Flight Simulation and Synthetic Trainers (FsAST PT)

Scope Part 1

For The
Royal Air Force Centre of Aviation Medicine (RAF CAM) Relocation Project

Scope Document for Contract 701577386

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Scope Documents

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SRD Annex B - 20220518 RAF CAM CIS Spec Parts A and B.

Document 3 Equipment Catalogue. Document redacted in full - Military sensitive technical information

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Reference Documents

Reference 1 Test And Evaluation Plan. Document redacted in full - Military sensitive technical information

Reference 2 FsAST Safety and Environmental Systems. Document redacted in full - Military sensitive technical information

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Introduction

1. Purpose

1.1. This Scope document sets out the specification for the provision of the Royal Air Force Centre of Aviation Medicine (RAF CAM) Relocation Project under Contract number 701577386.
1.2. For avoidance of doubt the Authority is the Client under the Part 1 Contact and the Contractor is the *Contractor* under the Part 1 Contract.
1.3. Both parties are to confirm that the Scope is a Contract document at paragraph 14**.**

2. Background

2.1. The RAF CAM shall re-locate from RAF Henlow to RAF Cranwell on the site specified in the Pre-Construction Information Pack (PCIP) Document 1 to the Scope.

2.2. RAF CAM is currently based at RAF Henlow in Bedfordshire. On the 6th of September 2016 it was announced via a Written Ministerial Statement (HCWS133), that RAF Henlow would close by the end of Parliament 2020, and this was subsequently confirmed with the publication of the Better Defence Estate Strategy (BDES) in November 2016.

2.3. The new RAF CAM facility will provide a training and testing capability for the Ministry of Defence that satisfies current and known future requirements.

3. Stage 1 Early Contractor Involvement

3.1. Along with the below outlined system milestones to deliver Early Contractor Involvement, certain Data Item Definitions (DIDs) are also required from the Contractor. The DIDs required, along with the information required, are outlined in the Contract Data Deliverables within Document 6 of the Scope.

3.2. The Authority shall have 60 Business Days (or other such timeframe as may be mutually agreed) to review the Final plans and provide comments back for consideration. Following the Authority's review, the Contractor shall make any updates to the plans where reasonable to do so, within 20 Business Days (or other such timeframe as may be mutually agreed).

3.3. Information Management System (IMS); the Contractor shall provide an on-line document storage system, which the Contractor, Authority and Authority representatives have live access to maintain the project library. Version control of the IMS shall be managed mutually by an appointed Authority representative and Contractor representative. For record keeping access to the system shall be required for 12 years from Contract Award.

3.4. The Contractor shall provide a list of key personnel involved in this Contract in accordance with DID 041 and identify authorised signatories that shall be required, this document is to be maintained throughout the Contract.

3.5. Section 13 outlines the requirement for meetings and liaison between the Contractor and the Authority throughout the length of the Contract.

3.6. Table 1 outlines the System milestones to be delivered during this part:

System Milestone	Expected Deliverables	Delivery Date

RIBA Stage 2 – Architectural concept closure approved	• Approval of the Stage Report by the Authority.	
RIBA Stage 3 – Spatial Coordination closure approved.	• Approval of the Stage Report by the Authority.	
Structural Engineering certificate sign-off.	• Demonstration that the Contractor has achieved the BRCS C2 Structural Design Compliance Certificate and the Authority has confirmed receipt.	
Preliminary Design Review (PDR) completion	• Authority confirm that the evidence presented in accordance with DID-021 (PDR) is of sufficient maturity for the Contractor to proceed.	

Table 1 – Early Contractor Involvement

4. Stage 2 Detailed design and build of RAF CAM equipment & infrastructure

4.1. Table 2 below outlines the System milestones to be delivered during the detailed design and build of RAF CAM Relocation Project:

System Milestone	**Expected Deliverable/s**	**Delivery Date**
Critical Design Review (CDR)	• Authority confirm that the evidence presented in accordance with DID 022 (CDR) is of sufficient maturity for the Contractor to proceed.	
RIBA Stage 4 – Technical Design	• Approval of the Stage Report by the Authority.	
Test Readiness Review (TRR)	• Authority confirm that the evidence presented in accordance with DID 031 (TRR) is of sufficient maturity for the Contractor to proceed.	
Site Acceptance Testing (SAT) completed	• Authority acceptance of Design Certificates in accordance with DID 023 (CofD). • Authority acceptance that Contractor provided training for the equipment and infrastructure is complete.	
Completion	• Authority acceptance of the Signed Certificate of Design. • Authority acceptance of the Logistics Demonstration in accordance with DID 038 (ILSP). • Authority approves completion of RIBA Stage 5 • Completion Certificate (Practical Completion as defined by RIBA) issued by the Project Manager.	November 2025

Final Completion	• Authority approves completion of RIBA Stage 6 • Defects Certificate (Final Certificate as defined by RIBA) issued by the Supervisor.	November 2026

Table 2 – Design and build milestones

5. Meetings

5.1. Section 13 outlines the requirement for meetings and liaison between the Contractor and the Authority throughout the length of the Contract.

5.2. The Contactor shall facilitate Authority chaired meetings as defined within section 13, including the provision of secretarial duties to include the following:

1. send out calling notice to all attendees.
2. produce and distribute the agenda.
3. draft minutes to be produced within 10 Business Days of the meeting for comment by all attendees.
4. final minutes to be distributed within 5 Business Days of agreement of the final version with the Authority.

6. Supporting Plans and Documentation.

6.1. All plans and documents to be prepared and maintained by the Contractor in support of, and for the duration of, the Contract are listed in (Contract Data Deliverables Document 6 of the Scope).

6.2. The Authority shall have 60 Business Days (or other such timeframe as may be mutually agreed) to review the Contractor's final plans and provide comments back for consideration. Following the Authority's review, the Contractor shall make any updates to the plans where reasonable to do so, within 20 Business Days (or other such timeframe as may be mutually agreed).

6.3. The Contractor shall review and update all plans as appropriate to the relevant document but must be done annually as a minimum.

6.4. Information Management System (IMS); the Contractor shall provide an on-line document storage system, which the Contractor, Authority and Authority representatives have live access to maintain the project library. Version control of the IMS shall be managed mutually by an appointed Authority representative and Contractor representative. For record keeping access to the system shall be required for 12 years after Final Completion.

6.5. The Contractor shall update Document 3, Equipment Catalogue to reflect the equipment delivered through this Contract.

6.6. The Contractor shall provide a list of key personnel involved in this Contract in accordance with DID 041 and identify authorised signatories that shall be required, this document is to be maintained throughout the Contract.

The System Equipment & Infrastructure Procurement

7. The Authority requires the capability to deliver expertise and high-quality training in aviation, occupational and environmental medicine, and related sciences, in order to support current and future air and space operations by reducing associated aviation medicine operating risks to life to As Low as Reasonably Practicable (ALARP) and tolerable.

7.1. The Contractor is to provide training on the infrastructure and equipment before Site Acceptance.

Infrastructure.

7.2. This requirement specification section identifies management requirements necessary for the successful implementation of the RAF CAM Relocation project infrastructure and supports the implementation of the project technical requirements captured in the System Requirements Document (SRD) at Document 2 to the Scope.

7.3. The Contractor shall design and build the required infrastructure to satisfy all the requirements articulated in the SRD at Document 2 to the Scope, the Pre-Construction Information Pack (PCIP) at Document 1 to the Scope, and all other relevant requirements and restrictions stated within the Contract.

7.3.1. The infrastructure shall include the building, utilities and all required communications, physical connections, associated furnishings and associated landscaping, roads, and parking (including supporting Electric Vehicle (EV) connections). Maps showing the locations of the utilities and services are contained within Document 1 to the Scope.

7.3.2. The Contractor shall be responsible for the connection of utilities for the equipment, the domestic supply for the facility, and the surrounding associated infrastructure requirements e.g. exterior lighting, EV charge points.

7.3.3. The building shall provide the required interfaces to successfully integrate the training equipment, test equipment and facilities support safe operations to meet the Authority's requirements. An interface document is part of the equipment catalogue, outlining current interfaces at RAF Henlow, found at Document 3 to the Scope.

7.3.4. Included in RAF CAM's outputs are two Spatial Disorientation Trainers (SDT) and a Night Vision Goggle (NVG) trainer including 2 Hoffman boxes. Due to contractual constraints the relocation into the new infrastructure shall be contracted by the Authority through separate contracts with the Original Equipment Manufacturer (OEM).

7.3.5. The Contractor shall deliver the infrastructure requirements for both the SDT and NVG trainer as per SR 623 and SR 618. The Authority requires that the two SDT and the NVG trainer are relocated prior to SAT. The Authority requires that the Programme provides a clear installation window for this equipment and that access to the infrastructure is granted to the OEM personnel. The Authority point of contact for the SDT and NVG trainer is DES FsAST GTA-Ld.

7.3.6. A PCIP has been prepared in support of this Project and can be found at Document 1 to this Scope document.

7.3.7. The Contractor shall be given opportunity to inspect the Site in order to identify the full scope of any Site clearance required.

Infrastructure Requirements

Stage 1 - Early Contractor Involvement and Stage 2 - Detailed design and build of RAF CAM equipment & infrastructure

The following requirements are applicable to Stage 1 and Stage 2 of the Project Part 1.

7.3.8. The Contractor shall work within the legal and regulatory framework for new build in the UK, including inter alia:

- The Building Regulations 2010.
- The Construction (Design and Management) Regulations 2015 (CDM 2015).
- The Control of Major Accident Hazards (COMAH) regulation and guidance.

7.3.9. The Contractor shall apply JSP 850 to this Project[1].

7.3.10. The Contractor shall deliver a Project Execution Plan in accordance with DID 036A.

7.3.11. The Contractor shall work closely with the Authority's Project Manager (PM), Technical Support Provider (TSP), Principal Designer/NEC Supervisor, Quantity Surveyor, Project Planner and Information Manager as identified within the PCIP in pursuance of this Project.

7.3.12. The Contractor shall follow the MOD Building Regulations Compliance System (BRCS). The Contractor shall apply the MOD BRCS procedures and utilise the standard certificates. (This process is supplemented by 2021DIN04-041).

7.3.13. The Contractor shall register the construction Site on the Considerate Constructors Scheme (CCS).

7.3.14. In the infrastructure environment, the Contractor shall establish working groups with all relevant Authority stakeholders, including Defence Infrastructure Organisation (DIO), covering at least the following topics: Communication and Information Systems (CIS), Security, Fire health and safety, sustainability and environment, Government Soft Landing (GSL), and acceptance. (See GSL requirements).

7.3.15. The Contractor shall deliver an Interface Management Plan in accordance with DID 036H which establishes the process for the creation, maintenance, and delivery of a building/equipment interface document.

7.3.16. Planning

7.3.17. The Local Planning Authority (LPA) has authorised the RAF CAM building at RAF Cranwell as permitted development under Part 19, Class E of the General Permitted Development Order 1995 (GPDO). Consequently, the Contractor is not required to involve the LPA in the building planning process providing the plans stay within the limitations highlighted in the DIO application to the LPA.

7.3.18. The Contractor shall not exceed the limitations highlighted within the DIO planning application to the LPA[2] which can be found at Document1 to this Scope document.

[1] **2021DIN03-023** - Retirement of JSP 315 and Building Performance Standards moving to into JSP 850. Access to the Knowledge in defence website and JSP 850 can be found through by registering using the following link https://sts.defencegateway.mod.uk/register.aspx

[2] RAF Cranwell–Permitted Development Notification dated 22 July 2021

7.3.19. The Contractor shall comply with all design restrictions and recommendations established by the RAF siting board[3] and Counter Terrorism Measures' (CTM) requirements.

7.3.20. Building Information Modelling (BIM)

7.3.21. BIM Level 2 is the UK Government mandated level of BIM required on Government funded projects. The Contractor shall comply with the Authority's BIM Requirements, including meeting all Authority BIM, processes, and technology requirements.

7.3.22. The Contractor shall adopt the use of the UK BIM Framework processes and appropriate technologies, in accordance with the ISO 19650 standards, including British Standard (BS) 1192-4:2014 (COBie – Code of practice) and Publicly Available Specification (PAS) 1192-6:2018 Health & Safety; in line with UK Government's Construction Strategy (GCS) 2011–15 (as updated 2016-20).

7.3.23. The Contractor shall fully support the Authority in the transition between the former BIM British Standards and Publicly Accessible Standards to that of the new, and currently being developed, ISO 19650 standards to enable MOD's BIM documentation to be uplifted to the new standards.

7.3.24. The Contractor shall fully support the Authority with the development of its Asset Information Model (AIM) for all the Authority assets subject to this Contract.

7.3.25. The Contractor must use processes, technologies (including an Industry recognised ISO 19650 workflow compliant Common Data Environment) and systems that meet the Government's UK BIM Framework in accordance with the Employers Information Requirements[4] (EIR), and ensure that all information and data in these systems is maintained in accordance with the security classification of the Level 2 asset and in accordance with any asset specific Security Aspects Letter (SAL) or other security guidance

7.3.26. Following Contract Award, the Contractor shall act as the Projects BIM Information Manager for the Contract appointment, as fully detailed within the BIM documents provided at Document 4 to this Scope document.

7.3.27. The Contractor shall work collaboratively with the Authority and/or the Authority's representative to establish a compliant BIM Execution Plan (BEP), in accordance with the Authority's Employers Information Requirements (EIR) and BEP Evaluation Assessment Criteria.

7.3.28. The EIR, Information Delivery Plan (IDP) and BEP evaluation criteria documents are included at Document 4 to the Scope. These document detail the standards, formats, and delivery requirements of the Project.

7.3.29. As part of the early Contractor involvement, the Contractor shall provide a compliant BEP, detailing only those elements of the BEP related to the specific Asset Information deliverables required because of those works.

7.3.30. The BEP remains a live document throughout the life of the Project, and shall be provided to the Authority, via the Asset Information Model Common Data Environment (AIM CDE).

[3] Proceedings of a Board of Officers for a siting board to consider the RAF Centre of Aviation Medicine relocation to RAF Cranwell dated 10 June 2021.
[4] EIR – currently Employers Information Requirements will transition to Exchange Information Requirements under ISO 19650.

7.3.31. As an interim approach until the roll out of the AIM CDE, the Contractor shall hold the information within the Contractor's Project Information Model Common Data Environment (PIM CDE).

7.3.32. COBie (Construction Operations Building Information Exchange) shall be used as a standard format for data interchange.

7.3.33. The Contractor shall, update the COBie Demand Matrix (CDMx) in accordance with the Authority's EIR, IDP, Asset Information Requirements (AIR), and Master Asset Hierarchy (MAH), appropriate to those work development activities to ensure COBie data is delivered at the appropriate stage LOD & LOI.

7.3.34. The following BIM documents are provided at Document 4:

- Employers Information Requirement (EIR)
- Information Delivery Plan (IDP)
- BEP Evaluation Assessment Criteria
- BIM Information Manager Roles & Responsibilities
- BIM Maturity Assessment Tool (BMAT) and supporting guidance document.
- BIM Process Compliance Document

7.3.35. For any Works Development activities, the Contractor shall:

7.3.35.1 Programme, plan, coordinate and deliver the information: model(s) documents and data files at the Level of Development specified in the Project Information Delivery Plan (PIDP) and to the EIR;

7.3.35.2 Hold model(s) documents and data files at the Level of Development specified in the PIDP and to the EIR until the Authority have procured their Employers Asset Information Model Common Data Environment (AIM CDE) and;

7.3.35.3 On request forward model(s) documents and data files to another Supplier.

7.3.36 The Contractor shall produce the Master Information Delivery Plan (MIDP) to meet the requirements of the Project Information Delivery Plan (IDP) developed by the Authority's TSP in liaison with the Authority's Project Manager.

7.3.37 In collaboration with the Authority's TSP the Contractor shall update the MIDP throughout the Project and ensure that information is published throughout each stage in accordance with the Project IDP and MIDP

7.3.38 The Contractor shall arrange for and undertake, with the Authority, a BIM Maturity Assessment in accordance with the Authority's BMAT.

7.3.39 <u>Royal Institute of British Architects (RIBA) Plan of Work 2020.</u>

7.3.39.1 The Contractor shall employ the RIBA Plan of Work 2020 as a process guide.

7.3.39.2 If the Contractor applies a process at variance to the RIBA Plan of Work 2020 this shall be highlighted and agreed with the Authority in advance.

7.3.39.3 At the end of each RIBA stage the Contractor shall establish a gateway meeting with the Authority to review as a minimum the Stage Report, risks, next stage events and any updated plans and Programme.

7.3.39.4 Initiation of the subsequent RIBA stage(s) prior to the receiving the Authorities approval to close a Stage is undertaken at the Contractor's risk.

7.3.39.5 The Contractor shall deliver a Building Manual, Health and Safety File, Fire Safety Information and Manufacturing Information and Construction Information during RIBA Stage 5.

7.3.40 Government Soft Landings (GSL)

7.3.40.1 The Contractor shall fully participate in Government Soft Landings (GSL) processes, as, in part, defined by BS 8536 Parts 1 and 2 (Briefing for design and construction – Part 1: Code of practice for facilities infrastructure and Part 2: Code of practice for asset management (linear and geographical infrastructure)).

7.3.40.2 The Contractor shall deliver a GSL Plan in accordance with DID 036D and support the Authority in the development and delivery of its Government Soft Landings approach.

7.3.40.3 The Contractor shall appoint a Project GSL Lead who will support the following activities:

- Working with the Authority and its representatives to establish and maintain the GSL Stakeholder engagement strategy.
- Working with the Authority and its representatives to establish the handover and acceptance criteria of the Project. (Including the appropriateness of the proposed IDP and Information (COBie) Demand Matrix to be achieved).
- Working with the Authority and its representatives to establish any Project Aftercare requirements.
- Working with the Authority and its representatives to establish the Project's Post Occupancy/Operation Evaluation (POE). which will also contribute to the Project Learning From Experience (LFE) reviews.

7.3.41 RAF CAM Facility Security

7.3.41.1 The security provisions of the RAF CAM facility are outlined in the security Operational Requirements (OR1) specification Annex A to the SRD. The detailed security provisions shall be captured in the OR2 specification which will be finalised during the building design process, not later than end of RIBA Stage 4.

7.3.41.2 The Contractor shall work with the RAF Cranwell Police Flight (RAFP) and other government defence security organisations, through the Security Working Group, to finalise the security aspects of the design.

7.3.41.3 The Contractor shall support the accreditation activities and accreditation authorities to facilitate the security accreditation of the building.

7.3.41.4 Counter Terrorism Measures (CTM) shall be applied by the Contractor as required by SR305, JSP 440, and JSP 850.

7.3.41.5 Stand-off distances shall be applied to the building by the Contractor location as required by the JSP 440 leaflet 3A.

7.3.41.6 The Contractor shall support the Principal Security Advisor (PSyA) at 11 Group for accreditation of the CTM measures.

7.3.42 Site Information

7.3.42.1 The Contractor shall consider and apply as necessary the data within the Pre-Construction Information Pack (PCIP) including a RAF Cranwell Site Data Pack V1.1 dated 25 May 2022 provided at Document 1 to this Scope document.

