) or Memorandum Of Understandings (MOUs) between the UK Government or Ministry of Defence and the host nation equivalents.

t. The Supplier shall deliver the contract with appropriately qualified and accredited personnel.

Security

4. In accordance with JSPs 440 and 604 - MOD ICT Accreditation policy, the Supplier's DaCAS and voice comms systems will be security accredited by CyDR or the accreditation authority may be delegated to the Army Cyber Counter-Intelligence and Security Branch.

a. In accordance with the Defence Cyber Protection Partnership, the contract's cyber profile will be considered 'Low'.

b. All classified information (incl crypto) will be returned to the Authority or destroyed at the end of the contract. Destruction will be conducted in accordance with UK Government policy and advice shall be sought from CyDR Crypt-key (destruction of information must not take place without first confirming permission with the Authority).

c. Use of Crypto in the UK. The Supplier's crypto custodian shall be issued a key fill device prior to each exercise for which it is required. The Supplier will need to make provisions to collect/return crypto keys from MOD Corsham prior to and at the end of relevant exercises.

d. Use of Crypto overseas. The Authority will arrange for crypto keys and key fill devices to be available overseas at the respective CTE crypto cell. [REDACTED]. Possession, safeguarding and use of crypto will be in accordance with MoD policy.

e. Security documentation (Risk Management Accreditation Documents) shall be produced by the Supplier's Security Officer in conjunction with the MoD Suppliers.

f. The Supplier shall not reproduce any documents or data given or loaned to them by the Authority.

g. [REDACTED].

h. Any Supplier equipment and/or systems which require compatibility with UK Military cryptographic material must be accredited by the Authority prior to Contract Award.

i. If a Subcontractor is to be used, they must be fully compliant with the requirements in this document and meet DCPP requirement.

j. CONDO regulations are not applicable as the training is not classed as Deployed Operations.

Project Management

5. The Supplier shall have a dedicated suitably qualified and experienced Project Manager (PM) who shall be the focal point for all project management activities throughout the contract and act as the single point of contact for the Authority.

6. The Supplier shall plan for and provide quarterly Project Management Reviews (PMRs) as defined in the following sections. PMRs shall be conducted quarterly and shall provide the forum for all project briefings. The Supplier shall make provision for conducting half of the PMRs at the Authority's facilities and half at the Supplier's facility. The Authority and Supplier shall co-chair each meeting or working group and determine the attendees / stakeholders as required.

7. The PMR shall confirm project progress is in accordance with the contract, it shall cover, as a minimum, the following subject areas in each quarterly progress meeting:

- a. Contract progress
- b. Contract performance
- c. Schedule status
- d. Status of deliverables
- e. Future plans/ work scheduled
- f. Risks, issues and opportunities management
- g. Finance payments.
- h. Technical maturity levels
- i. 3-month look ahead on detailed Supplier activities

8. The Supplier shall prepare, provide and maintain a Meetings Schedule which, as a minimum, includes the following subject areas:

- a. PMRs
- b. Project Safety Panel meetings
- c. Project Security Review meetings
- d. Ad Hoc meetings as directed by the Authority.

9. The Supplier shall ensure all written deliverables are produced in either MS Word, Excel, or PDF format:

a. Compliant with JSP440 Security Regulations and Project Security Aspects Letter (SAL)

b. Sent via email to the Authority's Project Manager and Technical Subject Matter Experts using the RLI and/or MODNET Networks where necessary.

Risk

10. The Supplier shall produce and maintain a Risk Register. Risks shall be identified and managed throughout the course of the contract. Risks may include but shall not be limited to

technology (including system / technology maturity), finance, project management, safety, integrated logistic support, integration, and interoperability.

- 11. The Risk Register shall include the following data:
 - a. Risk Serial. Unique alpha numerical reference.
 - b. Risk Status. Status of the risk open/closed/approved/draft etc. with any change in status justified.
 - c. Type. Type of the serial e.g. issue/opportunity/risk.
 - d. Risk Title. Short form title usually to address the subject matter.
 - e. Risk Description. Cause/Event/Consequence should each be explained by Because of.../there is a risk that.../Leading to... respectively.
 - f. Risk Context. Any background information that serves to reinforce the description and ensure the risk is fully understood by the reader.
 - g. Risk Category. Subject that the risk relates to e.g. safety/security/through life support/systems engineering etc.
 - h. Risk Owner. The individual having the authority and resources to enable effective analysis and management of the risk.
 - i. Trigger and Expiry Dates. The potential timeframe within, which the risk could impact the project.
 - j. Probability. Likelihood of risk occurring, expressed as a percentage figure and shall be accompanied by a justification statement, which details all assumptions that underpin the probability value.
 - k. Current Impact. On time, cost and quality/performance and shall be accompanied by justification statements, which detail all assumptions that underpin the impact values.
 - I. Target Impact. On time, cost and quality/performance and shall be accompanied by justification statements, which detail all assumptions that underpin the impact values.
 - m. Priority Level. Overall risk score (typically automatically calculated by the risk management tool).
 - n. Mitigation. Each risk shall have a comprehensive mitigation plan and fall-back plan. The mitigation plan shall identify the actions to be taken in advance that will reduce the probability of occurrence and / or reduce the severity of the impact if a risk were to occur. The fall-back plan shall identify the alternative strategy that will be undertaken following occurrence of the risk.
 - o. Details of the mitigation action(s) including:
 - i. Owner (can be different to the risk owner).
 - ii. Strategy (treat/terminate/tolerate/transfer/take opportunity).
 - iii. Category (action/control/fallback).
 - iv. Deadline for completion.
 - v. Predicted impacts of actions.
 - vi. Description of work.