7.3.42.2 The following site surveys were undertaken by the Authority and have been provided within the PCIP:

a) DIO - RAF Cranwell, Lincolnshire – Geo-environmental and Geotechnical Interpretative Report, Revision 2 dated December 2018.

b) DE&S - RAF CAM Relocation to RAF Cranwell - Preliminary Ecological Appraisal V2 dated 02/04/2020.

c) DIO - RAF CAM Relocation to RAF Cranwell - Transport Assessment V2 dated Nov 2020.

d) RAF Cranwell - Ground Penetrating Radar and Topographical Survey dated March 2020.

e) DE&S - RAF Cranwell “Site 07” Land to the East of Trenchard Hall Phase 1 Land Quality Assessment V2 dated May 2020.

f) DE&S - RAF Cranwell “Site 07” Land to the East of Trenchard Hall Supplementary Phase II Ground Investigation V2 dated November 2020.

g) DE&S - RAF CAM Relocation to RAF Cranwell - Utilities Survey and Review V1(draft) dated 31 July 2020.

h) DE&S - RAF CAM Relocation to RAF Cranwell - Security Assessment Report V1(draft) dated 13 July 2020. Document redacted in full - Military sensitive technical information

i) DE&S - RAF CAM Relocation to RAF Cranwell - Site Surveys Summary Report V1(draft) dated 18 February 2021.

7.3.42.3 If the Contractor plans to undertake additional surveys during the period of the contract these shall be detailed by the Contractor (quantities and dates) within their PEP.

7.3.43 Design and Construction

7.3.43.1 Building Regulation Compliance System (BRCS).

7.3.43.1.1 The BRCS shall be applied by the Contractor in accordance with JSP 850 and as supplemented by 2021DIN04-041.

7.3.43.1.2 The Contractor must nominate a designated Project Manager (PM), a Building Control Advisor (BCA) and a Structural Engineer to manage the BRCS.

7.3.43.1.3 The Contractor shall identify the PM, the BCA and the Structural Engineer to the Authority within 30 Business Days after Contract Award and update them as required.

7.3.43.2 Design Requirements

7.3.43.2.1 Lighting

7.3.43.2.1.1 Lighting design shall comply with the requirements of JSP 850 BPS leaflet 0.6.

7.3.43.2.1.2 The luminaires for outdoor installation shall be Ingress Protection rating IP55 minimum.

7.3.43.2.1.3 Emergency lighting is required above switchgear for manual operation during power outage

7.3.43.2.1.4 Emergency and Safety luminaires are required to operate following a power failure or battery backup. These shall remain operational during plant shutdown.

7.3.43.2.1.5 The design of the lighting installation shall minimise stroboscopic effects and glare.

7.3.43.2.2 Electrical systems

7.3.43.2.2.1 Design of the electrical system shall provide a safe and reliable supply of electrical power to the users.

7.3.43.2.2.2 Safe conditions shall be ensured under all operating conditions, including those associated with start-up and shutdown of plant and equipment, and throughout the intervening shutdown periods.

7.3.43.2.2.3 The design of electrical systems and equipment shall ensure that all operating and maintenance activities can be performed safely and conveniently.

7.3.43.2.2.4 The design of the electrical installation and equipment will also ensure that easy and adequate access is provided for all operational and maintenance purposes.

7.3.43.2.2.5 All items of electrical equipment and materials including switchboards / cubicles, luminaires, control stations etc. shall be adequately labelled.

7.3.43.2.2.6 Labels shall be provided for the following purposes:

- Identification
- Equipment Rating
- Safety / Warning Notices
- Instructional Notices

7.3.43.2.2.7 Labels shall be of laminated plastic, engraved with black characters on a white background.

7.3.43.2.2.8 Warning labels shall have black characters on a yellow background.

7.3.43.2.2.9 Danger labels shall be white characters on a red background.

7.3.43.2.2.10 Labels shall be located so that they are not obscured by wiring or equipment and are visible from the normal access point.

7.3.43.2.3 Building Access

7.3.43.2.3.1 All pedestrian and vehicular access to the building shall connect with existing roads and pathways with clear line of sight along the existing infrastructure.

7.3.43.2.3.2 Parking entrance and exit roadways shall be appropriately signed and positioned to minimise entry and exit hazards.

7.3.43.2.3.3 Vehicular access routes to loading and delivery bays shall be clearly signed.

7.3.43.2.3.4 Emergency vehicle access points shall be clearly signed.

7.3.43.2.3.5 Vehicular loading and delivery bays, and emergency vehicle access points, shall have sufficient turning circles.

7.3.43.2.4 Design Lifecycle

7.3.43.2.4.1 The design lifecycle for the infrastructure is defined as the period for which structural elements, pavements, buildings, electrical and mechanical (E&M) systems, services, drainage systems, etc are to be used for their intended purposes with acceptable planned maintenance.

7.3.43.2.4.2 The design lifecycle of the Building shall be 60 years.

7.3.43.2.4.3 The Contractor shall deliver a plan for the design lifecycle at the end of RIBA Stage 3 which identifies the target life for the major elements of the Building with the required planned interventions. It shall state a need for refurbishment or replacement.

7.3.43.3 Building Management System (BMS)

7.3.43.3.1 The BMS shall be connected to the station Defence Broadband Internet (DBI).

7.3.43.3.2 The BMS shall be compatible with the station BMS, which is TREND.

7.3.43.4 Design reviews

7.3.43.4.1 The Contractor shall establish and manage design reviews as required by the RIBA process.

7.3.43.4.2 The Contractor shall ensure the suitable participation of the Authority and its representatives.

7.3.43.4.3 For each design review the Contractor shall identify, and agree with the Authority, the input and output requirements.

7.3.43.4.4 As a minimum a design review will be established for the Architectural concept as part of the RIBA Stage 2 process, for the building Spatial Coordination activity as part of the Stage 3 process, and as part of the final design review for the building in Stage 4. (See Document 5 of this Scope document).

7.3.43.5 Building Performance Standards (BPS)

7.3.43.5.1 As required within JSP 850, the following BPS shall apply:

- BPS 0 - Estate-wide Standards and Guidance,
- BPS 3.0 - Offices
- BPS 5.1 – Technical and non-Technical Stores
- BPS 7.0 - Defence Primary Healthcare.

7.3.43.5.2 The SRD (Document 2 of this Scope document) is built around the RAF CAM structure, defined by various wings and squadrons. This shall not dictate the determination of offices and their layout. The Contractor should note that as described within BPS leaflet 3.0 offices shall normally be open plan and shall be shared between departments to improve efficiencies and utilisation. Therefore, the Contractor shall consider how the layout of the offices is determined by the movement of people and the delivery of the building functions.

7.3.43.5.3 Any deviation from the BPS shall be agreed with the Authority and recorded for audit purposes.

7.3.43.6 Modern Methods of Construction (MMC)

7.3.43.6.1 The Contractor shall consider the application of MMC for this Project as detailed within BPS 0.7.

7.3.43.6.2 The Contractor shall consider the risks and benefits of the proposed application including comparison with traditional methods of construction and the impact on building maintenance.

7.3.43.6.3 CTM shall be considered and addressed. Refer to JSP 440 for guidance on MMC.

7.3.44 Utilities

7.3.44.1 The Contractor shall arrange, manage and be responsible for all connection and disconnection works with the Utility providers.

7.3.44.2 The Contractor shall identify to the Authority all utility dis-connection and connection dates and any consequential site utility downtime.

7.3.44.3 Any utility downtime must be agreed with the Authority at least 10 Business Days in advance.

7.3.44.4 If the utility connection point lies outside the Site perimeter fence the Contractor shall seek permission from the Authority to enter that location and apply for permission to dig at that location.

7.3.44.5 In accordance with JSP 850 BPS 0.1 Table 10 the Contractor shall report monthly utility consumption in the monthly report during construction.

7.3.44.6 All utility costs incurred during construction, installation and commissioning, and until Completion, shall be borne by the Contractor.

7.3.44.7 The Contractor shall identify and justify a requirement for mains gas supply to the Authority at the earliest opportunity in the design phase, but no later than end of RIBA stage 3.

7.3.44.8 The RAF CAM facility electrical power requirement shall not exceed the limits of the mains supply Infrastructure at RAF Cranwell.

7.3.44.9 Project Aquatrine

Note: Project Aquatrine is the MOD's GB-wide water and wastewater Public Private Partnership (PPP) project. Aquatrine provides water and wastewater services and manages environmental risk across the Defence Estate. The project Aquatrine contractor is Severn Trent Services (STS).

7.3.44.9.1 Enclosure 8 of the Cranwell site data pack contains information regarding the Aquatrine service, provider, and connection requirements. The Contractor shall use the details within Enclosure 8 to ensure smooth integration with the existing Aquatrine project.

7.3.44.9.2 The Contractor shall clearly define the water and wastewater connection points with STS.

7.3.44.9.3 The Contractor shall advise the Authority of the connection points agreed with STS for approval.

7.3.44.9.4 The Contractor shall conform to the build standards required by the Aquatrine Project[5].

7.3.45 Facility Communication and Information Systems (CIS)

Note: The requirements are detailed within the CIS specification which is contained at Annex B to the SRD. The CIS Specification has three parts. Part A covers the installation of compliant Structured Wiring Systems (SWS) within new and refurbished MOD buildings. Part B specifies site specific requirements relating to the project and includes any CIS which is not part of the SWS. Part C defines the user CIS requirements in terms of User Presentations (UP) per room. The requirements captured in Part C will be determined as part of the building design activities and finalised and agreed no later than the end of RIBA Stage 4.

7.3.45.1 The Contractor shall incorporate the requirements of the CIS specification within the design and construction of the building.

7.3.45.2 The Contractor shall work with the Authority, through the CIS working group, to develop and finalise Part C of the CIS requirement specification, resolve any anomalies, provide clarity on the specification as required, seek guidance on alternative implementation, discuss progress and timing of installation.

7.3.45.3 The Contractor shall support the CIS accreditation activities to facilitate the accreditation of the CIS.

7.3.45.4 Drawings and documentation, as identified in part A of the CIS requirement specification, shall be approved by the Authority prior to building construction and installation work.

7.3.45.5 The SWS Installation M&E Contractor shall be an accredited data system installer.

7.3.46 Innovation – Building resilience and sustainability

7.3.46.1 The Contractor shall deliver a Sustainability and Resilience Plan in accordance with DID 036G.

7.3.46.2 In accordance with JSP 850 BPS 0.1 the Contractor shall maximise renewable energy provision. Therefore, the plan shall highlight where sustainable and renewable practices and design opportunities will be considered, where these are not to be adopted and how opportunities could be implemented.

[5] STS DD01 Drainage Design Standards - This document outlines the requirements relating to the design and construction of foul sewers and lateral drains and STS ED04 Standards for Estate Development Projects V1.2.

7.3.46.3 The Contractor shall incorporate rainwater or grey water systems to reduce potable water consumption.

7.3.46.4 The Contractor shall report as part of the design process on the following:

7.3.46.4.1 The percentage of building electricity demand delivered from self-generated sources.

7.3.46.4.2 The volume of grey water captured and employed as a percentage of expected potable water requirement.

7.3.46.5 The design figures at 7.3.48.4 above shall be compared to actuals during building commissioning by the Contractor for review by the Authority.

7.3.47 Net zero carbon/energy efficiency

7.3.47.1 The design and construction of the building shall comply with JSP 850 Part 2 – BPS 0.1 Energy and Carbon.

7.3.47.2 The building shall conform to the operational energy intensity targets identified within BPS 0.1.

7.3.47.3 The Contractor shall deliver a whole life carbon assessment as part of the RIBA Stage 3 report. It shall include separate figures for the production and construction stage, the replacement stage and operational energy use as defined in BS EN 15978:2011 [Sustainability of construction works — Assessment of environmental performance of buildings — Calculation method].

7.3.47.4 In accordance with JSP 850 BPS 0.1 the Contractor shall deliver design reports as detailed at Table 9 of JPS 850 BPS 0.1. (See CDD stage 2 item 58)

7.3.47.5 The Tenderer shall provide whole life cost data for the application of sustainable systems across the design, including the use of PV cells and rainwater capture systems.

7.3.47.6 Where PV cells are to be employed the Contractor shall undertake a “glint and glare” study to understand the possible impact on flying activities. Where the Contractor considers this shall not be required appropriate justification shall be explained in the Sustainability and Resilience Plan.

7.3.48 Warranty

7.3.48.1 The Contractor shall provide a 12-year warranty for the building design, materials and workmanship covering the major elements which shall include as a minimum – building structures; roof, canopy and walls; roofing systems; electrical infrastructure; water and drainage systems; roads, paths and parking.

7.3.49 Sustainability and Environmental Appraisal Tools (SEAT)

7.3.49.1 The Contractor shall deliver a SEAT Management Plan in accordance with DID-040.

7.3.49.2 The MOD Sustainability and Environmental Appraisal Tools (SEAT) shall be applied by the Contractor to the RAF CAM Relocation project.

7.3.49.3 The Contractor shall have an Environment Management System aligned to ISO 14001.

7.3.49.4 The SEAT Management Plan shall be a development of the Outline Plan delivered as part of the Tender, incorporating additional elements as agreed with the Authority. Additional elements shall include at least a detailed Programme, comprehensive milestone plan, stakeholder management plan, detailed working group terms of reference, and management and reporting information.

7.3.49.5 The Management Plan shall be subject to approval by the Authority in accordance with the contract documentation review and approval process.

7.3.49.6 Within 90 Business Days of contract award the Contractor shall establish working group(s) required to deliver the SEAT tools.

7.3.49.7 A SEAT working group shall be established and managed by the Contractor to support the delivery of the SEAT articles. The Authority shall participate in these working groups, supported by RAF CRN representatives. Frequency and location of these working groups will be agreed between the Authority and the Contractor but shall be, as a minimum, aligned to the end of each RIBA stage.

7.3.49.8 The Contractor shall undertake all additional surveys required by the project before completion of RIBA stage 3.

7.3.49.9 The Contractor shall identify biodiversity enhancement measures planned for implementation within the site boundaries.

7.3.49.10 The Contractor shall support the Authority with information required to complete the SA, DREAM and CIRAM assessments using a process described in the agreed Management Plan

7.3.49.11 The Contractor shall report progress on the SEAT activities through the PM Stage progress reports.

7.3.49.12 The Management Plan shall be reviewed by the Contractor at closure of every RIBA stage.

7.3.49.13 Where the Management Plan review results in amendments to the Plan the updated document shall be issued to the Authority for approval.

7.3.49.14 The Contractor shall support the regular review and update of the SA through the SEAT Working Group.

7.3.49.15 The Contractor shall register for the DREAM web-based tool.

7.3.49.16 The Contractor shall provide the Authority with information required to support the completion of the DREAM assessment, as a minimum at the stages outlined below:

- DREAM RIBA Stage 4 assessment.
- DREAM RIBA Stage 5 assessment.
- DREAM RIBA Stage 6/7 assessment.

7.3.49.17 Updates to the DREAM assessment shall be agreed between the Authority and the Contractor through the SEAT working groups.

7.3.49.18 The Contractor shall provide the Authority with information required to support the development of the CIRAM report by the Authority as design and construction progress through the various RIBA stages.

7.3.49.19 The impact on the CIRAM of the proposed development shall be considered within the SEAT working groups.

Stage 2 Detailed design and build requirements for the RAF CAM infrastructure

The following requirements are applicable to Stage 2 of the Project Part 1.

7.3.50 Site access and management

7.3.50.1 The Contractor shall develop a Construction Traffic Management Plan in accordance with DID 036F.

7.3.50.2 All construction site traffic shall access the Site via the B1429 from the A17, avoiding construction traffic passing through Cranwell village.

7.3.50.3 To ease access to the Site for Contractor personnel and equipment the Contractor shall establish a secure entry point to the Site at the vehicle access gate on the North-East corner of the Site, off the B1429.

7.3.50.4 Construction activities shall only be undertaken between the hours of 07:00 and 18:00 Monday to Friday, unless exemptions are agreed with the Authority.

7.3.50.5 Construction traffic shall be kept to a minimum during the “school run” periods of 08.30 to 09.00 and 15.00 to 15.30.

7.3.50.6 The Site shall be enclosed with secure, solid fencing (e.g. timber hoardings) to prevent access to the Site by unauthorised personnel, aid site safety management, restrict views of the Site and reduce noise and dust impact.

7.3.50.7 The use of large metal structures during construction, such as metal fencing, lighting towers, portacabins, shall be approved by the Authority prior to installation due to the possible impact on airfield flying aids.

7.3.50.8 The Contractor is soley responsible for the security of the Site.

7.3.50.9 The Site must be self-contained.

7.3.50.10 Site temporary buildings including storage, office, toilets and washing facilities shall be established as required within the Site perimeter.

7.3.50.11 Site temporary buildings shall not exceed two stories high.

7.3.50.12 A Site office shall be provided for up to 4 Authority personnel.

7.3.50.13 The Site office shall have two desks and 4 power sockets for lap top connection.

7.3.50.14 Site temporary buildings shall be removed on completion of the construction activity and the Site made good.

7.3.50.15 Storage of construction material, equipment and vehicles on the Site shall be at the Contractor's risk.

7.3.50.16 Security lighting shall be unobtrusive and directed over the Site only.

7.3.50.17 Any lights used for night working shall conform the 10m height restrictions of the Site.

7.3.50.18 The use of lighting on the Site shall be restricted to working hours unless required for security reason.

7.3.50.19 Security lighting on Site must not be intrusive to local housing or training establishments.

7.3.50.20 Access to, and use of, station utilities[6] is prohibited during construction (except when connection to existing station infrastructure is required as part of construction and commissioning activity).

7.3.50.21 The connection of utilities to the building must be agreed with the Authority.

7.3.50.22 The scheduling of any interruption to station utilities must be agreed with the Authority. This includes the start and duration of the work.

7.3.50.23 The Contractor shall comply with BS 7375:2010 - Code of practice for distribution of electricity on construction and building sites.

7.3.50.24 The Contractor shall seek approval from the Authority to employ construction equipment which exceeds the site height limit of 10m.

7.3.50.25 The Contractor shall manage construction activities to minimise the impact on the station, particularly the training environment.

7.3.50.26 The B1429 access road shall be cleaned regularly to prevent the build-up of excessive dust, debris, and mud on the surface.

7.3.50.27 All waste is to be securely stored prior to removal or cleared daily.

7.3.50.28 Waste shall be removed from the Site on a regular basis to ensure the Site remains clean and clear and hazards are avoided. Where any waste or flammable waste is required to be stored on Site, it shall be stored in a lockable fireproof container/skip and be removed from Site as soon as reasonably practicable.

7.3.50.29 Road drains must be monitored to ensure they remain free flowing and clear from site debris or material which has originated from the Site.

7.3.50.30 The station perimeter fence and verges must be made good and returned to its pre-construction standard on completion of construction.

7.3.50.31 All Site fencing, security lighting, and hoardings shall be removed and made good, landscaped as required, to the original, pre-construction standard on completion of the construction activities.

7.3.50.32 The RAF Cranwell perimeter fence shall be returned to its pre-construction standard on completion of construction.

7.3.50.33 All Contractor access (equipment and personnel) to RAF Cranwell (the station, excluding the Site) must be cleared through station access procedures.