Annexes:

A. GFX support provided by the Authority.

	PART 2 – KEY SERVICE REQUIREMENTS		
Req	Requirement	Detail	
1.1	The Supplier shall provide an aerial ISR and CAS emulation service.	Support exercises in: a. UK ([REDACTED]) b. Kenya ([REDACTED]) c. Germany ([REDACTED]) d. Expeditionary basis ([REDACTED])	
		For up to 20 days deployment and 40 flying hrs per exercise, for up to 6hrs airborne on task (excl transits) in a 24hr window. The 6hrs on task should be split across a maximum of 3x sorties in that 24hr window.	
		In up to 3 locations concurrently (a combination of any of UK, Kenya, Germany or worldwide).	
		Able to emulate representative weapon engagements, sensor profiles and voice procedure in accordance with extant doctrine and TTPs for respective in-service UK and NATO platforms.	
1.2	The Supplier shall deliver the service in a range of meteorological conditions.	The ability to safely deliver the service within VMC and IMC meteorological conditions as defined by the CAA and within the Standardised European Rules of the Air.	
1.3	The Supplier shall maintain real-time voice and data communications.	The aircraft shall be equipped with a minimum of 1 x UHF radios and 1 VHF radio. The UHF radios shall be able to communicate with military UHF systems used by JTACs, by voice and data, and shall be dedicated for this use. The radio transmissions shall be received by the battlegroup HQ, sub-units, LOs and safety personnel within 20 nautical miles of the training area.	
		[REDACTED].	

1.4	The Supplier shall provide a dry CAS emulation service in the live-environment.	Emulate dry CAS missions through the continued application of correct voice procedure, cadence, battlespace management procedures, joint fires integration procedures, and aircraft and weapon TTPs as outlined in the latest versions of ATP 3.3.2.1(c) and J-Pub 3-09.3.
1.5	The Supplier shall provide an FMV capability.	Able to emulate the FMV feed from current RAF and NATO airborne sensors on in-service platforms using an aircraft mounted FMV sensor and datalink transmitter ([REDACTED]). To include but not limited to: a. Litening III. b. Litening V (digital and analogue). c. Sniper. d. MX15 HDi. e. MTS-A.
1.6	<i>Overseas.</i> The Supplier shall provide their personnel with equipment and support to perform their duties.	To include but not limited to: a. Clothing (suitable for both extreme cold and extreme hot temps depending on locations). b. Stationery. c. Computing and printing. d. Mobile open-source internet. e. Transport (and fuel) (4x4 capability). f. Accommodation/sleeping facilities. g. Feeding. h. Washing and laundry facilities. i. Access to medical support including enabling medical activity (e.g. inoculations and anti-malarial medication). j. All necessary insurance. *See annex A for GFX support provided specifically to Supplier LOs on overseas exercises

1.7	The Supplier shall provide their own air-to-ground communication equipment.	Equipment for the Supplier's GLO (located in HICON/EXCON) shall include at least: a. Mast. b. Antennae. c. Coax cables. d. Radio (plain text). e. Means of viewing FMV datalink. f. Ancillary equipment. g. Means of communicating with the aircrew by data/digital messaging. With sufficient spares to ensure the LO can operate in the face of equipment failure. Air to Ground communications between the LO and the Supplier's aircraft should function within 20NM of the training area.
1.8	The aircraft sensors, FMV and DaCAS datalink equipment and aircrew shall be capable of achieving JALO accreditation.	Accreditation to include but not be limited to: a. Equipment suitability checks (aircraft, radios, FMV and DaCAS systems etc). b. Written examination e.g. knowledge of CAS etc. c. Practical assessment of ability to emulate CAS TTPs. within 6 months of contract award.

	PART 3 – SERVICE REQUIREMENTS			
Req No.	Requirement (WHAT)	Detail		
1.1	The Supplier shall ensure readiness.	Available for tasking with 8 weeks' notice.		
2.1	The Supplier shall deliver the service with a manned fixed- wing aircraft.	The aircraft shall be capable of operating up to 10,000ft AMSL for up to 6 hours on task (excluding transit). The aircraft should have a spare seat when flying simulated operational missions to enable ad-hoc familiarisation flights by military personnel.		
2.2	The Supplier shall enable secure voice and data communications.	UHF voice and data comms shall be capable of operating in selectable plain or cypher text modes using the following Defence generated encryption types: [REDACTED]		
3.1	The Supplier shall imitate in- service NATO CAS aircraft.	Maintain awareness of the latest TTPs of in-service UK, US, and NATO assets. To include but not limited to: a. BRITMIL unmanned air systems. b. Typhoon FGR4. c. Lightning II. d. F15E. e FA-18. f. F16. g. A10. h. AV8. i. Hawk. j. Rafale. k. AMX. I. JAS-39 Gripen. m. M2000.		
3.2	The Supplier shall be capable of emulating night CAS TTPs.	Aircrew equipped with NVDs which replicate what a FJ pilot would be able to see, and be able to see IR marks originating from the ground, created by JTACs using in-service IR pointers in VFR conditions.		
3.3	The Supplier shall be capable of conducting JTAC currency controls.	Aircraft and aircrew capable of conducting the types of Terminal Attack Control articulated in JSP 918 excluding 'live or trg ordnance'.		

		PART 3 – SERVICE REQUIREMENTS
Req No.	Requirement (WHAT)	Detail
4.1	The Supplier shall ensure the sensor providing FMV capability emulates in-service FMV sensors.	A sensor capable of viewing a 360° axis with image quality that mimics at least: a. Litening III. b. Litening V (digital and analogue). c. Sniper. d. MX15 HDi. e. MTS-A. The sensor shall have the fidelity to recognise people from 8000ft AGL. The sensor shall be able to operate EOTV, IR (black hot) and IR (white hot) with an ability to zoom in/out of at least wide, medium, medium-narrow and narrow fields of view in all imaging modes.
4.2	The Supplier shall ensure the FMV sensor applies overlaid metadata.	Synchronous overlay of metadata or embedded as Key Length Value data encoding standard (for digital links), to include but not limited to: a. Crosshairs (boresight). b. Sensor Position (in MGRS, BNG and Lat Long formats (cockpit-selectable)). c. Sensor Type. d. Sensor Focal Length. e. Date/Time Group. f. Crosshair position (in MGRS, BNG and Lat Long formats (cockpit-selectable)). g. Slant Range from Sensor to Target. h. North arrow. i. Terrain Elevation at Target Crosshair. j. KLV information [REDACTED]. k. [REDACTED] The metadata shown should be cockpit selectable to manage screen clutter.
4.3	The Supplier shall ensure the FMV datalink transmits the overload metadata.	The metadata shall be transmitted via the datalink and be capable of being received by user's video receiver and displayed on their viewing terminal.

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
4.4	The Supplier shall ensure the FMV datalink frequency is compatible with in-service video receivers and viewing terminals.	FMV datalink frequency to be compatible with receivers and terminals to include but not limited to: [REDACTED] By operating on the same analogue and digital frequency bands as the above listed systems, to include but not limited to: [REDACTED]	
4.5	The Supplier shall ensure the FMV datalink video format is compatible with in-service video receivers and viewing terminals.	FMV datalink video format to be compatible with: [REDACTED] By supporting video formats for: [REDACTED]	
4.6	The Supplier shall ensure the FMV datalink operates at the prescribed range.	The datalink transceiver shall operate out to a minimum 20NM line of sight.	
4.7	The Supplier shall ensure the FMV datalink can be secured.	Digital FMV feeds secured by crypto and fill devices collected from a certified MOD account holder, supplied by the MOD. [REDACTED]	