7.3.51 Demolition and Site Clearance

7.3.51.1 Where demolition activity is required on the Cranwell site the following shall apply:

7.3.51.2 The Contractor shall comply with Section 14.2 of the Wildlife and Countryside Act 1981 which prohibits deposition of any plant material from any non-native invasive

[6] Station utilities covers mains gas, mains electricity, mains water (fresh and waste), CIS and station Tannoy and alarms.

species listed in Part 2 of the Schedule 9 of the Act; e.g. Giant Hogweed or Japanese Knotweed.

7.3.51.3 All demolition work shall be carefully planned and carried out in accordance with BS 6187: 2011 Code of Practice for full and partial demolition.

7.3.51.4 Site clearance shall be undertaken using the Specification for Highway Works Volume 1 Series 200, Site Clearance, and shall cover all areas where Site Clearance is required for either demolition or general infrastructure works within the site boundary at RAF Cranwell.

7.3.51.5 Site excavation practices shall comply with HSE leaflet HSG47 - Avoiding danger from underground services.

7.3.51.6 The Contractor shall explain in the Construction Environmental Management Plan (CEMP – see para 7.3.54.3.6) provisions for soil re-use and/or disposal.

7.3.51.7 The Contractor shall pay particular attention to the residual design and construction hazards identified within the PCIP.

7.3.51.8 The Contractor shall comply with the recommendations of the arboriculture survey undertaken on behalf of the Authority unless an exemption requested by the Contractor is approved by the Authority.

7.3.52 SEAT

7.3.52.1 The Contractor shall undertake a species and habitat survey no more than 6 months prior to the start of construction.

7.3.52.2 The Habitat and Species survey report shall be provided to the Authority and an action plan agreed in the event of protected species being identified within the construction site.

7.3.52.3 The Contractor shall implement the biodiversity enhancement measures as part of the construction process.

7.3.52.4 Any biodiversity enhancement measures requiring FM support after handover shall be identified in the Building Manual.

7.3.53 Construction

7.3.53.1 In accordance with CDM 2015 the Contractor shall deliver a Construction Phase Plan in accordance with DID 036I which must set out the arrangements for securing health and safety during the construction phase (the period that construction work is carried out).

7.3.53.2 The Contractor shall apply DSA 02: Defence Fire Safety Regulations (DFSR) to this Project and reference the associated guidance in DSA 03: Defence Fire Safety Regulatory Guidance.

7.3.53.3 As a supplement to SR 208, the Contractor shall ensure that construction material management and containment is employed to minimise the risk of Foreign Object Debris (FOD) outside of the construction site. Containment practices shall include storage of site waste in enclosed containers, use of netting or other suitable covering during transportation, the use of fine mesh netting/fencing around the site perimeter.

7.3.53.4 The system shall be protected against lightning such that the system shall not be damaged as the result of a lightning strike.

7.3.53.5 The Contractor shall develop and deliver a Construction Environmental Management Plan (CEMP) in accordance with DID 036B.

7.3.53.6 The Contractor shall develop and deliver a construction site Waste Management Plan in accordance with DID 036C during RIBA Stage 4 for approval by the Authority.

7.3.54 Construction Quality

7.3.54.1 The Contractor shall deliver monthly quality reports to the Authority on the construction activity within the monthly report (CDD 8).

7.3.54.2 The quality reports shall be the result of site inspections by the Contractor and an Authority representative.

7.3.54.3 The quality reports shall highlight quality arisings and resulting remedial actions.

7.3.55 Net zero carbon/energy efficiency

7.3.55.1 In accordance with JSP 850 BPS 0.1 the Contractor shall deliver construction reports and commissioning reports as detailed at Tables 10 and 11 respectively of JPS 850 BPS 0.1. (See CDD stage 2 item 58)

7.3.55.2 In accordance with Appendix 1 Section 4 of JSP 850 BPS 0.1 the Contractor shall include the identified meter and submeter requirements into the Works Information (Building Manual).

7.3.55.3 The Contractor shall calculate the 'as designed' in-use energy consumption. It shall be appended to the CEMP at the end of RIBA stage 4 and also recorded within the asset information to facilitate use as a benchmark for assessing the in-operation performance of the building.

7.3.55.4 The Contractor shall follow the guidance provided within BPS 0.1 and whilst noting the previously stated requirements for Construction environmental, waste and traffic management plans, complement the BPS 0.1 guidance with the following:

7.3.55.4.1 During RIBA Stage 4 the Contractor shall provide Environmental Product Declarations (EPD), as an addendum to the CEMP, for all major building materials including but not limited to concrete, steel, insulation, brick and block, plasterboard, glass, and timber.

7.3.55.4.2 100% electric plant shall be employed on the site. Where it is not available in the size or module required for the site construction, the Contractor shall provide robust justification within the CEMP. In this event, hybrid modules should be given priority over diesel plant.

7.3.55.4.3 The Contractor shall connect to the electricity grid as early as possible, identifying this date within the construction Programme and CEMP v1, and procure 100% renewable energy. If this is not practical the Contractor shall provide a robust justification within the CEMP.

7.3.55.4.4 The Contractor shall meet the Construction Delivery Targets for offices as detailed within Table 8 of the BPS 0.1.

7.3.55.5 All required monthly reporting during construction shall be made in the monthly report (CDD item 8) and also delivered to the Authority on-site representative.

7.3.56 Defect reporting

7.3.56.1 Following Completion there shall be a Defect correction period of 12 months, where Defects are raised and captured in the Defects List and resolved to the satisfaction of the Authority.

7.3.56.2 The Contractor shall establish regular reviews to consider progress against the Defects List and update the Defect List to capture and sentence new defect arisings.

7.3.56.3 All Defects, once identified and captured within the Defect List held by the Contractor, will be sentenced as agreed by the Authority and the Contractor and placed in one of three categories outlined below:

- Emergency – a Defect for which there is no workaround available, and which impacts:
    - safe operation of the building, including its systems, thereby putting building users, occupants and maintainers at risk of injury or death, or
    - delivery of capability which is required to be employed within the next 10 Business Days.
- Urgent - a defect which impacts delivery of capability but for which there is a workaround available.
- Routine - a defect which is neither an emergency defect nor an urgent defect.

7.3.56.4 An emergency defect shall be rectified by the Contractor within 3 Business days from sentencing.

7.3.56.5 An Urgent defect shall be rectified by the Contractor within 5 Business Days from sentencing.

7.3.56.6 A Routine defect shall be rectified by the Contractor within 10 Business Days from sentencing.

Note: If an Emergency Defect is identified the building or system concerned shall be appropriately isolated to prevent injury.

7.3.56.7 The Defects List reviews shall facilitate closure of all Defects by the Authority.

7.3.56.8 The Defects List shall be resolved to the satisfaction of the Authority prior to acceptance of the Final Certificate.

7.3.56.9 For the duration of the Defect correction phase, or a minimum of 6 months, the Contractor shall establish an on-site coordinator who will be responsible for managing progress, review and demonstration of Defects resolution. The on-site coordinator shall also be the first point of contact for warranty issues, fault reporting and building design and support queries.

7.3.57 Acceptance

7.3.57.1 Apart from the Defects identified for resolution within the Defects List all preparations and deliverables must be complete at Completion to facilitate the safe occupation and use of the building.

7.3.57.2 The Contractor shall establish an acceptance working group to support the management of the acceptance processes.

7.3.57.3 The acceptance working group shall include representatives from the Authority and other Stakeholders as necessary.

7.3.57.4 Meetings shall be established by the Contractor for the presentation and acceptance of the Practical Completion Certificate and the Final Certificate.

7.3.57.5 Building Systems which require commissioning must be commissioned before the building is handed over to the Authority.

7.3.57.6 Commissioning shall involve calibrating and adjusting the relevant systems until they are working as specified, with test results reviewed by the Authority and its representatives to confirm that they are working satisfactorily.

Note: The Installation and commissioning of the 2 SDT, the NVG trainer and 2 Hoffman boxes is out of scope. Acceptance of this equipment will be the responsibility of the Authority. An ICD for both equipment's will be provided by the Authority to establish the building interface. The Contractor shall support installation to the building and connection to the utilities.

7.3.58 Post Operation Evaluation

7.3.58.1 The Supplier shall work collaboratively with the Authority and its Facilities Management team in completion of the Post Operation Evaluation for the Project.

7.3.58.2 The Contractor shall deliver a Transition Management Plan (TMP) (DID 036E) which will define the process of acceptance of the building by the Authority and handover to the Authority and/or the Authority’s representatives.

7.3.58.3 The Contractor, liaising with the Project Manager and/or Authority’s representative, shall support the delivery of the first POE (normally at the end of the Defects liability period, or 12 months following the successful handover and completion of the System).

7.3.59 Building Maintenance

7.3.59.1 In accordance with JSP 850 BPS 0.2, lifecycle modelling shall be reviewed throughout the design development to capture component replacement costs for the proposed design.

7.3.59.2 Maintenance shall be optimised for delivery by the CRN site Facilities Management organisation.

7.3.59.3 Training shall be provided to the Facilities Management (FM) organisation on the building systems.

7.3.59.4 The use of special tools shall be kept to a minimum and identified within the Building Manual.

7.3.59.5 The GSL working group shall support the efficient application of standardisation of components, fixtures, fittings, furniture, and finishes as detailed within BPS 0.5.

7.3.59.6 The GSL working group shall determine the construct of the Building Manual beyond the statutory requirements.

7.3.59.7 Warranty provision and associated service requirements and servicing agents shall be clearly identified within the Building Manual, (Stage 2 DID 062).

7.3.59.8 Equipment requiring specialist contractor support shall be clearly identified within the Building Manual.

7.3.59.9 Any building surfaces or building systems' surfaces with cleaning or handling restrictions shall be clearly identified within the Building Manual.

7.3.59.10 Any system flushing requirements shall be clearly identified within the Building Manual.

7.4 **Equipment** The Contractor shall deliver the following equipment;

7.4.1 **Reprovision of RAF CAM Equipment** - The Contractor shall provide specialist Aviation Medicine capabilities to fulfil the requirements as set out in the SRD at Document 2 to the Scope and all other relevant requirements and restrictions within the Contract. To drive value for money the Contractor may procure new equipment, combine capabilities or use parts/or all the existing equipment to deliver the requirements.

7.4.2 **Modification of RAF CAM Equipment** – The Contractor shall modify the vertical deceleration tower to simulate horizontal angles of deceleration to simulate accident dynamics, in addition to the vertical angle simulated by the existing capability.

7.4.3 **Relocation of RAF CAM Equipment** – Any equipment that does not fall into reprovision, The Contractor shall relocate the following equipment:

Equipment
Inversion Rig
Gazelle Cockpit
Lynx Cockpit
Typhoon Cockpit
Hawk Cockpit

Table 3 – Equipment requiring relocation

7.4.4 The Contractor shall provide all associated manuals and safety cases for equipment that the Contractor has reprovisioned, modified and relocated.

7.4.5 **In-Service Support of Equipment** Part 2 of Contract requires the Contractor to provide service provision to fulfil the requirements of the SRD at Document 2 to the Scope Part 1 and all other relevant requirements and restrictions stated within the Contract from Completion. Further information on the current capability at RAF CAM is set out within the Equipment Catalogue Document 3 to the Scope. The Contractor is required to update the Equipment Catalogue to reflect the equipment it has identified to satisfy the RAF CAM requirement.

7.4.6 The Aviation Medicine Engineering Section (AMES) is the engineering section of RAF CAM, the AMES skill sets shall be provided in the Equipment Catalogue at Document 3. The equipment for which AMES assist in the maintenance and operation of are currently the hypobaric chambers, multi point pressure breathing rigs, single point pressure breathing rig and scenario-based hypoxia trainers. The Authority requires that AMES will continue to assist in the maintenance and support of RAFCAM equipment to the same/similar degree as currently provided .The Contractor shall determine the scope of maintenance activities

undertaken by AMES and the Contractor within the Reliability Centred Maintenance Plan, Annex C to the Integrated Support Plan (ISP), DID-038.

7.4.7 For new equipment where a warranty is provided, any conditions of that warranty shall be communicated to the Authority and, upon agreement, shall be followed for the warranty period. Following the conclusion of the warranty period, the support solution for the system shall reflect what has been written within the Integrated Support Plan (ISP), DID-038, and this Scope.

7.4.8 Table 4 below outlines the maximum Time to Restoration required for each piece of equipment that shall be maintained within Part 2 of the Contract (service provision). The Contractor is shall update the table 4 with the name of each piece of equipment once this has been identified.

Equipment	**Maximum time to restoration**[7]
Hypobaric Chamber System	Within 5 Business Days.
Scenario Based Hypoxia Trainer System	Within 1 B day if 1 rig available. Within 2 Business Days if 2 rigs available.
Vertical Helmet Drop Test Facility	Within 5 Business Days.
Vertical Deceleration Tower	Within 5 Business Days.
Electric Winch (Parachute Hoist)	Within 5 Business Days.
Gazelle Cockpit	Within 5 Business Days.
Lynx Cockpit	Within 5 Business Days.
Typhoon Cockpit	Within 5 Business Days.
Hawk Cockpit	Within 5 Business Days.
Multi-Point Pressure Breathing Rig	Within 2 days if 4 or less stations working. Within 5 days if 5 or more stations working.
Single-Point Pressure Breathing Rig	Within 1 working day.
Climatic Chamber	Within 5 Business Days.

Table 4 - Maximum time to Restoration.

7.4.9 Should the Contractor combine multiple capabilities, the maximum Time to Restoration below will still be applicable to the individual capability, unless a complete system failure occurs, in which case, the maximum Time to Restoration will default to the shortest time for the combined capabilities.

7.5 **Relocation of Ancillary Items & Official-Sensitive Data** There are several ancillary items located at RAF CAM that will require the Contractor to relocate from RAF Henlow to RAF Cranwell. These items include numerous plaques, pictures, Personal Protective Equipment, documents, flight equipment, and extraction tables from the Lumbar Bay. Any items that requires installation that may alter or affect the building, such as drilling into a wall, will be the responsibility of the Contractor to mitigate the risk of damage to the infrastructure. The total volume of these ancillary items is estimated to be 150 cubic meters.

[7] Restoration to where the equipment can be used to perform as required as defined in Def Stan 00-049.

7.5.1 There is Official-Sensitive data that requires relocation to RAF Cranwell. This includes air incident evidence, and tissue reference samples. This material will need to be securely transported in accordance with the Contract and any associated General Data Protection Regulation (GDPR) not only due to the sensitivity of it, but due to the cost if this is lost or damaged. The Contractor shall detail how sensitive data is to be transported securely through a Transport Plan (DID-037).

7.5.2 The location of display items shall be agreed with the Authority prior to installation at the new building at RAF Cranwell.

8 Acceptance

8.1 Acceptance shall be governed by two complementary elements of Equipment Acceptance and Infrastructure Acceptance as defined in 8.2 below;

8.2 The Authority shall provide a Test, Evaluation, and Acceptance Plan (TEAP) for reference that defines the delivery of the pan-DLOD capability acceptance activities. The Contractor shall develop the Integrated Test, Evaluation and Acceptance Plan (ITEAP) (DID-028) for the infrastructure and equipment and shall be maintained and/or matured through the delivery of the Project, including the PDR and CDR phases, and shall be reviewed and approved by the Authority prior to any testing being undertaken by the Contractor to ensure compliance with the requirements within the SRD are satisfied.

9 Safety & Environmental Requirements

9.1 The RAF CAM Relocation Equipment Safety Case (ESC) shall be produced by the Contractor in accordance with the FsAST PT Safety and Environmental Management System (SEMS) and applies to all equipment in Table 6. The ESC is a structured argument supported by a body of evidence and remains in place for the life of a project. The Contractor shall develop and maintain their ESC throughout the Design/Demonstration, Manufacture, and In-Service phases that comply with the FsAST SEMS, Def Stan 00-56 Part 1 and the SRs within Document 2 of the Scope. This ESC underpins the FsAST SEMS and will be used as evidence to support the structured argument that the equipment is safe to use. The ESC is required to be mature and acceptable to the Authority prior to declaration of Completion.

10 Security

10.1 The security and the associated accreditation are the responsibility of the Authority, but it is noted that the Contractor shall conform to JSP440, JSP604, and any local security policies such as SyOps. The Contractor shall be required to provide data to the Authority in support of accreditation and shall support the Security Working Groups throughout the life of the Project.

11 Earned Value Management (EVM) Requirements

11.1 Implementation

11.1.1 The Contractor, in accordance with (DID-011), shall develop, deliver, and update as needed over the term of the Contract, an Earned Value Management Plan (EVMP) that:

- Describes an Earned Value Management System (EVMS) that is compliant with the Association for Project Management (APM) Earned Value Management: APM Guidelines (2008), The Earned Value Management Compass (APM,2010) and The Earned Value Management Handbook (APM,2013) (collectively, the Nominated EV Standard) or an equivalent standard (such as EIA-748 or ISO 21508:2018) to be agreed by the Authority.
- Describes how tools, processes and Suitably Qualified and Experienced Personnel (SQEP) are available to support the implementation and use of an EVMS throughout the Contract duration. The Contractor shall conduct Earned Value

Management (EVM) in accordance with the Approved EVMP until Contract completion.

- Describes how the EVMS is governed, lists the accountabilities, and outlines the approval and timeframe for regular review and updating.
- Details how configuration control is applied to the EVMS. Describes the Change Control process (including but not limited to change to the EVMP, engineering, technical, baseline, or Contract changes).

11.1.2 The Contractor shall facilitate the Authority's Representative to conduct a Pre-Contract Award Readiness Review to enable assurance to the Authority of the Contractor's ability to comply with the Contract.

11.1.3 The Contractor shall, within 60 Business Days after the Contract Commencement Date, have an established EVMS that complies with the requirements as defined in the Nominated EV Standard and the Approved EVMP.

11.1.4 The Contractor shall, within a 60 Business Days after Contract Award undertake an independent review of the Contractor's EVMS in accordance with the Nominated EV Standard for the purpose of assessing compliance with the requirements of the Contract. The Authorities involvement and support to this review will be jointly agreed prior to commencement.

11.2 **Contract Work Breakdown Structure**

11.2.1 The Contractor shall develop, deliver, and update a Contract Work Breakdown Structure (CWBS) in accordance with CWBSD (DID-010) that meets both the Authority reporting requirements.

11.2.2 The Contractor shall maintain and update the CWBS Structure and Dictionary throughout the Contract. Proposed changes to the CWBS that may affect Authority requirements must be provided to the Authority, within 5 Business Days of the change being proposed, and must include an updated CWBS Dictionary for Approval. No change that may affect Authority requirements may be implemented without prior approval.

11.2.3 The CWBS implemented shall enable reconciliation of the EVMS back to the Contract. The Contractor Budget Baseline shall be equal to the Contract Price minus margin/fees. The Contractor Budget Baseline shall comprise of the Performance Measurement Baseline and Management Reserve. The Performance Measurement Baseline shall be set with a deterministic Programme with the balance of cost being defined as Management Reserve and the balance of Programme remaining being defined as Programme reserve.

11.3 **Accepted Programme**

11.3.1 The Contractor shall develop, deliver, and update a Accepted Programme in accordance with DID-003. This will include the Performance Measurement Baseline (PMB), a current forecast Programme with the updated performance against the PMB, and a high-level summary Programme as agreed with the Authority.

11.3.2 The Contractor shall use the Accepted Programme as the primary Programme for managing the Contract.

11.3.3 The Contractor shall ensure that the Accepted Programme fully incorporates all the defined scope within the CWBS and will be used as the basis of the Performance Measurement Baseline (PMB).

11.3.4 The Contractor shall ensure that the Programme is created in a format that allows an Export file compatible with scheduling software as defined by the Authority, e.g., Primavera P6 XER or XML file. The output of any alternative software systems must be compatible with being translated to an alternative file format as agreed by the Authority.

11.3.5 The Contractor shall ensure that Performance Measurement Baseline (PMB) must be under configuration control with any approved changes in accord with the standards defined in paragraphs 11 of the Scope - EVM Requirements. The PMB change log shall describe the changes to Programme and budget to Control Account level.

11.3.6 The Contractor shall preserve a record of historical Budgeted Cost of Work Programmed and not implement retroactive changes, including but not limited to re-baselining the Performance Measurement Baseline, unless approved by the Authority.

11.3.7 The Contractor may amend the Accepted Programme, without first obtaining the Authority's Approval under clause 11.3.5 as long as:

- payments under the Contract are not affected;
- the Baseline dates for Contract Milestones are not affected;
- the ability of the Authority to meet its obligations under the Contract is not affected; and,
- it does not impact any Authority dependent activities.

11.3.8 Authority approval of an amendment to the Accepted Programme under clause 11.3.7 shall be obtained when the next update to the Accepted Programme is required, as specified in the DID.

11.3.9 Authority Approval of an amendment to the Accepted Programme shall not affect either party's responsibilities or obligations under the Earned Value Management System (EVMS).

11.3.10 If the Contractor becomes aware that the baseline is no longer achievable, they shall notify the Authority within seven days.

11.4 **Earned Value Performance Reporting**

11.4.1 The Contractor shall produce Contract Performance Reports (CPR) in accordance with DID-013 with data at the following minimum levels:

- CPR Format 1 to the appropriate material level agreed with the Authority to represent a Managerially Significant breakdown of the work, in accordance with DID-013, unless otherwise specified in the Approved EVMP.
- CPR Format 2 by each uniquely identified Baseline Change Request, in accordance with DID-013, unless otherwise specified in the Approved EVMP.
- CPR Format 3 at the appropriate material level agreed with the Authority to represent a Managerially Significant breakdown of the work, in accordance with DID-013 unless otherwise specified in the approved EVMP. An analysis report is required for each agreed monthly reporting period where the cost and Programme variance, current or cumulative to date, or the variance at completion of any reporting element:
- Adversely affects any activity that lies on the critical path and Sub-Critical Path;
- Adversely affects the top 10 risk elements as notified from time to time to the Contractor by the Authority Representative; or
- Either exceeds the variance thresholds in Table 5 *(see below)* or alternate variance thresholds as defined in the approved EVMP.

Project % Complete As a % of BAC	Cumulative Cost Variance	Cumulative Programme Variance	Variance at Completion
0 - 25%	+/-15% and £50K	+/-10% and £50K	+/-10%
26 – 75%	+/-10% and £50K	+/-7% and £50K	
76 – 100%	+/-7% and £50K	+/-4% and £50K	

Table 5 – Cost and Programme Variance Thresholds (For this Table: SV%=(SVx100)/BCWS: or (SVx100)/PV CV%=(CVx100)/BCWP: or (CVx100)/EV)

11.4.2 The Contractor shall conduct workshops with the Authority as part of each mandated EVMS review or other project reviews, to agree on the CPR reporting levels, time increments and the reporting threshold for CPR formats over the project. The agreed reporting levels, time increments and reporting thresholds, including to an initial standard agreed with the Authority, shall be documented by the Contractor in an update to the EVMP.

11.4.3 The Contractor shall provide electronic copies of all CPRs and full open-book access to data (including but not limited to source data for planned value, earned value, actual cost, and Programme performance) so that the Authority can validate the data.

11.4.4 The Contractor shall provide or make available Suitably Qualified and Experienced Personnel (SQEP) to provide in-depth analysis of EVM data presented, typically to include the Project Manager, Project Control Manager (PCM), Control Account Managers (CAMS), and senior Project Controls and Finance staff or alternatives to be agreed in advance with the Authority.

11.5 **Baseline Change Control**

11.5.1 The Contractor shall identify a process that ensures their PMB is not changed without appropriate analysis, communication, and approval. The change control process shall:

- Document, track and communicate changes to the Performance Measurement Baseline.
- Reconcile current budgets to prior budgets in terms of changes to the authorised work in the detail needed by management for effective control.
- Control retroactive changes to records pertaining to work performed that would change previously reported amounts for actual costs, earned value, or budgets. Adjustments should be made only for correction of errors, routine accounting adjustments, effects of customer or management directed changes, or to improve the baseline integrity and accuracy of performance measurement data
- Prevent revisions to the program budget except for authorised changes.
- The Authority shall review, and the Contractor shall ensure that the change control process and procedures meet the needs of the Authority, in accordance with DID-012.

11.6 **Sub-Contractor Management – Project Control**

11.6.1 The Contractor shall manage all Sub-Contractors at an appropriate level commensurate with the risk value and complexity of scope being delivered.

11.6.2 The Contractor shall ensure that all Major Sub-Contractors shall manage their Contracts in accordance with the Contractors own approved project management and earned value management plans.

11.6.3 Contract elements delivered by Major Sub-Contractor(s) shall be listed in the Contractor PMP, EVMP or Contractor Management Plan (as appropriate) with the value and scope of the sub-Contract. Major Sub-Contractors must have separate Control Accounts within the Contractors PMB.

11.6.4 Unless otherwise agreed by the Authority, the minimum requirement for an EVMS (including EVMP, CWBS, Programme and CPRs and Sub-Contractor PMB shall be flowed down to the appropriate material level agreed with the Authority to represent a Managerially Significant breakdown of the work where the Sub-Contract or group of Sub-Contracts requires effort:

- In excess of 12 months and the Sub-Contract price exceeds £20m;
- Represents more than 20% of the Contract value;
- As deemed appropriate by the Contractor; or,
- As directed by the Authority. Authority direction will be based on a risk assessment of the scope of work being undertaken in the sub-Contract.

11.7 **Sub-Contractor Earned Value Management Requirements**

11.7.1 Where EVMS requirements flow down to a Sub-Contractor, the Sub-Contractor shall maintain and use, throughout the delivery of the Sub-Contract, an EVMS compliant with the Nominated EV Standard, Contractor Approved Sub-Contract EVMP that meets the requirements of this Contract.

11.7.2 The Contractor shall ensure the Sub-Contractor's EVMS is with the requirements of this Contract.

11.7.3 The Contractor shall be responsible for reviewing and accepting the Sub-Contractor's Performance Measurement Baseline (PMB) and Contract Budget Baseline (CBB) through an Integrated Baseline Review (IBR) conducted in accordance with the Nominated EV Standard.

11.7.4 The Contractor shall permit Authority Representative(s) to participate in any review associated with the Sub-Contractor's EVMS, including IBRs, EVMS Demonstration Reviews and System Surveillance activities for the Sub-Contract, to ensure compliance of the Sub-Contract EVMS with the requirements of the Contract.

11.7.5 The Contractor shall give the Authority at least 30 Business Days prior notice in writing of when a Sub-Contractor Review is to be carried out.

11.7.6 The Contractor shall make available to the Authority records and source data that supports any EVMS compliance review, Demonstration Review or Surveillance Review of a Sub-Contractor's EVMS within thirty days of receipt or production.

11.7.7 The Contractor shall include EVM data from approved Sub-Contractors within their CPRs, which has the same status as the Contractor's EVM data when preparing CPRs in accordance with DID-013.

11.7.8 The Contractor for small high-risk sub-Contract(s), instead of a CPR Format 1 (Provided in Annex A to DID-011) shall mandate the delivery from the sub-Contractor of a Contract Cost and Programme Status Report (CPSR) similar to the template provided in Annex A to DID-013). These reports will be made available to the Authority aligning to the Authority data requirements.

11.8 **Sub-Contractor Monitoring and Control where EVM does not apply**

11.8.1 The Contractor shall ensure that the approved Sub-Contractors monitor progress against their own plans.

11.8.2 The Contractor shall ensure that the approved Sub-Contractors implement corrective actions to address any deviations from any plan.

11.8.3 The Contractor shall ensure that the Sub-Contractors prepare and deliver performance status to the Contractor within the same intervals that the Contractor reports to the Authority.

11.8.4 The Contractor shall derive and include EVM data from approved Sub-Contractors, which corresponds to the data being provided by the Contractor's EVM data, when preparing CPRs in accordance with DID-013.

11.8.5 Upon request, the Contractor shall provide the Authority with a copy of the Sub-Contractors' supporting data or basis of performance reports.

11.9 **Deliverable Data Formats**

11.9.1 The Contractor shall ensure that project/programme data can be exchanged using the Authority preferred software tools. These include:

- Microsoft Office tools for narrative documents;
- Primavera P6 for Programmes; or outputs that can be translated to a XER or XML file as agreed by the Authority.
- Microsoft Excel compatible for numerical reports
- Risk Register from Active Risk Manager (ARM) or similar

11.9.2 The output of an alternative software system must be compatible with being translated to a XER or XML format file or alternative file as agreed by the Authority. The Contractor shall ensure that the Programme is created in a format that allows an export file compatible with scheduling software defined above or as approved by the Authority.

11.10 **Estimate at Completion (EAC)**

11.10.1 The Contractor shall ensure that an EAC process is completed, and the results reported to the Authority upon internal approval.

11.10.2 Where applicable, the timing and detail of the Contractor EAC process shall be as follows:

- Annually, a comprehensive, detailed estimate of remaining and at completion (inclusive of Sub-Contractor costs) shall be conducted by the Contractor including risk analysis.
- As driven by any substantial change, an update of the ETC and EAC shall be conducted by the Contractor. This is to be highlighted to the Authority.
- Monthly, various CPR reports require an updated EAC. CPR Format 1 (Annex A to DID-013) also require the Contractor's best case, worst case, and most likely values for the EAC. The reason for any variance is to be explained on the associated CPR Format 3 (Annex C to DID-011).

11.10.3 For Substantial Change, Annual or Quarterly EAC updates, the Contractor shall provide data in both static and electronic form and grant Authority access to the Contractor EAC Guidance Documentation including but not limited to:

- The Programme assumptions to include copies of the Programme which the Contractor is using to develop the ETC. The Programme level of detail will be agreed between the Contractor and the Authority.
- Timings for EAC, governance, cost, and Programme review meetings which the Authority may wish to attend.
- Risk and Opportunity Management Plan and guidance on Risk and Opportunity Reviews.

- Assumptions regarding Economic Conditions (ECs) and Rates Treatment, estimating methodologies, impending and approved changes to the PMB, dependences, exclusions, the basis of estimate for cost and Programme, data collection, verification and validation and approval process.
- Cost Model and supporting / feeder data capture, templates or guidance including files, formats, and structure of the data collation.
- An explanation of any EAC changes to facilitate collation of CAM EAC Movements and subsequent summation of Contract EAC movements identifying cost drivers.
- Risk Analysis, Risk Register, Risk Programme Network Diagrams and Programme Uncertainty Basis of Estimate.
- Copies of the finalised EAC Programme data in XER or XML file format and Programme / Time Risk Analysis Model data (.PLAN file format where Primavera Programme Risk Analysis is used).

11.10.4 EAC Process Analysis and Reporting

11.10.4.1 The Contractor shall provide upon completion of the Annual and Quarterly EAC process an EAC Review document including;

- Summary of EAC Cost versus Contract Approval Cost with variance. Where applicable, from Risk Analysis modelling, the comparison of the P10, P50, P90 confidence EAC (and including the Contract Approval confidence if different to the usual P50 confidence).
- Summary of EAC Programme Key Milestones deliverable dates versus those dates agreed as part of Contract Approval with variance. Derived where applicable from Risk Analysis modelling, the P10, P50, P90 EAC confidence (and including the Contract Approval confidence if different) versus the Contract Approval and variance.
- Summary of Contract cost impact drivers.
- Summary of Programme impact drivers
- Detailed Summary of top EAC drivers by Control Account
- Top 10 cost risks with an additional focus on current and following financial year forecasted risk impacts.
- Contractor EAC risk mitigation action plans
- A comparison of any EAC changes to the previously agreed baseline in MS Excel format to communicate the forecast EAC. The comparison shall be between the approved budget and the current estimate at the WBS level agreed with the Authority to represent a managerially significant breakdown of the work.
- A copy of any changes in risks, which will be supplied separately or incorporated into the above, in MS Excel format to communicate the forecasted risk exposure.

12 **Data Item Definitions (DIDs)**

12.1 The Data Items Definitions (DIDs) for the defines the minimum levels of data required for the documents required under this Contract. The Contractor may include additional information where it adds value or provides clarity.

12.2 The Contractor shall ensure that every document delivered that is defines in this document includes the following standard information:

- List of definitions, acronyms, and abbreviations
- Record of amendments
- A statement which defines the period or conditions under which the document shall be updated.

12.3 Unless otherwise explicitly specified within the relevant Data Item Definition, all documents shall be delivered to the Authority in a format which is compatible with standard Microsoft Office applications.

12.4 All documents shall be delivered in accordance with the Scope document where applicable.

DID No.	Scope
DID-001	Stakeholder Management Plan
DID-002	Project Management Plan
DID-003	Accepted Programme
DID-004	Deliverable Quality Plan
DID-005	Risk, Issue, & Opportunity Management Plan
DID-006	Risk, Issue, & Opportunity Management Register
	Part 2 – Equipment & Infrastructure Procurement
DID-007	Business Continuity & Disaster Recovery Management Plan
DID-008	Monthly Progress Report
DID-009	Earned Value Management Plan
DID-010	Contract Work Breakdown Structure and Dictionary
DID-011	Earned Value Performance Reporting
Annex A	CPR Format 1 SubContractor Report
Annex B	CPR Format 2 Baseline Change
Annex c	CPR Format 3 Variance Analysis
DID-012	Baseline Change Control
DID-013	Contractor Performance Report
Annex A	Contract Cost and Programme Status Report
DID-014	Safety & Environmental Management Plan
DID-015	Safety Case Report
DID-016	Hazard and Accident log
DID-017	Legislation Compliance Report
DID-018	Hardware & Software Development Plan
DID-019	High Level Design
DID-020	System Requirements Review (SRR)
DID-021	Preliminary Design Review (PDR)
DID-022	Critical Design Review (CDR)
DID-023	Certificate of Design (CofD)
DID-024	Coordinating Installation Design Authority (CIDA) Engineering Change Request (ECR)
DID-025	CIDA “As Fitted” CM Drawings
DID-026	Qualification Test Report
DID-027	Test Evaluation & Acceptance Plan
DID-028	Integrated Test, Evaluation & Acceptance
DID-029	Verification & Validation Requirements Matrix

DID-030	Test Schedule
DID-031	Test Readiness Review (TRR)
DID-032	Test Plan
DID-033	Test Case Procedure
DID-034	Test Reports
DID-035	Legislation Register
DID-036	Infrastructure
DID-036a	Project Execution Plan (PEP)
DID-036b	Construction Environmental Management Plan (CEMP)
DID-036c	Waste Management Plan
DID-036d	Government Soft Landing (GSL) plan.
DID-036e	Transport Management Plan (TMP)
DID-036f	Construction Traffic Management Plan
DID-036g	Sustainability and Resilience Plan
DID-036h	Interface Management Plan
DID-036i	Construction Phase Plan
DID-037	Transport Plan
DID-038	Integrated Logistics Support Plan
Annex A	Supportability Analysis Plan
Annex B	Availability, Reliability and Maintainability Plan
Annex C	Reliability Centred Maintenance Plan
Annex D	Support and Test Equipment Plan
Annex E	Technical Documentation Plan
Annex F	Packaging, Handling, Storage and Transportation Plan
Annex G	Training Management & Training Equipment Plan
Annex H	Configuration Management Plan
Annex I	Obsolescence Management Plan
Annex J	Software Support Plan
Annex K	Disposal Plan
Annex L	Supply Management Plan (SMP)
Annex M	Human Factors Integration Plan
Annex N	Supportability Case
Appendix 1	Separate Spares Provision List
DID-039	Sub-Contractor Management Plan
DID-040	Sustainability and Environmental Appraisal Tools (SEATS).
DID-041	List of Contractor Key Personnel

Table 6 – RAF CAM Relocation DIDs

Scope Document for Contract 701577386

DID-001 – Stakeholder Management Plan

1. The Contractor shall deliver a Stakeholder Management Plan which shall include, but is not limited to, the following sections;
    1. Introduction
    2. Stakeholders
        1. A list of Stakeholders who will have an interest or influence on the delivery of the project shall be identified in a list as an appendix to the Stakeholder Management Plan.
        2. Analysis of each stakeholder to identify their influence or interest.
    3. Communications:
        1. Identification of appropriate methods of communication relative to each Stakeholder/group of Stakeholders.
        2. Identification of the planned frequency of communication with the identified Stakeholders.
    4. Relationships:
        1. The strategy for establishing a mutually beneficial relationship with the Authority and its representatives.
        2. The strategy for working effectively with all suppliers (including Original Equipment Manufacturers (OEMs), Sub-Contractors and the Supply Chain.
        3. Proposed methods of relationship measurement and assessment.
        4. Proposed strategy for conflict resolution.

Scope Document for Contract 701577386

DID-002 – Project Management Plan

1. The PMP shall include, but is not limited to, the following essential information:
    1. Introduction, Purpose, and Overview
    2. Objectives and Scope
    3. Assumptions, Dependencies, Constraints and Exclusions
    4. Project Success Criteria & Factors
    5. Execution Strategy and Delivery Approach
    6. Through Life Management Plan
    7. Monitoring & Control
    8. Reporting
    9. Organisation and Governance
    10. Tools & Techniques
    11. Project Closure and Learning from Experience

2. The PMP shall include, but is not limited to, the following subordinate plans, to be delivered as Annexes to the PMP;
    1. Annex A: Risk, Issues and Opportunities Management Plan (see DID-005)
    2. Annex B: Deliverable Quality Plan (see DID-004)
    3. Annex C: Stakeholder Management Plan (see DID-001)
    4. Annex D: Safety and Environmental Management Plan (see DID-014)
    5. Annex E: Business Continuity & Disaster Recovery Management Plan (see DID-007)
    6. Annex F: Sub-Contractor Management Plan (see DID-039)
    7. Annex G: Earned Value Management Plan (DID-009)

DID-003 – Accepted Programme

1. The Contractor shall deliver a Programme for the duration of the delivery of RAF CAM Relocation, up to Completion. If required, a separate Programme shall be developed to support the snagging phase post-FOC.

2. The initial document shall be tailored to reflect the detail within the Tender proposal but shall include all major milestones (as defined by the Authority) including RIBA stage boundaries, shall reflect any risk assessment completed within the Tender proposal, and all external Project dependencies.

3. An Infrastructure Programme, coherent with the Project Programme, shall be prepared, maintained, and shared with the Authority as required within the Infrastructure DID. To maintain a reasonable planning horizon the Contractor may establish the Project and Programme in defined Stages, noting that the infrastructure level Programme will be broken into RIBA stages as required by the Infrastructure DID. The strategy behind this choice of approach and the defined levels of reporting for the active and future phases shall be detailed in the Tender proposal.