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
4.9	The Supplier shall provide FMV video receivers and viewing terminals.	A video receiver and viewing terminal which is capable of receiving FMV downlink from the Supplier's aircraft and sensor, as well as in-service sensors to include, but not limited to those listed in Req No 4.1 (operating on C, Ku, S & L bands as described in Req No 4.5).	
		1x screen capable of receiving the FMV datalink located with each sub-unit (up to 3 per exercise).	
		1x screen capable of receiving the FMV datalink located at the battle group HQ.	
		1x screen capable of receiving the datalink located in HICON.	
		For at least 2 exercises concurrently, if requested in advance by the Authority (with at least 2 weeks' notice).	
4.9	The Supplier shall provide equipment to test video receiver and remote viewing	1 set of test equipment held by the Supplier's LO during each exercise, to confirm video receivers and viewing terminals are fully functional.	
	terminals.	Test equipment shall transmit a local C, Ku, S & L band signal as described in Req No 4.5.	
4.10	The Supplier shall provide video clips from the FMV	Media emailed to CTE within 30mins of the end of the sortie.	
	feed.	A Supplier-provided DVD shall be available as a secondary means of transfer.	
		Media compatible with Microsoft Office 2016 and be at least High Definition (720p) quality.	
4.11	The Supplier shall provide FMV screenshots.	Single-page slides with FMV screenshots, emailed to CTE within 30mins of the end of the sortie.	
		A Supplier-provided DVD shall be available as a secondary means of transfer.	
		Media compatible with Microsoft Office 2016 and be at least High Definition (720p) quality.	
5.1	The Supplier shall provide a DaCAS service via generation of UK Variable	A DaCAS air system that can exchange and process UK VMF message transactions and Digital Still Imagery [REDACTED]	
	Message Format (VMF) message sets.	Sent and received via UHF data.	

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
5.2	The Supplier shall enable exchange of Digital Still Imagery.	A DaCAS air system that can exchange, and process Digital Still Imagery derived from FMV, [REDACTED]	
		Sent and received via OTIF data.	
5.3	The Supplier shall enable MAYDAY broadcasts.	[REDACTED]	
5.4	The Supplier shall enable CAS requests.	A DaCAS air system that can exchange, process and rebroadcast the following third party VMF messages, [REDACTED]	
5.5	The Supplier shall enable DaCAS in selectable plain and cypher text modes.	A DaCAS air system that can be encrypted when communicating with in-service ground systems, enabling secure 2-way UHF data messaging between JTACs and the Supplier's aircraft/aircrew to enable VMF DaCAS. Able to encrypt of UHF data communications using one of the following Defence generated crypto keys: [REDACTED] Incorporated computer/processing systems capable of processing SECRET data to National Cyber Security Centre approved full disc encryption standards. Selectable plain and cypher text modes. [REDACTED]	

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
6.1	<i>UK.</i> The Supplier shall provide their personnel with equipment and support to perform their duties.	To include but not limited to: a. Clothing (suitable for 4-season UK weather, indoor activity, and limited periods of outdoor/ hands-on work). b. Stationery. c. Computing and printing. d. Mobile open-source internet. e. Transport (and fuel). f. Accommodation/sleeping facilities. g. Feeding. h. Washing and laundry facilities. i. Access to medical support. j. All necessary insurance.	
6.2	The Supplier shall be responsible for issuing/recovering their own equipment.	Supplier owned equipment shall be issued to the Primary Training Audience (PTA) between 1-3 days prior to STARTEX (e.g. FMV remote viewing terminals). Equipment return must be done at a date and time in consultation with CTE staff after the exercise has ended. This should fall within a window of 1-2 days post ENDEX.	
6.3	The Supplier shall ensure equipment is suitable for demanding use in field conditions.	Video Receivers, FMV viewing terminals and all associated ancillaries. The equipment should not exceed a combined weight of 4kgs to enable easy carriage. They should be ruggedized and usable in all conditions.	
6.4	The Supplier shall ensure equipment operates on internal batteries.	Video Receivers and FMV viewing terminals. Able to operate for a minimum of 6 hours on internal batteries. Batteries should be rechargeable using 12v vehicle plugs and 240v 3-pin plugs. (internal batteries and charging cables provided by the Supplier).	
6.5	The Supplier shall ensure equipment is inter-operable with display screens.	FMV viewing terminals should have connectivity to enable them to be linked to a TV screen or computer monitor via an HDMI connector.	

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
6.6	The Supplier shall ensure equipment power cables can be used internationally.	Adapter plugs to allow use of power cables in whichever country the service is delivered.	
6.7	The contract shall ensure their equipment is insured.	Insurance to cover at least: All equipment owned by the Supplier (including, but not limited to): a. Aircraft. b. FMV systems. c. DaCAS systems. d. IT systems. e. Communication systems. For loss, damage or destruction.	
7.1	The aircraft voice comms and DaCAS systems shall be security accredited to use Defence generated cryptographic material.	Accreditation to include but not be limited to: a. Assurance of relevant equipment (including UHF voice/data radio suites and computer systems). b. Assurance of any relevant processes. c. Assurance of DaCAS system design/architecture.	
8.1	The Supplier shall provide qualified support staff.	Personnel shall be suitably qualified and experienced for their respective roles. Personnel shall be trained and qualified in accordance with any legal requirement associated with their role. To include, but not limited to: a. Engineering staff.	

PART 3 – SERVICE REQUIREMENTS			
Req No.	Requirement (WHAT)	Detail	
8.2	The Supplier shall provide experienced aircrew.	Pilots and sensor operators to have CAS experience (they must serve, or have served in the RAF, USAF, RCAF, RAAF or RNZAF as a pilot or WSO).	
		Experience must include knowledge of at least:	
		a. Airspace Control Measure Requests. b. ISR 8-Liners.	
		 c. Air Support Requests incl Joint Tactical Air-support Requests. d. Mission Reports. 	
		e. Defence Air Safety Occurrence Reports.	
		f. Common NATO aircraft sensors and weapons.	
		g. Battlespace management procedures.h. Joint fires integration procedures.	
		i. 9-Line CAS Briefs.	
8.3	The Supplier shall provide qualified aircrew.	To include pilots and sensor operators. Certified to operate the aircraft type in a range of meteorological conditions.	
		Aircrew with the appropriate ratings for VFR and IFR flying as defined by CAA and Standardised European Rules of the Air.	
8.4	The Supplier shall provide LOs.	Experience to include but not limited to:	
	105.	a. Employment in the UK military as an Air Land Integration practitioner (in a CAS, ISR or ASO role). b. ACMRs.	
		c. ISR 8-Liners.	
		d. ASRs incl JTARs. e. MISREPS.	
8.5	The Supplier shall ensure all	Written and oral to IELTS Level 8.	
	communications, written and verbal between the Authority		
	and Supplier are in English.		

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
8.6	The Supplier shall ensure all personnel are insured.	Insurance to include but not limited to: a. Medical care in the UK and overseas. b. Liability insurance in the UK and overseas.	
8.7	The Supplier shall provide crypto custodians.	Suitably qualified and authorised personnel to be responsible for the safeguarding, transport, use and return of crypto and key fill devices.	
9.1	The Supplier shall attend planning meetings.	The ability to conduct planning and briefing at up to and including UK SECRET level at meetings occurring in the UK. The ability to dial-in to meetings occurring overseas (at up to OFFICIAL level). Meetings to include but not limited to: a. Main planning conferences (one per exercise). b. Final planning conferences (one per exercise). c. Exercise writing weeks (one per exercise).	

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
9.2	The Supplier shall provide a pre-exercise brief to the PTA at the CTE prior to	A verbal brief delivered to key PTA staff (as decided by the PTA) between 1 - 3 days prior to STARTEX at the CTE.	
	STARTEX.	The brief should include but not limited to:	
		a. Aircraft and sensor capabilities. b. Aircrew competencies and experience.	
		c. Products available during the exercise (such as FMV screenshots).	
		d. JTAC trg benefits. e. Air Battlespace Management considerations.	
		The CTE staff will assist with identifying the correct time in the pre-exercise administration process to conduct the brief.	
		The brief can be at alternative location (such as the PTA's HQ location) if mutually agreed between the Authority, the PTA, the CTE and the Supplier.	
		Preparation of a capabilities briefing note to accompany CTE joining instructions available to the CTE (via Collective Training Group SO2 Air) 4 weeks prior to STARTEX.	
9.3	The Supplier shall provide written Post Exercise Reports (PXR).	A written PXR submitted by the Supplier to SO2 Air at Collective Training Group within 1 week (5 working days) of ENDEX.	
		To include but not limited to:	
		a. A summary of activity conducted.	
		 b. Issues that arose as a result of Supplier and/or user equipment failure. c. Safety concerns. 	
		d. Lessons Identified during the delivery of the service, which could applied on the next exercise. e. Technical and operational issues related to the use of FMV datalinks and DaCAS.	
9.4	The Supplier shall contribute to continuous-improvement processes.	To attend meetings in the UK or overseas as directed by the Authority (on an ad-hoc basis but with at least 4 weeks' notice).	
	piocesses.	To include but not limited to:	
		The development of exercise scenarios to enable up-to-date and realistic ALI training to be delivered.	

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
9.5	The Supplier shall provide an LO to manage service delivery on each exercise.	The LO is to be established at EXCON with all equipment operating 60 mins before sortie and 60 mins post sortie (to debrief on activity and coordinate next tasking).	
9.6	The Supplier shall provide a point of contact for liaison with the Authority.	Duties to include but not limited to: a. Arrange briefings, visits and meetings. b. Coordinate tasking requirements for each exercise. c. receiving information regarding forecasts of events and projected training activity.	
9.7	The Supplier shall provide a senior Manager for contract management.	To attend contract management meetings and act as liaison with the Authority. Contract management meetings to be conducted Quarterly. Location directed by the Authority. An empowered and service aware individual as the Contract Manager and be available to the Authority.	
9.8	The Supplier shall have a corporate identity.	All personnel to have common ID cards which can be identified by MoD security personnel. ID cards should include but not limited to: a. Passport-style photograph. b. Title, first and last name of holder. c. Title of company. d. Expiry date. e. Clearance/vetting level.	
9.9	The Supplier shall ensure personnel are available for update briefs.	Aircrew, sensor operators and LOs to be available, outside of tasking windows, to attend bi-annual unit visits for update briefs on weapon and sensor capabilities and TTPs. Briefs will be facilitated by the Authority and will require Supplier staff to have access to UK SECRET information.	
9.10	The Supplier shall provide a Security Officer.	A suitably qualified and experienced Security Officer capability to manage: a. The contactor's safeguarding and use of protectively marked material. b. Adherence to security policy and regulation to include but not limited to JSP440. c. The activity of the Supplier's crypto custodian(s). d. To attend Security Working Groups with the Authority, to be held on a periodic basis (bi-annually).	