1. **Use/Relationship**

3.1. The Authority will use the Accepted Programme to:
3.2. Provide visibility into the Contractor's planning baseline and current forecast Programme;
3.3. Understand and evaluate the Contractors approach to meeting the requirements of the Contract;
3.4. Monitor Contractor progress in meeting the requirements of the Contract;
3.5. As a source of input when completing Authority planning activities; and,
3.6. Understand the required touch points between the Contractor's and the Authority's work.
3.7. The Accepted Programme relates to the following documents required within the Contract:
- 3.7.1. . Earned Value Management Plan (EVMP);
- 3.7.2. . Project Management Plan (PMP); and,
- 3.7.3. . Contract Work Breakdown Structure (CWBS).

3.8. The Accepted Programme shall be traceable and integrated with:
- 3.8.1. The CWBS (DID-010) – all activities and milestones on the Programme will be coded to the lowest level of the CWBS that represent the scope to which the activity pertains;
- 3.8.2. Contract Milestones – shall be clearly identifiable within the logic linked activity network;
- 3.8.3. The Contractor's EVMS – the integration of scope, Programme and budget will be undertaken around the CWBS, which will form the primary structure for EV Performance reporting; and,
- 3.8.4. . Each submission of the Accepted Programme shall be consistent with the associated Contract Performance Report (CPR) delivered within this Contract.

4. Applicable Standards, Governance & Related Documentation

4.1. Nominated EV Standard - unless otherwise stated in the Contract Terms and Conditions.

5. Requirements:

5.1. The Accepted Programme shall be capable of comparing planned and current forecast data and being displayed in a variety of formats to include:
- 5.1.1. A Gantt chart
- 5.1.2. A listing of all tasks, together with planned (baseline and current progress including forecast) and actual start and finish dates
- 5.1.3. A listing of project milestones (to include all Contract milestones) together with original, rescheduled, forecast and actual completion dates
- 5.1.4. All activity durations within the Programme shall be in days unless otherwise agreed by the Authority.
- 5.1.5. . All resource units within the Programme shall be in hours and costs shall be in Great British Pounds Sterling unless otherwise agreed by the Authority.

5.1.6. The Accepted Programme shall be capable of being displayed at the following levels:

5.1.7. Summary Level – The Summary level of the Accpeted Programme shall provide a graphical display of Contract activities, key events, and milestones at a managerial significant level of the WBS.

5.1.8. Intermediate Level – The Intermediate Level of the Accepted Programme shall provide a graphical display of Contract activities, key events, and milestones at the control account level of the WBS. Accepted Programme generated at the Intermediate Level shall be able to be rolled up to, and shall provide visibility of, the Summary Level.

5.1.9. Detailed Level – The Detailed Level of the Accepted Programme shall provide a graphical display of Contract activities, key events, and milestones at the work-package level of the WBS. A Accepted Programme generated at the Detailed Level shall be able to be rolled up to, and shall provide visibility of and access to, both the Intermediate Level and the Summary Level.

5.2. The Accepted Programme shall identify the following aspects;

5.2.1. Activities and associated durations

5.2.2. Milestones, including Contract Milestones, Payment Milestones, and significant project events

5.2.3. The relationships and dependencies of activities and associated milestones that are to be completed within the scope of this Contract.

5.2.4. Earliest and latest start and finish dates for all activities and associated milestones

5.2.5. Total float and free float of the overall Programme

5.2.6. Critical Path, list of activities on the critical path and those that are near the critical path from start through to completion of the Contract.

5.2.7. Resource Profiles, depicting manpower, materials, and equipment.

5.2.8. The baseline budget for all activities aggregating to the total Performance Measurement Baseline (PMB), allowing a roll-up to work package and control account levels.

5.2.9. SubContracting Programme to include all major sub-Contract activities and outputs at the appropriate level of detail, reflecting complexity and risk.

5.2.10. Required Government Furnished Items (GFX) to include Government Furnished Equipment (GFE), Government Furnished Assets (GFA), Government Furnished Information (GFI), Government Furnished Structures (GFS) if applicable, together with ‘required by’ dates and ‘end of loan dates.’

5.2.11. All non-working time such as holidays and known disruptions

5.3. A Basis of Programme (BOP) shall be produced and maintained under configuration control. The BOP should include the following;

5.3.1. How the Accepted Programme has been produced;

5.3.2. Detail methodologies used to establish estimated durations;

5.3.3. Key assumptions and exclusions;

5.3.4. Details of the standard working time and calendar that has been included;

5.3.5. Risks, including risk analysis techniques used, and any mitigations embedded in the Programme;

5.3.6. The standards used to establish duration lengths and use of constraints, ensuring no open-ended activities;

5.3.7. The basis of estimate and associated assumptions for the cost and duration of baseline activities, covering both labour and materials. This may take the form of a master data and assumptions list; and,

5.3.8. The Configuration and assurance procedures that will be used to manage and ensure the ongoing integrity of the ACCEPTED PROGRAMME.

5.4. **Accepted Programme Reports -** The following reports,

5.4.1. Baseline Reports (Performance Measurement Baseline)
5.4.2. Reports that describe and reflect the initial baseline
5.4.3. Subsequently approved changes that caused a revision of the baseline.
5.4.4. A narrative shall be provided with the original baseline and any subsequent baseline revisions outlining how the Programme has been constructed, the key assumptions together with the basis of estimate and logic of milestone selection and a description of the critical and near critical paths.
5.4.5. A set of Authority agreed Programme health metrics.
5.4.6. Programme Risk Analysis shall be conducted on the Contractor programme, at least quarterly and on the Authority's request, a Programme Risk Analysis (PRA) Report and electronic copies of the PRA programme and the Contractor PRA models shall be provided to the Authority.

5.5. **Progress Reports** (Statused Current Working Programme)
5.5.1. Electronic copy of the progressed programme each reporting period that has formed the basis of the CPR for that period.
5.5.2. A Programme narrative shall be provided with the progressed Programme outlining, the key assumptions underlying the progress and forecast together with the basis of estimate for key forecast activities where this is significantly different to the baseline, the impact and rationale of any significant logic changes and the resulting change to the Programme risk implications, and the resulting impact on key (including Contract) milestone and deliverables, if any. The analysis shall include a narrative description of the current Critical and near Path Analyses.
5.5.3. Milestone Report. Agreed milestones to be shown with the baseline and current forecast dates. Report to provide RAG status and indication of float. Note that there shall be clear definitions and acceptance criteria for reporting milestones.
5.5.4. Critical Path, Sub-Critical Path, and Float Erosion Analysis Reports. Critical path analysis against the baseline and current forecast dates within the Accepted Programme. Summary / variance commentary of movements / changes to the critical path to be reported.
5.5.5. Interdependencies (Give/Get Milestones) Table. To indicate key interdependencies between supply chain, MoD, and Contractor Programe. The report should indicate movements in the period relating to both the Accepted Programme and the current forecast version of these Programme. Variance commentary to be provided.
5.5.6. A set of agreed Programme health metrics for the submitted progressed Programme.
5.5.7. Programme Risk Analysis (PRA) shall be conducted on the Contractor Programme with a Programme Analysis Report and copies of the PRA Programme being provided to the Authority. PRA analysis will be provided together with associated confidence figures for the deterministic baseline considering both uncertainty and risk (against a submitted risk register) and uncertainty.

5.6. **Preparation Instructions:**
5.6.1. The data item shall comply with the general format, content and preparation instructions contained in this DID.
5.6.2. The Accepted Programme shall be the Programme used for the Contract; all other Programme produced in support of this are considered as subordinate to this Accepted Programmed.

5.7. Data Format & Delivery Instructions:
5.7.1. Acceptable file formats are those that are compatible with the Authority IT System.
5.7.2. Accepted Programme deliveries shall include the original Accepted Programme and Basis of Programme, all agreed baseline amendments, the current working Programme together with forecast completion dates and durations.

5.7.3. Contractor Programme updated to reflect current progress shall be provided to the Authority monthly to the end of the calendar month unless agreed otherwise. The monthly reports shall be provided within 5 Business Days of the end of the reporting period unless otherwise specified in the Conditions of Contract.

5.7.4. A Accepted Programme hard copy as well as electronic submission in the native file format P6.

5.7.5. Each submission of the Accepted Programme shall be consistent with the associated Contract Performance Report (CPR).

DID-004 – Deliverable Quality Plan

Background Information:

1. In order to understand and monitor the application of quality management and quality assurance surveillance within the RAFCAM Relocation Project, the Authority requires a Quality Plan to define the activities and level of compliance with all processes and procedures to be conducted within the RAF CAM Relocation Project Contract.

Deliverable Document:

2. This plan shall be reviewed at a minimum annually for compliance and updated by the Contractor and submitted to the Authority for approval i.a.w. Def Con 602A. The plan shall detail the processes to ensure compliance of its sub-Contractors to ensure that quality standards defined within the Contract will be achieved.

Requirements:
3. The Quality Plan shall specify as a minimum how the Contract related quality requirements will be fulfilled and will be developed in accordance with the following:

3.1 The Quality Plan shall describe the quality assurance (QA) activities, processes and resources required to ensure successful delivery of the project against the Contract and the applicable standards.
3.2 The Contractor shall comply with the following UK Defence, Allied Quality Assurance Publications (AQAP) and ISO standards at the latest versions:

3.2.1 AQAP 2105 - NATO Requirements for deliverable Quality Plan.

3.2.2 AQAP 2110 - NATO Quality Assurance Requirements for Design, Development and Production.

3.2.3 AQAP 2210 – NATO Supplementary Software Quality Assurance Requirements to AQAP 2110. The Quality Management Plan shall include a Software Project Quality Plan (SPQP) which will comply with AQAP 2105 and 2210.

3.2.4 Def Stan 05-061 Part 9. (Some products are Safety Critical).

3.2.5 Def Stan 05-135 Avoidance of Counterfeit material is required by AD policy

3.2.6 Def Stan 05-61 Part 1 Concessions and Production Permits. **NB** Due to the nature of this Contract all concessions are to be forwarded to the Authority for acceptance/rejection. Def Stan 05-061 Part 9. (Some products are Safety Critical).

3.2.7 DEFCON 627 Supply of conforming products CoCs are required.

ISO 9001

Guidance Document:

4. The Contractor should make use of the following guidance documents when producing the QMP:

4.1 AQAP 2070 Ed.B Ver. 4 NATO MUTUAL GOVERNMENT QUALITY ASSURANCE (GQA) PROCESS

4.1.1 AQAP 2105-SRD.1 Ed. A Ver.1 GUIDANCE ON THE USE OF AQAP 2105.

4.1.2 AQAP-2110-SRD.2 Ed. A Ver.1 GUIDANCE ON THE USE OF AQAP-2110 EDITION D.

4.1.3 AQAP-2210-SRD.1 Ed. A Ver.1 NATO GUIDANCE ON THE USE OF AQAP-2210 NATO SUPPLEMENTARY SOFTWARE QUALITY ASSURANCE REQUIREMENTS TO AQAP-2110 OR AQAP-2310

Scope Document for Contract 701577386

DID-005 – Risk, Issue, & Opportunity Management Plan

1. The Risk, Issues, & Opportunities Management Plan shall include, but is not limited to, the following essential information:

1. Introduction.
2. Purpose, Objectives, and Context.
3. Management Process – a detailed description of the processes which will be used to manage risks, issues, and opportunities, to include:
    1. Identification
    2. Assessment
    3. Developing responses
    4. Monitoring, reporting and escalation
    5. Rationale
    6. Costed Opportunities
4. Risk, Issues, & Opportunity Reviews:
    1. A process and frequency for conducting risk, issue, and opportunity reviews within the Contractors Organisation.
    2. A process for conducting quarterly risk, issue, and opportunity reviews with the Authority, including a generic agenda for reviews.
5. Risk, Issue, & Opportunity Reporting:
    1. A process and frequency for reporting risks, issues, and opportunities to the Authority, including both regular and ad-hoc reporting.
6. Risk Governance.
7. Methods, Tools & Techniques:
    1. Provide information on any recognised methods, tools and techniques that are used to manage risks, issues, and opportunities.

Scope Document for Contract 701577386

DID-006 – Risk, Issue, & Opportunity Register

1. The Risk, Issues and Opportunities Register shall contain, but is not limited to, the following essential information for each entry:
    1. Identification Number.
    2. Date identified.
    3. Title Description: A narrative description of the risk, issue, or opportunity, presented in the following format;
        1. "*Because of… [cause]...there is a risk/issue/opportunity that... [event]...will occur, resulting in... [effect].*"
    4. Probability, including any estimated probability post-response action.
    5. Impact: 3-point estimates for time, cost, and performance for both pre-and post-mitigation.
    6. Response Action: The activities that will be undertaken to;
        1. Reduce either the probability and/or the impact of the risk occurring (to include a Cost Benefit Analysis)
        2. Maximise the potential for exploiting the opportunity.
    7. Response: Identify if the risk or opportunity will be Treated, Tolerated, Transferred, Terminated, or Taken.
    8. Owner.
    9. Review Date.

All risks shall be scored in accordance with the Contractor's risk management tool.

2. The Risk Register shall be delivered in a format which is compatible with Active Risk Manager (ARM Version 11). If the Risk Register is developed using an alternative software, then the register shall be prepared to ensure it can be imported into ARM without any additional preparation activity by the Authority.

Scope Document for Contract 701577386

DID-007 – Business Continuity & Disaster Recovery Management Plan

1. The Contractor shall deliver a Business Continuity and Disaster Recovery Management Plan (BC&DRMP) which shall include, but not limited to, the following sections:
    1. Introduction.
    2. Conditions and rules for the plan to be invoked.
    3. The process for invoking the plan and activating fall back plans.
    4. Risk analysis of possible BC&DR scenarios, including impact to service delivery.
    5. Mitigations to reduce impact of identified risks.
    6. Appropriate fall-back plans and processes to be followed if an event occurs.
    7. Communication strategy in event of BC&DR event.
    8. Identification of business-critical resources and infrastructure.
    9. Identification of single points of failure and how these are mitigated.
    10. Safeguards in place for storing and retrieving business critical information data, plans, processes, configurations, records etc.
    11. How the BC&DRMP is flowed down throughout the supply chain.
    12. The Programme for regular testing of the plan.
    13. Authority responsibilities to the Contractor.

Scope Document for Contract 701577386

MAC Reference	Description	Report
2.3	Support educational attainment relevant to the contract, including training schemes that address skills gaps and result in recognised qualifications	Number of people-hours of learning interventions delivered under the contract, by UK region (Covered by KPI 2)
3.1	Create a diverse supply chain to deliver the contract including new businesses and entrepreneurs' start-ups, SMEs, VCSEs and mutuals.	For each of the following categories: ○ start-ups ○ SMEs ○ VCSEs; and ○ mutuals identify the Total spend under the contract, as a percentage of the overall contract spend.
3.2	Support innovation and disruptive technologies throughout the supply chain to deliver lower cost and/or higher quality goods and services	Outcomes-based specifications enabling alternative approaches to be offered
3.3	Support the development of scalable and future-proofed new methods to modernise delivery and increase productivity	Activities that promote collaboration to access new technologies/green technologies and/or approaches

DID-008 – Monthly Progress Report

The Contractor shall deliver a Monthly Progress Report and will chair a subsequent meeting to present this report up to 5 Business Days after release of the report. This report shall include, but is not limited to;

1. Project Management;
    1. Programme summary.
    2. Risk, Issues, and Opportunities summary.
    3. Key Performance Indicators (KPI) status for preceding quarter and review any KPI trends to confirm correct approach and application.
    4. Quality Performance Indicators (QPI) status for preceding quarter.
    5. Forward Plan.
    6. Supporting Plans and Documents status.
    7. Change Register summary.
    8. Update and lessons learned from the latest Business Continuity and Disaster Recovery Management Plan test.

2. Technical;
    1. Safety & Environmental summary.
    2. Security summary.
    3. Quality Management summary.
    4. Value Engineering – presentation of value engineering provisions for consideration by the Authority.

3. Finance and Commercial;
    1. Report on the variable costs, provide actuals to date and forecast for remaining TY.
    2. Report on any performance deductions IAW Schedule K (Key Performance Indicators, and Performance Measures).
    3. A Report on 3PR including the asset value is to be provided in the final quarterly report of each year following annual reconciliation.
    4. SME participation and spend (annually)

5. Social Value
    1. Reporting on progress of Model Award Criteria (MAC) 2.3,3.1,3.2,3.3 (annually) in accordance with the table below.

Scope Document for Contract 701577386

6. Infrastructure
    1. Quality arisings.
    2. Working group summary statements,
    3. SEAT updates
    4. Summary sustainability reports.

DID-009 – Earned Value Management Plan

1. **Description:** The EVMP documents the Contractor's plans, methodologies, and processes for ensuring compliance with the EVMS requirements of the Contract. The EVMP shall include a description of the system structure and data flows, Project Controls System Description (PCSD), plans for implementation and subsequent review and maintenance of the Contractor's EVMS.
2. **Use/Relationship:**
   2.1. The Authority will use the EVMP to:
      2.1.1. Gain confidence that the full scope of work related to the EVMS implementation Contractual requirements, together with associated system implementation risk have been captured and are within the plan for implementation of a compliant EVMS on the Contract;
      2.1.2. Review and assess the Contractor's proposed EVMS for:
         2.1.2.1. compliance with the requirements of the Contract;
         2.1.2.2. the EVMS ability to support effective Contract Performance Management; and
         2.1.2.3. the EVMS ability to meet the Authority's data requirements.
      2.1.3. Understand the design and functionality of the Contractor's EVMS as the basis for the conduct of EVMS related reviews;
      2.1.4. Gain confidence that the Contractor has appropriate controls procedures in place to maintain a compliant system during the Contract; and,
      2.1.5. Form a basis for assessing the ongoing compliance of the EVMS.

   2.2. The EVMP is subordinate to the Project Management Plan (DID-002).

3. **Requirements:**
   3.1. EVMP Overview
      3.1.1. The EVMP shall describe the objectives, scope, constraints, risks, and assumptions associated with the Contractor's EVMS activities related to this Contract. Any risks identified with the Contractor's EVMS implementation and operation shall be documented in the EVMP and shall describe the risk management strategies associated with any EVMS implementation and operation related risks.
      3.1.2. Configuration Management to be defined within the context of EV within the EVMP.

   3.2. EVM Implementation
      3.2.1. The EVMP shall describe the processes and Programme to meet the Contractual requirements and dates that the Contractor intends to use to implement the EVMS including:
         3.2.1.1. a description of the areas of noncompliance between the Contractor's current project management system and the EVMS Contractual requirements
         3.2.1.2. the corrective actions planned to be undertaken to rectify the areas of non-compliance, including the timeframes involved.
         3.2.1.3. identification of any new or modified procedures, an overview of the scope of the new or modified procedures, and the responsibilities and timeframes for developing and approving these procedures;
         3.2.1.4. identification of areas of risk to the proposed EVMS implementation and proposed mitigation strategy;
         3.2.1.5. a summary of the implementation Programme, with the full implementation Progamme being provided as part of the Accepted Programme;
         3.2.1.6. a description of the activity to ensure SubContractor implementation of EV related Contract requirements.

   3.3. EVMS Description

3.3.1. The EVMP shall provide a description of the Contractor's EVMS that demonstrates compliance with the requirements of the Contract covering all relevant EV Criteria as defined by the applicable standard. Where Contractor generated processes are referenced copies are to be provided to the Authority. These will include, but not be limited to, processes for Work Authorisation, scheduling, Risk Management, Change Management, Cost Control, and Accounting processes

3.4. Contractor EVMS Assurance

3.4.1. The EVMP shall describe the Contractor's EVMS quality assurance strategy to ensure that the EVMS remains compliant with the requirements of the Contract, including:

3.4.1.1. The criteria to determine that an EVMS Review is required; and,

3.4.1.2. the company roles/personnel involved in the reviews/activities.

3.4.2. Details of any continuous improvement process the company utilises. Results of Contractor Internal EVMS Assurance reviews and processes shall be shared with the Authority.

3.5. EVM Performance Reports

3.5.1. The EVMP shall describe the EVMS performance reporting processes and timescales used by the Contractor. The EVMP shall confirm adherence to the Contract Terms & Conditions by describing the reporting levels, structures, and variance thresholds for the provision of CPRs including the standard reporting levels by CWBS elements.

3.5.2. The EVMP shall detail the variance thresholds that, when exceeded, require the provision of CPR Format 3 (Annex C to DID -011) and at what level of the CWBS.

3.5.3. The EVMP shall describe any variations to the reporting levels and variance thresholds as the Contract progresses or the risk profile change.

3.5.4. The EVMP shall confirm the electronic formats to be used for the provision of EVMS data to the Authority to facilitate data transfer and analysis.

3.5.5. The EVMP shall describe the level and methodology to produce trend data.

3.6. Data Integrity Checks

3.6.1. The EVMP shall detail the methodology and frequency of data, Programme, and EV health checks.

3.6.2. The EVMP shall define the process through which it will be possible to reconcile the financial data within the system back to the Contract value (price).

3.7. EVM Related Reviews

3.7.1. The EVMP shall describe the facilities and support that will be provided to the Authority in support of IBRs. This should include but is not limited to:

3.7.1.1. The provision of supporting documentation to the Authority review team no later than forty-two days prior to a review;

3.7.1.2. All documentation shall be delivered electronically to the Authority;

3.7.1.3. Documentation delivered in support of a review shall be the final version that will be presented at the review unless otherwise agreed by the Authority;

3.7.1.4. Selected Control Account Managers (CAM) and Project Management & Control staff shall be available to support pre-planned interviews; and,

3.7.1.5. Access provisions are to be made for the review of documentation in electronic formats such as EVMS process and procedures, Programmes, CPR CAM documentation and any related data requested to support the review.

3.8. Contractor EVM Assessment

3.8.1. Unless otherwise agreed by the Authority, the Contractor will undertake an assessment of Earned Value of the Sub-Contractor's performance where the subContract is:

3.8.1.1. in excess of 12 months and the SubContract price exceeds £20m;
3.8.1.2. represents more than 20% of the Contract value; or
3.8.1.3. as directed by the Authority. Authority direction will be based on a risk assessment of the scope of work being undertaken in the subContract.

3.8.2. The EVMP will detail a list of all significant SubContracts (where the subContractor portion of the overall Contract cost is => 20% or £20M) incorporating the following information:
3.8.2.1. SubContract title and description;
3.8.2.2. SubContract type;
3.8.2.3. SubContract value and Duration;

3.8.3. SubContractor PC (Project Controls) experience including standards that applied and any formal recognition of EVMS.

3.8.4. The PC Description of Flow Down arrangements to each SubContract shall include the following information:
3.8.4.1. Contractors Plans for assessing performance to meet the Authority's EV Standards and Contract Requirements., including plans for SubContractor Reviews. Note the Authority shall be given the opportunity to participate in these reviews in accordance with the Contract terms.
3.8.4.2. Plans for subContract report data incorporation against WBS (CPR Format 1) Annex A to DID 011, Baseline Change (CPR Format 2) Annex B to DID 011, Variance Analysis (CPR Format 3) Annex C to DID 011,
3.8.4.3. Proposed timing of SubContract data incorporation

4. **Preparation Instructions:**
4.1. The data item shall comply with the general format, content and preparation instructions contained in this DID.
4.2. Where referenced information is included, it shall refer to the lower-level EVMS procedures, these referenced procedures and any related instructions shall be delivered as attachments to the EVMP.
4.3. The content requirements of this data item should be considered as the minimum standard that is required. It is not intended to constrain or otherwise restrict the inclusion of any content required to effectively develop the plan or implement the EVMS requirements of the Contract.

Scope Document for Contract 701577386

DID-010 – Contract Work Breakdown Structure and Dictionary

1. **Description:** The Contract Work Breakdown Structure (CWBS) is the Contractor's extension of the Authority Work Breakdown Structure (WBS) and forms the framework for Contract planning, management, and status reporting and for estimating costs, Programme, and technical achievements at completion.

2. **Use/Relationship:**
   2.1. This DID summarises the format and content for the CWBS Structure and Dictionary and provides preparation instructions to support the data and frequency requirements specified in the Contract. This DID applies to all Contracts that require a CWBS.
   2.2. The purpose and intent of the CWBS, and associated Dictionary, is to document and understand the Contractor's product-oriented deliverable scope and planned approach to performing the Contract.
   2.3. CWBS at the nominated reporting level will be used in the CPR Reports.
   2.4. The CWBS is related to, and shall be consistent with, the Contractor's Earned Value Management Plan (EVMP) (DID-011) and the Accepted Programme DID-003.

3. **Requirements**
   3.1. The data item shall comply with the general format, content and preparation instructions contained in this DID.
      3.1.1. Configuration control of the CWBS and its Dictionary must be maintained throughout the Contract. Changes to the CWBS or its Dictionary affecting the Authority WBS & WBS Dictionary require the prior approval of the Authority.
      3.1.2. All Contract scope must be included in the CWBS Dictionary.
      3.1.3. The CWBS shall be developed in as much detail as required to define the work effort into manageable parts that successfully achieve the end objective of the Contract.
      3.1.4. The CWBS Dictionary shall define in detail the scope of work included against each CWBS element. It shall correlate all Contract deliverables (CLINs, CDRLs (Contract Data Requirement List) and accomplishment of Mandated Reviews) against the lowest level of CWBS elements to ensure responsibility for delivery of all items is assigned and planned appropriately.
      3.1.5. The CWBS shall be consistent with the DPS where appropriate.
      3.1.6. The CWBS will also include additional data as described below.

   3.2. Contract Work Breakdown Structure
      3.2.1. The CWBS is a hierarchical family tree arrangement of WBS elements, defined by:
         3.2.1.1. Incorporating any Contractually required high-level WBS structure; and
         3.2.1.2. Lower-level elements of the Contractor's WBS necessary to provide an appropriate framework throughout the project for product and service definition and control.
      3.2.2. The CWBS Structure shall comprise of:
         3.2.2.1. CWBS/WBS Code. The preferred convention is to use a numeric structure.
         3.2.2.2. CWBS Element Level. The level of the CWBS element.
         3.2.2.3. CWBS Element Name. The title of the CWBS element using the specific name or nomenclature. The CWBS element names used in the CWBS Structure must be identical for the same element in the CWBS Dictionary.

   3.3. Contract Work Breakdown Structure Dictionary
      3.3.1. The CWBS Dictionary includes narrative descriptions of each WBS element scope and reference data to support tracing to other documents. The following features should be included (where applicable to each level):
         3.3.1.1. CWBS/WBS Code. The same codes used in the structure.

3.3.1.2. CWBS Element Level. The level of the CWBS element. It is desirable to note where the WBS element represents a Contractual Reporting Level, a Control Account, or, where relevant, a Work Package.

3.3.1.3. CWBS Element Name. Enter the same element names used in the CWBS structure.

3.3.1.4. CWBS Approved Changes. List of changes approved in the change control process

3.3.1.5. CWBS Element Status. Status of Scoping Statement (Draft/Approved)

3.3.1.6. Scoping Statement version number & Revision date

3.3.2. CWBS Scope Definition. Enter a complete description of the work content of each CWBS element. It is important that the Contractor specifies all hardware and software equipment that are associated with each WBS element. The work content definition must include a brief description of the process used to design, produce, or sustain the end item or service. The description must address the types of activities (e.g., design, production, analysis, or management) included within the CWBS element. These descriptions must include information on whether the reporting Contractor or a SubContractor is performing the work being described.

3.3.3. CWBS Dictionaries must reflect only the work that is being completed within the Contract for which the document is being submitted.

3.3.3.1. If work is not expected to occur for a given CWBS element, the CWBS Dictionary definition must indicate that this element is not applicable.

3.3.3.2. If work at some elements is being performed by a Supplier/SubContractor, the Dictionary must state this. Similarly, if the CWBS is for a subContract/supplier, the work defined for each element must be specific to the SubContractor/supplier's scope of effort and must not include the prime Contractor's work.

3.3.3.3. If there are Government Furnished Assets (GFA) items being integrated into the end item, it is not expected that a detailed description of those items is provided, however, all GFA items being integrated into the system as part of the Contract must be labelled as such in the CWBS Dictionary under the appropriate elements.

3.3.4. Typical features of the Scope Definition include:

3.3.4.1. PURPOSE: One or two sentences summarising why the scope exists.

3.3.4.2. BOUNDARIES: Explicit statements of what is in or out of scope to describe the boundaries. Consider including things by exception (obvious boundaries do not need stating whereas more subtle boundaries will require more description). To add clarity, it is desirable to indicate where the excluded scope is captured (e.g., alternate WBS/alternate Contract/ Customer)

3.3.4.3. STRATEGY: How is the scope to be delivered? Is it Prime Contractor Scope or is it to be subContracted? Is the strategy summarised in policies or processes?

3.3.4.4. KEY ASSUMPTIONS and EXCLUSIONS: Any top-level assumptions and exclusions that have been made in the definition of this scope, identifying clear interface points in delivery, and subsequent planning. For example: 'It is assumed that System X's design will reuse the power-plant from System Y.' If this assumption were to change, it would likely have scope, time, and cost implications and so the baseline would require a change proposal.

3.3.4.5. ACCEPTANCE CRITERIA: How will you know when the scope is complete (where appropriate, generally when there are deliverables/products).

3.3.4.6. DEPENDENCIES: Identify interdependencies with other WBS elements. If there is a particularly important dependency on another area of this project's WBS then consider including it. It is desirable to note the delivering WBS element. Interdependencies with of from the Authority should be identified and captured in accordance with the above instructions.

3.3.4.7. PRODUCTS/OUTPUTS: Insert the key deliverables particularly those that form dependencies to other WBS element (it is desirable to note the receiving WBS element) or Contract deliverables or review requirements. Scope without deliverables is acceptable, but this should not be the norm.

3.3.4.8. Cross-reference to the conditions of Contract and Scope that informed the scope definition, or other traceability references (a reference matrix for Scope clauses to the WBS may be desirable), or the applicable standards or references that determine the scope.

3.4. SubContracted Activities

3.4.1. SubContracted activities shall be identified in one or more separate WBS which shall be integrated into and identifiable within the CWBS. In the circumstance that one SubContractor is supplying products to multiple CWBS elements or work packages:

3.4.1.1. the WBS shall maintain a product structure reflecting the specification tree;

3.4.1.2. the responsibility for specifying each product shall remain with the design engineer for the WBS element to which the product belongs;

3.4.1.3. the cost of each product shall remain with the WBS element to which it belongs; and

3.4.1.4. a commercially clean interface can be maintained with the SubContractor by creating a SubContract Management WBS element for each such SubContract.

4. **Data Format & Delivery Instructions**

4.1. Routine reporting shall be at the appropriate level as agreed with the Authority to represent a Managerially Significant breakdown of the work for all Contractors unless otherwise defined in the Contract terms or EVMP.

4.2. More detailed reporting of the CWBS shall be required for those lower-level elements that address high-risk, high-value, or high-technical-interest areas of a Project. Consult with the Authority for guidance as needed.

4.3. The CWBS will be prepared and submitted in an electronic format that is either Microsoft Word or Microsoft Excel compatible.

Scope Document for Contract 701577386

DID-011 – Earned Value Performance Reporting

1. The CPRs are prepared by the Contractor to provide the Authority with earned value performance data designed to report multiple aspects of Contract performance and future planning activity. Examples of Format 1,2 & 3 (reports have been provided Annex A-C to DID-011).
   1.1. Format 1 (Annex A) – Measures cost and Programme performance by Work Breakdown Structure (WBS) elements at the appropriate material level agreed with the Authority to represent a Managerially Significant breakdown of the work.
   1.2. Format 2 (Annex B) – Provides the Performance Measurement Baseline (PMB), and records changes to the PMB implemented during the reporting period. The PMB is represented as a time-phased budget baseline plan against which performance is measured.
   1.3. Format 3 (Annex C)– Narrative report used to explain significant cost and Programme variances together with other related Contractor problems. Significant variances are those that exceed the Contracted thresholds for these variances.

2. **Use/Relationship:**
   2.1. The Authority will use the CPRs to:
      2.1.1. Assess and evaluate Contract performance and as the basis for Contract performance meetings and reviews;
      2.1.2. Assess the impact of existing and potential problems encountered resulting in significant cost and Programme variances and as the basis for discussing potential mitigation actions.
      2.1.3. Provide accurate, timely status information to aid Authority view of Contractor performance and as the basis for summarisation of performance across the Authority.
      2.1.4. CPRs directly relate to the requirements specified in the Earned Value Management Plan (EVMP) and reconcile to progress incorporated in any related status reports that may be required within the scope of the Project Management Plan (PMP) where required.

3. **Applicable Standards, Governance & Related Documentation:**
   3.1. Nominated EV Standard unless otherwise stated in the Contract terms.

4. **Requirements:**
   4.1. Data provided within the CPRs shall relate to the authorised Contract work undertaken in support of this Contract, demonstrating compliance with EV requirements.
   4.2. Data provided shall include both priced and unpriced effort.
   4.3. The level of detail required for each report shall be as agreed by the Authority.
   NOTE: Lower-level detail may be required on an ad hoc basis in areas where a problem has occurred until such time that the Authority is content to return to the higher level.

5. **Preparation Instructions:**
   5.1. The content requirements of this data item should be considered as a minimum standard that is required. It is not intended to constrain or otherwise restrict the inclusion of any content required to effectively develop the plan or implement the EVMS requirements of the Contract.

6. **Data Format & Delivery Instructions:**
   6.1. The data item shall comply with the general format, content and preparation instructions contained in this DID.
   6.2. CPRs are to be delivered in electronic format to the Authority and in accordance with the CDRL timescales. Electronic format shall permit drill down to the lowest level where cost performance is captured.
   6.3. Reports shall be delivered monthly.
   6.4. Ensure that reports apply agreed variance thresholds to ensure completeness of CPR format 3 (Annex C to DID 011) narratives.

Scope Document for Contract 701577386

Annex A to DID-011 Cost Performance Report Format 1 subContract Report Data

CLASSIFICATION (After Completion)

CONTRACT PERFORMANCE REPORT FORMAT 1 - WORK BREAKDOWN STRUCTURE							GBP IN _____	FORM APPROVED DES-CPR-1
SUBMIT COMPLETED FORMS IN ACCORD WITH CONTRACTUAL REQUIREMENTS.								
1. CONTRACTOR		2. CONTRACT			3. PROGRAMME			4. REPORT PERIOD
a. NAME		a. NAME			a. NAME			a. FROM (YYYYMMDD)
b. LOCATION (Address and Post Code)		b. NUMBER			b. PHASE			b. TO (YYYYMMDD)
		c. TYPE	d. SHARE RATIO		c. EVMS ACCEPTANCE NO YES (YYYYMMDD)			

5. CONTRACT DATA								
a. QUANTITY	b. NEGOTIATED COST	c. ESTIMATED COST OF AUTHORISED UNPRICED WORK	d. TARGET PROFIT/ FEE	e. TARGET PRICE	f. ESTIMATED PRICE	g. CONTRACT MAXIMUM	h. ESTIMATED CONTRACT MAXIMUM PRICE	i. DATE OF ESTIMATE (YYYYMMDD)

6. ESTIMATED COST AT COMPLETION				7. AUTHORISED CONTRACTOR REPRESENTATIVE	
	MANAGEMENT ESTIMATE AT COMPLETION (1)	CONTRACT BUDGET BASE (2)	VARIANCE (3)	a. NAME (Last, First, Middle Initial)	b. TITLE
a. BEST CASE				c. SIGNATURE	d. DATE SIGNED (YYYYMMDD)
b. WORST CASE					
c. MOST LIKELY					

8. PERFORMANCE DATA

ITEM (1)	CURRENT PERIOD							CUMULATIVE TO DATE							AT COMPLETION		
	BUDGETED COST		ACTUAL COST	VARIANCE		INDICATOR		BUDGETED COST		ACTUAL COST	VARIANCE		INDICATOR				
	WORK SCHEDULED (2)	WORK PERFORMED (3)	WORK PERFORMED (4)	SCHEDULE (5)	COST (6)	SPI (7)	CPI (8)	WORK SCHEDULED (9)	WORK PERFORMED (10)	WORK PERFORMED (11)	SCHEDULE (12)	COST (13)	SPI (14)	CPI (15)	BUDGETED (16)	ESTIMATED (17)	VARIANCE (18)
a. WORK BREAKDOWN STRUCTURE ELEMENT																	
b. UNDISTRIBUTED BUDGET																	
c. SUB TOTAL (PERFORMANCE MEASUREMENT BASELINE)																	
d. MANAGEMENT RESERVE																	
e. TOTAL																	

DES-CPR-1

CLASSIFICATION (After Completion)

Scope Document for Contract 701577386

Annex B to DID-011 Cost Performance Report Format 2 Baseline Change

CONTRACT PERFORMANCE REPORT FORMAT 3 - BASELINE CHANGE GBP IN _____														FORM APPROVED DES-CPR-3
SUBMIT COMPLETED FORMS IN ACCORD WITH CONTRACTUAL REQUIREMENTS														
1. CONTRACTOR			2. CONTRACT			3. PROGRAMME								4. REPORT PERIOD
a. NAME			a. NAME			a. NAME								a. FROM (YYYYMMDD)
b. LOCATION (Address and Post Code)			b. NUMBER			b. PHASE								b. TO (YYYYMMDD)
			c. TYPE		d. SHARE RATIO	c. EVMS ACCEPTANCE NO YES (YYYYMMDD)								
5. CONTRACT DATA														
a. ORIGINAL NEGOTIATED COST		b. NEGOTIATED CONTRACT CHANGES	c. CURRENT NEGOTIATED COST (a. + b.)		d. ESTIMATED COST OF AUTHORISED UNPRICED WORK	e. CONTRACT BUDGET BASE (c. + d.)		f. TOTAL ALLOCATED BUDGET					g. DIFFERENCE (e. - f.)	
h. CONTRACT START DATE (YYYYMMDD)		i. CONTRACT VALUE AGREED DATE (YYYYMMDD)			j. PLANNED COMPLETION DATE (YYYYMMDD)	k. CONTRACT COMPLETION DATE (YYYYMMDD)			l. ESTIMATED COMPLETION DATE (YYYYMMDD)					
6. PERFORMANCE DATA														
ITEM	BCWS CUMULA-TIVE TO DATE	BCWS FOR REPORT PERIOD	BUDGETED COST FOR WORK SCHEDULED (BCWS) (Non-Cumulative)											UNDIS-TRIBUTED BUDGET	TOTAL BUDGET
			SIX MONTH FORCAST						ENTER SPECIFIED PERIODS						
			+1	+2	+3	+4	+5	+6							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
a. PERFORMANCE MEASUREMENT BASELINE (Beginning of Period)															
b. BASELINE CHANGES AUTHORISED DURING REPORT PERIOD															
c. PERFORMANCE MEASUREMENT BASELINE (End of Period)															
7. MANAGEMENT RESERVE															
8. TOTAL															

DES-CPR-3

Scope Document for Contract 701577386

Annex C to DID-011 Cost Performance Report Format 3 Variance Analysis

CLASSIFICATION (After Completion)

CONTRACT PERFORMANCE REPORT FORMAT 5 - EXPLANATIONS AND PROBLEM ANALYSES				FORM APPROVED DES-CPR-5
SUBMIT COMPLETED FORMS IN ACCORD WITH CONTRACTUAL REQUIREMENTS.				
1. CONTRACTOR	2. CONTRACT		3. PROGRAMME	4. REPORT PERIOD
a. NAME	a. NAME		a. NAME	a. FROM (YYYYMMDD)
b. LOCATION (Address and Post Code)	b. NUMBER		b. PHASE	b. TO (YYYYMMDD)
	c. TYPE	d. SHARE RATIO	c. EVMS ACCEPTANCE NO YES (YYYYMMDD)	

5. EVALUATION

WBS ELEMENT	CURRENT PERIOD							CUMULATIVE TO-DATE							AT COMPLETION		
(1)	BCWS (2)	BCWP (3)	ACWP (4)	SV (5)	CV (6)	SPI (7)	CPI (8)	BCWS (9)	BCWP (10)	ACWP (11)	SV (12)	CV (13)	SPI (14)	CPI (15)	BAC (16)	EAC (17)	VAC (18)
				0	0						0	0					0

Explanation should include but is not limited to:
Summary Analysis
Summary of Overall Contract Variances
Differences between EAC and BAC
Changes in Undistributed Budget
Changes in Management Reserve
Significant timephasing shifts in Baseline (BCWS) (Format 3)
Significant timephasing shifts or Overall Changes in Forecasted Staffing (Format 4)

Analysis of Significant Variances: (identify and describe each)
Type and Magnitude of Variance
Explanation of Significant Causes
Effect on Immediate Task
Effect on Total Contract
Corrective Actions Taken or Planned

DES-CPR-5

CLASSIFICATION (After Completion)

DID-012 – Baseline Change Control.