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
9.11	The Supplier shall provide a Flight Safety Officer.	A suitably qualified and experienced Flight Safety Officer capability to manage at least: a. Safety culture. b. An Air Safety Management System. c. Liaison with the Authority on matters concerning air safety.	
10.1	The Supplier shall mitigate the risk of controlled flight into terrain (CFIT).	Compliance with the regulations of the UK Civil Aviation Authority (or host nation National Aviation Authority regulations if they are more restrictive).	
10.2	The Supplier shall mitigate the risk of mid-air collision (MAC).	Compliance with the regulations of the UK Civil Aviation Authority (or host nation National Aviation Authority regulations if they are more restrictive).	
10.3	The Supplier shall mitigate the risk of aircrew fatigue.	Compliance with the regulations of the UK Civil Aviation Authority (or host nation National Aviation Authority regulations if they are more restrictive).	
10.4	The Supplier shall operate in accordance with military training area safety instructions and orders.	To include but not limited to: a. Stanford Training Area. b. BATUS. c. BATUK. d. Salisbury Plain Training Area. e. Castlemartin Training Area f. Germany	
10.5	The Supplier shall provide security measures.	To include but not limited to protection of: a. Physical security of equipment (including escorting/guarding). b. Documents – hard copy. c. Documents – soft copy. d. Software. e. Cryptographic material. In accordance with MoD security policy. In the UK and overseas.	

PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail
10.6	The Supplier shall be able to transport UK / 5 EYES SECRET material.	In accordance with JSP440 policy. Physical security measures in place to protect classified information in transit, to include but not limited to: [REDACTED]
11.1	The Supplier shall be able to hold UK / 5 EYES SECRET material.	In accordance with JSP440 policy. Security measures in place to protect classified information. [REDACTED]
11.2	The Supplier shall be signatory to the Official Secrets Act.	All staff who interact with the contract and who are exposed to classified material or equipment shall sign the Official Secrets Act.
11.3	The Supplier must ensure all personnel are vetted.	All staff who interact with the contract to hold SC clearance and comply with national caveats (e.g. only vetted, UK personnel allowed access to UK Eyes Only material). Sub-Supplier vetting sponsored by the Supplier.
11.4	The Supplier shall be compliant with all rules, regulations and legislation in the UK and overseas.	To include but not limited to: a. Flying regulations. b. Insurance regulations. c. Health and safety regulations. d. Security regulations (including JSP440 leaflet 7). e. Domestic/civil law. f. Data protection regulations.
11.5	The Supplier shall ensure the aircraft operator possesses a valid AOC.	The aircraft operator shall hold a valid AOC from an EASA nation, Australia, New Zealand, Canada, the USA or UK (non-EASA). They must not be on the European banned list or from the Federal Aviation Authority's Category 2 list.

		PART 3 – SERVICE REQUIREMENTS
Req No.	Requirement (WHAT)	Detail
11.6	The Supplier shall be licenced by a country with accepted aviation safety standards.	The aircrafts certificates of airworthiness, registration and insurance must be from an EASA nation, Australia, New Zealand, Canada, or the USA. The Supplier's pilots must be qualified and licenced by an EASA nation, Australia, New Zealand, Canada, or the USA.
		Certificates and licences must not be from countries on the European banned list or from the Federal Aviation Authority's Category 2 list.
11.7	The Supplier shall be responsible for arranging all necessary operating permissions.	To include but not limited to permissions, rights and licences for: a. Operating FMV and DaCAS equipment in the UK and overseas. b. Flying in the UK and overseas including over-flight, airspace and airfield bookings. c. Electronic spectrum activity. d. Air to ground UHF communication activity. e. working overseas in host nations (Visas, work permits etc).
11.8	The Supplier shall provide documents to the Authority.	Upon request of the Authority. To include but not limited to copies of: a. Security vetting certificates. b. Risk assessments. c. Personnel qualification records. d. Proof of List X status. e. Security measures in place. f. Insurance certificates. g. Air Operators Certificates. h. Certificates of Airworthiness.
11.9	The Supplier shall be subject to regular security audits.	To include but not limited to: a. Storage and destruction of classified documents. b. Personnel vetting. c. Employment nationality checks. d. Storage and use of cryptographic material. e. Reporting of security incidents and concerns.