1. **Description:** The change control process describes how the baseline will be maintained under configuration control, including defining how revisions will be analysed, communicated, and approved (in conjunction with the Authority when appropriate).

2. **Use/Relationship:**
   2.1. The Authority will use the change management process to:
   2.2. Assess and approve potential changes to the baseline where they break defined thresholds as agreed with the authority;
   2.3. Assess and understand potential impact to the funding profile and key dates as agreed with the MOD Front Line Command via the CASP;
   2.4. Understand the status of changes and as such the basis of the performance measurement baseline;
   2.5. Enable the Authority to obtain visibility of specific change request documentation where it is requested.

3. **Requirements**
   3.1. The change control process shall:
   4.1.1. Document, track and communicate to stakeholder's changes to the Performance Measurement Baseline;
   4.1.2. Ensure that the full impact of any change is articulated, including scope, Programme, and budget;
   4.1.3. Ensure that all changes are assessed and endorsed by the right group of stakeholders;
   4.1.4. Reconcile current budgets to prior budgets in terms of changes to the authorised work in the detail needed by management for effective control;
   4.1.5. Control retroactive changes to records pertaining to work performed that would change previously reported amounts for actual costs, earned value, or budgets. Adjustments should be made only for correction of errors, routine accounting adjustments, effects of customer or management directed changes, or to improve the baseline integrity and accuracy of performance measurement data;
   4.1.6. Allow a forward view of potential changes;
   4.1.7. Prevent revisions to the budget except for authorised changes;
   4.1.8. Be in accordance with best practice as defined by the standards referenced above (i.e. not be used to cover poor performance).

   3.2. The Contractor's Change Control Process is required to accept and control:
   4.2.1. Internal changes that do not impact the Contract – can often be processed without the need for Authority approval, but specialist requirements, e.g., safety, may result in a requirement for Authority assessment and endorsement;
   4.2.2. Internally raised changes that impact on the Contract – will always require formal approval from the Authority. Changes that impact on the Contract include any that has an impact on Contractually agreed scope, milestones, or the funding split across financial years;
   3.3. All changes are required to follow the agreed formal process, noting that changes that impact Contract must also follow the associated commercial processes before being Contractually agreed.

4. **Formal Reports**
   4.1. In support of the change management process the following reports are require

4.1.1. Contract Baseline Change Request Log. Baseline Change Requests (BCR), impact statements and approval status. The log shall cover all identified changes, including potential and approved changes. Access shall be provided to individual BCRs as required.

4.1.2. Contingency drawdown reports. Indicates Contractor forecast contingency burn rate (i.e. Risk Drawdown, uncertainty or associated BCR) for both cost and Programme;

4.1.3. Note: It is expected that Annex B to DID 011 will give visibility of all changes approved and implemented in month.

5. Preparation Instructions:

5.1. The content requirements of this data item should be considered as a minimum standard that is required.

5.2. The agreed change thresholds shall be defined within the EVMP.

6. Data Format & Delivery Instructions

6.1. The data item shall comply with the general format, content and preparation instructions contained in this DID.

6.2. Documents are to be delivered in both static and electronic format (MS Excel, XER, XML, or other format agreed with the Authority) to the Authority and in accordance with the CDRL timescales.

12.3. Reports shall be delivered on a monthly basis.

DID-013 – Contractors Performance Report.

1. **Description:** The CPRs are prepared by the Contractor to provide the Authority with earned value performance data designed to report multiple aspects of Contract performance and future planning activity. Examples of Format 1-3 been provided in DID-011.
   1.1. Format 1 (Annex A to DID 011) – Measures cost and Programme performance by Work Breakdown Structure (WBS) elements at the appropriate material level agreed with the Authority to represent a Managerially Significant breakdown of the work.
   1.2. Format 2 – (Annex B to DID 011) Provides the Performance Measurement Baseline (PMB), and records changes to the PMB implemented during the reporting period. The PMB is represented as a time-phased budget baseline plan against which performance is measured.
   1.3. Format 3 – (Annex C to DID 011) Narrative report used to explain significant cost and Programme variances together with other related Contractor problems. Significant variances are those that exceed the Contracted thresholds for these variances.
   1.4. Format 4 (Annex A to DID-013) – Report or small high-risk subContracts, especially where placed on a fixed or firm Price Contract(s), this format can be used instead of Format 1.

2. **Use/Relationship:**
   2.1. The Authority will use the CPRs to:
      2.1.1. Assess and evaluate Contract performance and as the basis for Contract performance meetings and reviews;
      2.1.2. Assess the impact of existing and potential problems encountered resulting in significant cost and Programme variances and as the basis for discussing potential mitigation actions.
      2.1.3. Provide accurate, timely status information to aid Authority view of Contractor performance and as the basis for summarisation of performance across the Authority.
      2.1.4. CPRs directly relate to the requirements specified in the Earned Value Management Plan (EVMP) and reconcile to progress incorporated in any related status reports that may be required within the scope of the Project Management Plan (PMP) where required.

3. **Requirements:**
   3.1. Data provided within the CPRs shall relate to the authorised Contract work undertaken in support of this Contract, demonstrating compliance with EV requirements.
   3.2. Data provided shall include both priced and unpriced effort.
   3.3. The level of detail required for each report shall be as agreed by the Authority.
   3.4. **NOTE:** Lower-level detail may be required on an ad hoc basis in areas where a problem has occurred until such time that the Authority is content to return to the higher level.

4. **Preparation Instructions:**
   4.1. The content requirements of this data item should be considered as a minimum standard that is required. It is not intended to constrain or otherwise

restrict the inclusion of any content required to effectively develop the plan or implement the EVMS requirements of the Contract.

5. **Data Format & Delivery Instructions:**
   - 5.1. The data item shall comply with the general format, content and preparation instructions contained in this DID.
   - 5.2. CPRs are to be delivered in electronic format to the Authority and in accordance with the CDRL timescales. Electronic format shall permit drill down to the lowest level where cost performance is captured.
   - 5.3. Reports shall be delivered on a monthly basis.
   - 5.4. Ensure that reports apply agreed variance thresholds to ensure completeness of CPR format 3 (Annex C to DID 011) narratives.
   - 5.5. Agree time increments to be used for baseline, resource, historical & forecast projections required within format 3(Annex C to DID 011).

Scope Document for Contract 701577386

Annex A to DID-013: Format 4 Cost and Programme Status Report

1. Contract Information

Contract Name						Report No	
Project Name						Version	
Project Phase		Project Start		Project Finish		Report Date	
Identifier		Owner			Report Period	Start	
Sponsor		Program ID				End	

2. Status Narrative

	Achievements to date and variance against plan for both period and culminative	Last Period	This Period
Overall		G	A

	WBS No.	This Period		Cumulative		Final Completion Date	Last Period	This Period
		%Complete	Budget	%Complete	Budget			
% Complete							A	G

	WBS No.	Scope (this Period only)	Milestones and Deliverables (this Period only)	Planned Due Date	Actual Date	Var (Cal. Days)	Last Period	This Period
Project Milestones							G	G

	WBS No.	Scope (this Period only)	Milestones and Deliverables (this Period only)	Planned Due Date	Actual Date	Var (Cal. Days)	Last Period	This Period
This Period Milestones							A	R

	Risk ID	Risk Rating	Risk title (and description if necessary)	Risk Owner	Change in Period	Last Period	This Period
Risks (Top 5)						A	A

	Issue ID	Issue Rating	Issue title (and description if necessary)	Issue Owner	Change in Period	Last Period	This Period
Issues (Top 5)						A	A

3. Changes

Ref	Description	Requested on	Value	Status

4. Next Period

Ref	

DID-014 – Safety & Environmental Management Plan

1. **Background Information**
    1. The MOD safety requirements for Contractors are defined in DEF STAN 00-056. These Standards ensure that both the MOD and its Contractors meet their obligations to ensure that procured Products, Services and/or Systems (PSS) are compliant with safety legislation and regulations.
    2. The MOD environmental management requirements for Contractors are set by DEF STAN 00-051 to enable the MOD to meet its obligations to comply with all applicable environmental legislation, policy, defence regulation and standards, both civilian and military.
    3. The Standards are intended to ensure that Contractors have established a robust approach to Safety and Environmental management and that an associated Safety Management System (SMS) and Environmental Management System (EMS) are in place. DE&S mandates the use of MODs Project Orientated Safety Management System (POSMS) and Project Oriented Environmental Management System (POEMS) to ensure all projects will be able to demonstrate the implementation of effective and efficient safety and environmental management process which satisfy legislation and departmental policy.
    4. The effectiveness of Safety and Environmental Management will be one of the key factors which will ensure the RAFCAM Relocation Project is a success. This shall be delivered via a Safety and Environmental Management Plan (SEMP) which focuses on the delivery and continued support throughout the life of the PSS in the Contract.
    5. The purpose of the SEMP is to capture the activities, dependencies, outputs, and milestones connected with the Safety and Environmental (S&E) Management processes of the Project.

2. **Deliverable Document**
    1. The Contractor shall provide a SEMP that defines and describes how they will implement a coherent approach to management of all safety-relevant activities and environmental impacts, throughout the life of the Contract.
    2. The SEMP for the RAFCAM Relocation Project shall be written in accordance with the latest issues of DEF STAN 00-56, DEF STAN 00-051, Acquisition and Safety and Environmental Management System (ASEMS)1 and the FsAST Safety & Environmental Management System (SEMS).
    3. Separate project SEMPs are to be produced both by the MOD Delivery Team (DT) and by the Contractor. Each SEMP shall define the safety and environmental management activities to be conducted by that organisation, so they are closely related to each other. The programmes that they contain will also be linked to activities of system development, trials and any safety approvals required.

3. **SEMP Requirements**
    1. The SEMP should identify a Safety Strategy that is both appropriate for the scope of analysis of the PSS, consistent with the FsAST Project Management Plan and MOD policy and appropriate to the project risk profile. The strategy should provide an overarching framework that will enable PSS to be assured as safe within the scope of supply.

2. The SEMP should identify, define, and justify the methods to be used for safety and hazard analysis, and which activities in the plan should use these methods.
3. The SEMP should identify and define the methods to be used for risk analysis, and which activities in the plan should use these methods. It should also identify the organisations involved and protocols to be used for risk acceptance.
4. The Contractor shall describe and implement a clear approach to the management of all Safety and Environmental related activities. Where the Contractor has its own SEMS, the SEMP should draw on that system. When a Contractor does not have its own SEMS, the SEMP shall address the core principals of systems engineering and safety and environmental management. The Plan shall also contain, but is not limited to:
    a. All elements identified within Appendix 7 to Annex C of DEF STAN 00-56 Part 2, Annex B of DEF STAN 00-051 and the FsAST SEMS.
    b. The SEMP should be produced using the guidance contained within DEF STAN 00-56 Part 1 & 2[2], DEF STAN 00-051 Part 1& 2, ASEMS (SMP 03 and EMP 01) and the FsAST SEMS.
    c. The SEMP should include the key SMEs and stakeholders of the Contractor and highlight what their safety and/or environmental responsibilities are. The SEMP should explain how Sub Contractors are selected and managed and how they are used for Safety and Environmental related tasks. The SEMP should also detail the responsibility of any Sub Contractor and how Safety and Environmental tasks are assured at this level. The Sub Contractors should similarly produce their own SEMP which details the scope of the activities for which they are responsible. DefStan 00-056 Part 1 Section 2 para 7.3 further expands on the expectations of the Contractor and how they should provide assurance for Sub Contractors.
    d. The Contractor should demonstrate their approach to environmental sustainability and commitment to Net Zero carbon by 2050.
    e. The SEMP should provide evidence of how the Contractor SEMS will be implemented for this programme. It should describe the Safety and Environmental Policy providing a summary of how Health & Safety (H&S) and Environmental Protection, and equipment safety assurance is managed.
    f. The SEMP should contain a detailed program of work that highlights how Safety and Environmental related tasks will be completed. As this project covers several different equipment types it should be made clear how different equipment's with differing levels of complexity will be covered. DefStan 00-056 Part 1 Section 2 para 7.4 provides further direction for multiple deliveries commensurate with the FsAST AvMed Programme.
    g. The SEMP shall identify all Top-Level Safety and Environmental Requirements imposed through Contract and Derived Safety Requirements applicable to legislation, regulations, and MOD policy. It should demonstrate how the evidence will be provided to the FsAST DT and how these standards have been met. The SEMP should include:
        i. The legislation, Civilian and Military regulations, standards, and MOD policies[3] that apply to the PSS[4]. It should identify

the relevant regulatory bodies, both civil and military, and the impact of their regulatory role on the PSS.

ii. MOD and Civilian Certification requirements and how this will be obtained.

iii. Statements of how each requirement is expected to be met by the implementation of the plan.

iv. Evidence of how Safety and Environmental assurance will be provided, where existing or proprietary products are used.

v. Identification of Safety and Environmental Management documentation to be produced to allow clearance for trials.

h. The SEMP should be reviewed periodically and in line with the FsAST Contract to reflect change throughout the life of the Contract. The mechanism of these reviews should be defined within the plan.

i. Contractors shall define their own internal Audit Plan which details the review of their activities and how improvements are made. The SEMP shall explain the types and how often an Audit is conducted. It should explain how the results of such audits will be presented to the FsAST DT throughout the life of the project. The FsAST DT is also subject to audit from ISEA in line with the FsAST SEMS. Both the Contactor and FsAST SEMP shall contain details of how pertinent findings are shared and improved upon.

j. The SEMP should articulate the method of managing change within the programme. FsAST AvMed is a complex programme so will require robust procedures for the management of change which address updates in service and the maintenance of clear records of material state, even for geographically dispersed PSS.

DID-015 – Safety Case Report

1. Background Information
    1. A Safety Case (SC) is necessary to demonstrate that a system is acceptably safe for use; all risk has been reduced to a level that is As Low As Reasonably Practicable (ALARP) and that the system complies with applicable legislation. A SC is defined in DSA03.DLSR.LSSR[1] as:

"A structured argument, supported by a body of evidence that provides a compelling, comprehensible and valid case that a system is safe for a given application in a given operating environment."

2. MOD safety requirements for Contractors are set by DEFSTAN 00-056 to ensure that procured Products, Services and/or Systems (PSS) are compliant with Safety Legislation, Regulations and Policy. The Contractor, along with the MOD, has responsibility for safety of all deliverable PSS. This DID expands on the guidance contained within DEFSTAN 00-056 Parts 1&2, ASEMS (SMP 12), FsAST SEMS and DSA03.DLSR.LSSR to highlight pertinent areas. Contractors should use these documents when developing a SC for MOD PSS.
3. The Safety Case Report (SCR)[4] is a snapshot of the SC at a specific point in time. The SCR Should summarise the arguments made, and the evidence provided, at various stages of the PSS development. It should document progress against the safety programme and the arrangements for managing safety through life. i.e., it provides the safety justification[5] to support the major project milestones identified in the SEMP. It is intended to provide information to those with accountability for the safety of the PSS on the status of safety assessment and assurance, where the Contractor can assess safety risk. This includes visibility of the structured argument justifying the suitability of the safety performance of the PSS.
4. The FsAST DT has evaluated the current Level of SC required for each equipment. These decisions are articulated in the FsAST SEMP, agreed at PESC, and made using the guidance on proportionality contained within DSA03. DLSR.LSSR DCoP D, Reg 4.

2. **Deliverable Document**

1. The Contractor shall provide an SCR identifying all the essential information/headings required within this DID to demonstrate to the authority that the Contractor has a comprehensive understanding of the Safety and Environmental requirements of this Contract.
2. The Contractor shall provide evidence of how they will manage Safety and Environmental Aspects throughout the Contract duration.
3. Following Authority approval of the SCR format all subsequent changes shall be approved by the Authority. The Contractor shall:
    1. Produce SCR that incorporates the key elements of the safety argument and references to evidence so that, in principle, it would be possible to access the complete SC, starting from the Report, or counterevidence where it has been identified.
    2. Where there are shortfalls in the evidence, the Contractor shall ensure that the SCR provides the rationale for operating the PSS, and the ways of mitigating the residual risk.
    3. Ensure that the SCR contains information on assumptions and limitations regarding the safe use of the PSS.

4. Ensure that any related SCR already in existence and identified in the scope of analysis are utilised and integrated, as necessary.

4. The Contractor shall deliver the reports incrementally, as Contracted, to give the MOD visibility of progress in safety engineering and safety analysis.

5. The MOD and Contractor must have an agreed[7] approach of how equipment carrying similar risk can be contained within the same SCR.