<u> </u>	.	PART 3 – SERVICE REQUIREMENTS
Req No.	Requirement (WHAT)	Detail
11.10	The Supplier shall provide iSMART compliant documentation.	Provision of Platform Requirement Specification (PRS) and Platform Implementation Difference Documents (PIDD) to enable comparison of capabilities with operational equipment by the Authority.
11.11	The Supplier shall maintain cyber assurance currency.	[REDACTED]
11.12	The Supplier shall provide security accreditation documentation.	[REDACTED]
12.1	The Supplier shall provide reports.	Provide the Authority with information to assist monitoring of Key Performance Indicators.
13.1	The Supplier shall provide a security plan.	 To include but not be limited to: a. The processes and procedures used by the Supplier to safeguard equipment, information and data (including crypto). b. The roles and responsibilities of key security personnel in the Supplier's organisation. c. Names and nationalities of key security personnel. d. Internal security audit procedures. e. Action plan in the event of losing SECRET and cryptographic material whilst it is in the custody of the Supplier.
13.2	The Supplier shall provide a risk management plan.	To include but not be limited to: a. List of the Supplier's operating risks. b. Mitigations to those risks where applicable.

	PART 3 – SERVICE REQUIREMENTS		
Req No.	Requirement (WHAT)	Detail	
13.3	The Supplier shall operate an Air Safety Management System (ASMS).	To include but not be limited to: a. Post-crash management plans. b. The roles and responsibilities of key safety personnel in the Supplier's organisation. c. Internal safety audit procedures. d. All compliances with legislation.	
13.4	The Supplier shall provide a Safety Plan.	To include but not be limited to: a. Safety Policy and Objectives. b. Safety Risk Management. c. Safety Assurance. d. Safety Promotion/Culture.	
13.5	The Supplier shall provide a Service Continuity Plan.	To include but not be limited to: a. Business Continuity and Data Recovery Plan. b. Recovery Data Objectives c. Recovery Point Objectives	

PART 4 – REFERENCE DOCUMENTS

- 1. The following reference documents apply to this Requirement Document:
 - a. JSP 918 Joint Terminal Attack Control Policy.
 - b. JSP 440 Defence Manual of Security v6.
 - c. NATO STANAG 3797.
 - d. JCAS AP MOA.

e. ATP 3.3.2.1C Tactics, Techniques and Procedures for Close Air Support and Air Interdiction.

- f. J-Pub 3-09.3.
- g. JDP 0-30.
- h. MAA Regulatory Article 1240(1).
- i. UK Govt Security Requirements for List X Contractors.
- j. UK / Kenya DCA.
- k. JFS ESC Digitally Aided Close Air Support TTPs (30 Oct 2012).
- I. US Joint Staff J6 Engineering Change Proposal #1, #3 and #6.
- m. MIL-STD-6017 (ITAR restricted, access through ISS Des Strat).
- n. SMPTE 336M-2007.
- o. DEF STAN 00-106 Issue 1.
- p. STANAG 4609 Edn 3.
- q. DEF STAN 05-138.
- r. JSP 490 Defence Cyber Security Operating Instructions v4.

PART 5 – GLOSSARY

AAR – After Action Review	ISTAR – Intelligence, Surveillance, Target Acquisition and Reconnaissance
AES – Advanced Encryption Standard	ITAR – International Traffic of Arms Regulations
AF – Adaptable Forces	JALO – Joint Air Land Organisation
AGL – Above Ground Level	JCRVT – Joint Common Remote Viewing Terminal
ALARP – As Low as Reasonably Possible	JFC – Joint Force Command
ALI – Air Land Integration	JFI – Joint Fires Integration
AMSL – Above Mean Sea Level	J-Pub – Joint Publication
AOC – Air Operators Certificate	JSP – Joint Service Publication
AP – Air Publication	JTAC – Joint Terminal Attack Controller
ASMP – Air Safety Management Plan	JTAR – Joint Tactical Air Request
ASMS – Air Safety Management System	KLV – Key length Value
ASO – Air Staff Officer	LAT LONG – Latitude Longitude
ASOC – Air Support Operations Centre	LI – Lesson Identified
ASR – Air Support Request	LO – Liaison Officer
ATP – Allied Tactical Publication	LOS/BLOS – (Beyond) Line of Sight
BATUK – British Army Training Unit Kenya	MAA – Military Aviation Authority
BATUS – British Army Training Unit Suffield	MAC – Mid Air Collision
BM – Battlespace Management	MALE – Medium Altitude Long Endurance
BNG – British National Grid	MEDEVAC – Medical Evacuation
BRITMIL – British Military	MGRS – Military Grid Reference System
C2 – Command and Control	MISREP – Mission Report
CAA – Civil Aviation Authority	MOA – Memorandum of Agreement
CAS – Close Air Support	MOD – Ministry of Defence
CFIT – Controlled Flight Into Terrain	MOU – Memorandum of Understanding
CIS – Command and Information Systems	NATO – North Atlantic Treaty Organisation
COMD – Commander	NM – Nautical Mile
COMMS – Communications	NTSC – North American Video Format
CTE – Collective Training Establishment	NVD – Night Viewing Device
DaCAS – Digitally Aided Close Air Support	OPFOR – Opposing Forces
DASOR – Defence Air Safety Occurrence Report	OM – Obsolescence Managed
DCA – Defence Cooperation Agreement	PAL – European and Asian Video Format
DEF STAN – Defence Standard	PIDDS – Platform Implementation Difference Document
DII – Defence IT system	PM – Protective Marking
DVD – Digital Versatile Disk	POC – Point of Contact
DV – Developed Vetting	PRS – Platform Requirement Specification
EASA – European Aviation Safety Agency	PTA – Primary Training Audience
ENDEX – End of Exercise	PXR – Post Exercise Report
ECP – Engineering Change Proposal	RA – Regulatory Article
EOTV – Electro-Optical Television	RAF – Royal Air Force
EXCON – Exercise Control	RAAF – Royal Australian Air Force

ETH Field Training Linit	DCAE - Devel Considion Air Force
FTU – Field Training Unit	RCAF – Royal Canadian Air Force
FMV – Full Motion Video	RNZAF – Royal New Zealand Air Force
GFX – Government Funded Equipment	RF – Reactive Forces
HICON – Higher HQ Control	ROVER – Remote Operations Video
	Enhanced Receiver
HQ – Headquarters	Rx – Receive
HQ LF – Headquarter Land Forces	SATCOM – Satellite Communication
IAW – In accordance with	SC – Security Checked
IELTS – International English Language Test System	SME – Subject Matter Expert
IFR – Instrument Flight Rules	SMPTE – Society of Motion Picture and
	Television Engineers
IMC – Instrument Meteorological Conditions	SRD – Service Requirement Document
IOE – Interoperability Evaluation	STANAG – Standardisation Agreement
STARTEX – Start of Exercise	
TACP – Tactical Air Control Party	
Trg – Training	
IR – Infra Red	
TTP – Tactics, Techniques and Procedures	
Tx – Transmit	
IT – Information Technology	
UHF – Ultra High Frequency	
UK – United Kingdom	
UKEO – United Kingdom Eyes Only	
USAF – United States Air Force	
VDS – VMF Documentation Set	
VFR – Visual Flight Rules	
VHF – Very High Frequency	
VMC – Visual Meteorological Conditions	
VMF – Variable Message Format	
WSO – Weapon Systems Officer	
US – United States	

Annex A to

Close Air Support and Intelligence, Surveillance and Reconnaissance Emulation for CTG Service Requirement Document

GFX SUPPORT PROVIDED BY THE AUTHORITY

- 1. The Authority will provide the following resources and support to the contractor:
 - a. Training area orders, and updates to those orders as they are published.
- b. For the Supplier Liaison Officers when they are embedded with EXCON during overseas training:
 - Campcot bed (not sleeping bags or bedding).
 - Accommodation (either a 12'x24' Field Tent or a portacabin room).
 - Rations (3x daily meals from field kitchen).
 - Communal toilet and washing facilities.
 - Access to communal laundry facilities.
 - Desk space.
 - Power for contractor computing/printers.
 - Access to basic medical treatment via a military medic located at EXCON.
- c. For the contractor's Liaison Officers when they are embedded with EXCON during overseas training in Kenya:
 - Campcot bed (not sleeping bags or bedding).
 - Accommodation (either a 12'x12' or 12'x24' Field Tent, or a portacabin room).
 - Rations and drinking water (3x daily meals from field kitchen or military ration pack).
 - Communal toilet and washing facilities.
 - Desk space in EXCON.
 - Power for contractor computing/printers.
 - Access to basic medical treatment via a military medic.
 - Transport to substantial medical treatment via medical evacuation to an established hospital. (The contractor will require their own medical insurance).

d. The UK VMF Documentation Set (v3.1 + Addendum), US Joint Staff J6 Engineering Change Proposal Message Sets, and access to MIL STD 6017 will be provided by ISS Des Strat.

e. Cryptographic key material and key fill devices will be provided by the Authority.

f. Aircraft and weapons tactics manuals will be provided by the Authority during arranged visits to operational units in the UK.