3. **Document Requirements**

1. The template/layout and contents of the SCR shall be agreed between the Contractor and the FsAST PESC. The SCR shall be written in accordance with ASEMS (SMP 12[8]) and the FsAST SEMS[9]. The SCR shall contain the following essential information:
    1. Executive Summary - The executive summary should enable the Duty Holder to provide assurance to stakeholders that they are content with the progression of work and that safety requirements have been, or will be, met.
    2. A Summary of System Descriptions - For a SC covering multiple equipment the summary of each equipment should be contained in an individual Annex of the SCR.
    3. Assumptions that underpin the scope of the SC or the safety requirements, argument or evidence should be stated. For example, this may include numbers of personnel, training levels, operational profiles, time in service, operating environment etc.
    4. Progress against the agreed project plans - An assessment of progress against the safety activities identified in the project plans should be provided that describes:
        1. An indication of the current status relative to the expectations documented within the Project plans, including an assessment of any impacts on future progress.
        2. Progress on safety management activities since the previous SCR, including identification of any new hazards and accidents and progress on Risk Management activities.
        3. Progress against agreed actions placed on stakeholders.

2. The Contractor shall ensure that Meeting Safety Requirements are clearly articulated within the report. It shall contain a summary of the argument and evidence that demonstrates how the Safety Requirements have been, or will be, met.

3. A statement confirming that appropriate Emergency/Contingency Arrangements (e.g. procedures) have been or will be put in place and identification of any areas where such arrangements do not exist or are inadequate.

4. The FsAST SEMP sets the scope and boundary of the Programme, but the Contractor shall still identify how the equipment can be used and maintained safely. The SCR should therefore contain safety related information to cover the expected use and management of equipment. It should consider:
    1. The main areas of risk e.g., Cat A/B risks.
    2. Relevant information that can assist the Operator in balancing the operational imperative against safety risk.
    3. Demonstration that operating and maintenance procedures and publications have been/or will be developed.

4. Demonstrate that training for all operation and maintenance has been developed, can be delivered, and covers all safety related activities.

5. Independent Safety Auditor (ISA) Report: Where an ISA is engaged, a formal ISA report should be prepared for inclusion in the SCR.

6. The SCR should contain a conclusion of the overall safety assessment of the equipment covered. It should include recommendations to enable issues identified within the SCR to be resolved.

7. The SCR should be as concise as possible, without sacrificing the need to provide the necessary information. References should be provided to supporting material within the SC.

DID-016 – Hazard and Accident Log

1. Background Information

1. This DID should be read in conjunction with Defence Standard (DefStan) 00-56 parts 1 & 2 and Defence Safety Authority (DSA) 03 Defence Land Safety Regulator (DLSR) Land Systems Safety Regulator (LSSR) and Acquisition Safety & Environmental Management Systems (ASEMS SMP11).

2. The Hazard Log is a record of the Hazards, accident sequences and accidents associated with a system. It includes information documenting risk management for each Hazard and Accident. The Hazard Log is a continuously managed database or document which contains information for traceability of how safety Hazards have been identified and managed throughout the lifecycle of a project. The Hazard Log should be used to record the results of the Hazard identification and analysis, the Risk Assessments and As Low As is Reasonably Practical (ALARP) Justification.

3. The Hazard Log as stated in DefStan 00-056 should identify all Hazards and associated potential Accidents from all credible/ foreseeable causes within the scope of the Royal Air Force (RAF) Centre for Aviation Medicine (CAM) (RAFCAM) equipment and facilities listed in the Contract. The Hazard Log must provide a record that it has been reviewed by the Project Safety & Environmental Committee (PESC) and provide an audit trail.

4. The In-Service Hazard Log for each equipment is owned by the FsAST DT. The FsAST SEMP, as agreed at PESC, will detail what is required regarding the review or creation of a Hazard Log pertaining to the equipment currently managed.

2. Deliverables

1. The Contractor shall provide an initial draft of the Hazard Log identifying all the essential information/headings required within this DID to demonstrate to the Authority that the Contractor has a comprehensive understanding of the hazard Identification process and requirements of this Contract.

2. The Contractor shall provide evidence of how they will manage Equipment/facility hazards throughout the Contract duration.

3. The Contractor shall provide a hazard log for each piece of equipment/facility identified within the SEMP[6] , for Authority approval via the PESC. NB PESC shall be held at least every 6 months and all documents (including hazard logs) to be approved at the PESC shall be submitted 10 Business Days prior to the PESC meeting.

4. Safety and Hazard management shall be managed in accordance with Def Stan 00-56 and the FsAST Safety and Environmental Management System (SEMS). The FsAST Hazard Management Procedure described in AS-1004 shall be used by the Contractor to develop and manage Hazards and associated Accident sequences. The proposed FsAST Severity and Likelihood Definitions within AS-1004 shall be used and combined to understand the safety risk posed by each Hazard.

5. The Contractor shall deliver and maintain a Hazard Log that is compatible and transferable with eCasandra. It shall be presented to the PESC for endorsement, being able to demonstrate that all identified Hazards are ALARP and being actively managed for each facility /equipment. Exceptions to an eCassandra Hazard Log will depend on the equipment and its complexity. The PESC will determine the Level of SC required in accordance with DefStan 00-056 determining how and if a Risk Assessment may suffice.

6. The Contractor shall ensure that the Hazard Log contains the detail expected within Section 3 of DefStan 00-056. The Key areas are:

a. Hazards and Accidents - The Contractor shall identify all hazards and associated potential accidents, from all credible/ foreseeable causes, within the scope of analysis.
b. Hazard Tracking - The Contractor shall ensure that the status of the control of all hazards is visible throughout the Contract.
c. The Contractor shall ensure that Hazard Log Reports are delivered as defined in the SEMP and in accordance with DEFSTAN 00-056 Part 2 Appendix 6 To Annex C.

3. **Document Requirements**

1. The Contractor shall understand the requirements of the Hazard Log which is defined in DefStan 00-056 and DSA03 DLSR LSSR. The Contractor shall use the FsAST SEMP and guidance contained within ASEMS (POSMS SMP 11) which covers the following:
   a. The Objectives of the Hazard Log.
   b. The Procedure for creating a Hazard Log.
   c. The Timing of a Hazard Log with including Review, development, and Acceptance.
   d. The required inputs/outputs expected.

2. A Hazard Log should contain at least the following information:
   a. Hazards.
   b. Controls / Mitigations.
   c. Causes.
   d. Accidents.
   e. Risk Assessments.
   f. ALARP justifications.
   g. References e.g., standards, design documents, competent personnel at hazard identification and assessment meetings, Test Results, SEMC dates and decisions, etc.

3. The Hazard Log is a live document and should be continually updated throughout the life of the project. The configuration control of the Hazard Log is extremely important. As such, Configuration Control process and methodology as laid out in the FsAST SEMS process shall be followed.

4. The Contractor shall ensure that all risks are covered for the move element of the programme. They shall provide a thorough Risk Assessment that covers all elements of the move of equipment and the installation of old and new equipment at RAF Cranwell.

DID-017 – Legislation Compliance Report

1. **Background Information**
    1. The Legislation Compliance Report demonstrates compliance against applicable legislation in the Legislation Register.
    2. All current and reasonably foreseeable legislation must be addressed in the acquisition and operation of Defence systems. Where full compliance is not achieved, the Legislation Compliance Report should provide justifiable reasoning for the non-compliance and must demonstrate that either standards and management arrangements are in place, as far as reasonably practicable, which are at least as good as those required by the legislation, or where legislation is not applied to maintain operational capability, there are no alternative relevant legislation or internal standards which provide a justifiable argument that provides a balance between risks and benefits.

2. **Deliverable Document**
    1. A Legislation Register (LR**)** for the RAFCAM Relocation Project is to be maintained through-life by the Contractor as detailed below:
        1. **Phase 1.** An initial LR shall be provided at to identify compliance with all legislation and shall identify any non-compliances.
        2. **Phase 2.** A revised LR 20 Business Days prior to each PDR, a detailed Register with a managed process for the development of a justified argument for all proposed non-compliances. This document shall have Authority approval. (NB if the PDR is to consider a group of equipment's, then only one LR listing all applicable legislation will be required for review by the Authority at that PDR. This document shall have Authority approval.
        3. **Phase 3.** A revised LR 20 Business Days Prior to CDR, A detailed Register with a managed process for the development of a justified argument for all non-compliances. This document shall have Authority approval. (NB if the CDR is to consider a group of equipment's, then only one LR listing all applicable legislation will be required for review by the Authority at that CDR. This document shall have Authority approval).
        4. **Phase 4**. 20 Business Days following all CDRs, an updated LR to support all Safety Cases which shall provide a fully justifiable argument for all non-compliances, enabling acceptance of the equipment(s) into service. This document shall have Authority approval.
        5. **Through-life.** The Legislation Register is to be updated and submitted to the Authority whenever Legislation changes are identified. This document shall have Authority approval

3. **Document Requirements**
    1. The Report shall contain, but is not necessarily limited to the following information:
        1. **Executive Summary**. The executive summary shall enable the Duty Holder to provide assurance to the stakeholders that they are content with the progression of work and that all relevant legislation has been complied with by:
            1. Confirming that all relevant legislation has been identified.
            2. Confirming compliance with identified legalisation.
            3. Identifying all non-compliances with identified legislation.
            4. Confirming the development of robust exemption statements for all non-compliances has been, captured, progressed, or completed.

5. A Recommendation for progression to the next stage of the acquisition cycle or the next defined milestone, confirming that non-compliances associated with the next stage can be satisfactorily managed.

2. **Sub System Legislation Matrix**. The Sub System Legislation Matrix shall identify:
    1. The sub-systems that make up the overall system, for which a discrete set of Legislation requirements are applicable.
    2. A matrix of Legislation applicable to each individual sub-system element of the system.
3. **Introduction.** The Introduction is to provide a brief description of the system/project, providing the means to associate the key legislation with the system. The Compliance Report shall clearly define:
    1. **Compliance Plan.** The plan to demonstrate compliance (certification, calculation, inspection, tests, trials, etc) prior to acceptance of the system in to service. The plan is to detail the roles and responsibilities of those individuals and organisations tasked with confirming compliance.
    2. **Exemption Process**. A clearly defined process for development and acceptance of exemptions, clearly identifying all roles and responsibilities, and interfaces with supporting evidence, e.g. the Safety Case.
4. **Progress Assessment.** An assessment of progress, including but not limited to:
    1. The current status of Legislation Compliance, including an assessment of any impact upon future progress.
    2. Progress on unresolved non-compliances.
    3. Identification of any new non-compliances and associated Risk Management activities.
    4. Progress against agreed actions placed on stakeholders

DID-018 – Hardware & Software Development Plan

1. **Background Information:**
    1. Understanding the requirements for, the design standards and methods to be employed in undertaking development of hardware or software is a key aspect of the RAFCAM Relocation Project. The Development Plan is required to give the Authority assurance of how development of hardware and software will be planned, implemented, and monitored during the RAFCAM Relocation Project.

2.Document Requirements:

1. The Plan shall contain, but is not necessarily limited to, the following essential information for all Equipment defined in the SRD and Scope:
2. A description of the development required to be undertaken to meet the RAFCAM Relocation Project requirements.
3. Identify the hardware components to be developed during the Project and their associated life cycle phase.
4. Technology and System Readiness Levels (TRL's and SRL's) IAW with MoD Definitions, Descriptions and Supporting Evidence to demonstrate that the selected capability is mature enough to be deployed and meet the SRD's required outputs.
5. Confirmation that the plan is consistent with the safety functionality and activities associated, including but not limited to:
    a. Details of the proposed certification process for new or modified capability for Authority approval.
    b. Evidence that the selected components are at an acceptable maturity to be deployed in an operational environment.
    c. Evidence that the System has an acceptable readiness level to be deployed in an operational environment (SRLs).
    d. Define the standards by which matters concerning all aspects of safety (software or hardware) will be managed procedures for evaluating safety integrity of the capability to be procured.
    e. Description of the assumptions, risks and mitigations that have been considered for hardware/software development.

3. If software development is included with the proposal the plan shall describe the logical and physical software architecture in text and diagrammatic forms. Identify whether software elements are bespoke software, 3rd Party Software or Off the Shelf (OTS).
4. Describe the scope and objectives of the software development activities including, but not limited to:
    a. Design Standard.
    b. The levels of reliability.
    c. The degree of robustness.
    d. Safety Integrity levels (SILS).
    e. The targets for security.
    f. The degree of interoperability.
    g. The levels of flexibility and re-composability.
    h. The performance targets for the software.
    i. Any applicable constraints
    j. The certification status of any proposed software.
5. Describe the resources required to complete the software development and integration activities.

6. Describe the plan for software development and integration activities, including, but not limited to:

    a. Requirements analysis and architectural design.
    b. Development and Integration.
    c. Verification of software System Requirements.
    d. Validation of software System Requirements.
    e. Project Control activities, including information management and configuration control.
    f. Key Milestones and decision points.

7. Describe approach to control and monitor the software development activities including, but not limited to:
    a. Metrics and performance indicators.
    b. Assessment and control activities.
    c. Lifecycle models and processes to be utilised, including any relevant standards.
8. Activities in the development plan shall be aligned with the Project Management Plan, Project Programmes, and Test, Evaluation and Acceptance Plan and shall not duplicate activities and content.

DID-019 – High Level Design

1. **Introduction**

1.1. The High Level Design Document (HLDD)describes, with reference to the system boundary; the system requirements and operating environment, system and subsystem architecture, inputs, output, Human-System Interfaces (HSI), and external interfaces.

1.2. The HLDD shall describe the Tenderer's selected solution.

1.3. FsAST Engineering have created an Excel spread sheet (as part/annex of the equipment catalogue, for information purposes only) which identifies interfaces of current equipment located at the RAFCAM facility at RAF Henlow:

- the footprint that each individual piece of equipment occupies
- Access requirements for servicing, maintenance, and medical emergencies
- Environmental requirements, air conditioning, ventilation etc
- any connections to services such as electricity, compressed air water, gas.
- Any interdependencies to other facilities or equipment
- Special equipment requirements.
- Government Furnished Equipment (GFX/GFE) currently utilised.

Note: All efforts have been made to provide accurate and sufficient data and information as is available for this Excel document which will support the creation of the bidders HLDD, but it should **not** be seen as definitive and it is incumbent on the bidder to validate the information provided by the Authority.

1.4. The MOD safety requirements for Contractors are defined in DEF STAN 00-056. These Standards ensure that both the MOD and its Contractors meet their obligations to ensure that procured Products, Services and/or Systems (PSS) are compliant with safety legislation and regulations.

2. **Deliverable Document**

2.1. The contractor shall provide an initial draft of an HLDD to demonstrate to the Authority that the contractor has a comprehensive understanding of the system boundaries; the system requirements and operating environment, system and subsystem architecture, inputs, output, human-machine interfaces, technical and external interfaces.

2.2. 20 Business Days (see note below) prior to a PDR/PDRs the Contractor shall provide an updated version of the HLDD for the Relocation of the RAFCAM capability for Authority approval at PDR/PDRs. Following Authority approval of the HLDD all subsequent changes shall be approved by the Authority.

2.3.At CDR/CDRs a final version of the HLDD shall be provided and maintained under configuration control by the Prime Contractor.

Note: Following contract award the Prime contractor in liaison with the Authority shall identify the frequency and periodicity of design reviews (PDR/CDR) to ensure a suitable review and approval of all equipment and integration aspects are understood and considered.

3. Document Requirements

3.1. The HLDD shall include a detailed overview of the proposed equipment architecture. The overview shall include details of the systems construct, dimensions, function, interfaces, hardware and software component descriptions.

4. Technical Interfaces

4.1. The Contractor shall record, as part of the information set, all assumptions and information necessary to enable safe integration (Including Regulations, Legislation and Standards) or interoperation with other PSS, including in a system of systems.

4.2. The Contractor shall identify and record, as part of the information set, their assumptions about any known interfacing or interacting PSS, whether extant or planned, to enable them to carry out safety-related activities within the scope of the Scope/Contract.

4.3. The Contractor shall record, as part of the information set, any assumptions made by them or sub-contractors/organisations are entitled to make about their deliverable PSS. The Authority will require these assumptions to be submitted at the earliest opportunity for endorsement.

4.4. The Contractor shall define and manage the technical interfaces of the capability provided.

Notes:

i. The intent is that the documentation of assumptions enables the Contractor responsible for one PSS to say what properties they can achieve and assure, given the assumptions they can legitimately make about interacting or interfacing systems. Such a scheme will not be infallible, and there is a limit to the extent to which Contractors can anticipate usage, but the aim is to limit the risk of unsafe emergent properties, without imposing an excessive burden on Contractors.
ii. Management of interfaces is important to safety as hazards can be initiated at technical interfaces, and because misunderstandings can occur at aligned technical and organisational interfaces, especially where several Contractor's PSS are brought together to form a system of systems.
iii. Where interfaces are at the boundary of the PSS produced by a Contractor (or at the boundary of the Scope of Analysis) then information needs to be provided for other stakeholders, eg the users of the PSS, or system integrators. Another stakeholder will need to know what they can assume, or rely on, about an interface in order that they can meet their Safety Requirements, or to provide guarantees to others. The assumptions might be physical or to do with information, for example: maximum electromagnetic field strength; materials used for connectors or latency in Data provided.

iv. The information on assumptions must always be included in the Information Set Safety Summary (ISSS). A DID for the ISSS provided in the DID Annex C of Def Stan 00-056.
v. Def Stan 00-056 identifies the need for Safety Case Reports and ISSSs for each PSS supplied. These reports and/or summaries would include the assumptions as necessary to demonstrate safety, or to provide information to enable safe assembly of a system of systems.

5. **Human Systems Interfaces (HSI)**

5.1. The contractor shall identify in the HLDD, all interfaces between users and the system. These interfaces shall include points at which operators, maintainers or other users interact with the equipment. The level of detail should be adequate to demonstrate a good understanding of the HSI involved and enable the development of design to ensure the required level of performance to be achieved.

5.2. Information provided by the Authority or other Contractors relating to the PSS must be considered such as the Target Audience Description (TAD) and the Task Analysis, but will require development by the Prime Contractor to provide a full description of HSI.

5.3. Any inconsistencies in the document set that impact on the Human System Interfaces shall be clearly identified to the Authority.

6. **External Interacting Interfaces**

6.1. The Contractor shall assess and detail information provided by the Authority or other Contractors for interacting PSS and take steps to resolve any inconsistencies in the assumptions made at external interacting interfaces, in discussion with the Authority if necessary.

6.2. The Contractor should seek to reconcile assumptions made at boundaries with other PSS to ensure safe operation of the whole, recognising that changes may need to be made in PSS still under development, to cater for limitations of other system elements. These changes shall be notified to the Authority as soon as they are identified and shall be subject to endorsement by the Authority.

Notes:
i. The focus is on what is known about interacting PSS, should there be limited opportunity to redesign.
ii. Information provided about interfacing or interacting products will need to be analysed by the Prime Contractor, and therefore must be defined in the scope of analysis to ensure the meeting Safety Requirements.
iii. Changes to resolve incompatibilities will need to be agreed with the Authority as they may go beyond the boundary of the Contractor's responsibility. These responsibilities apply at any level in the system hierarchy.

7. **The HLDD**

7.1. It shall include details on all aspects of the proposed equipment detailed within the contract.

7.2. The document shall detail any GFX dependencies that have been included within the design and provide a justification for their use.

7.3. The HLDD shall cover the entire proposed system, including interfaces at the system boundaries.

7.4. The HLDD shall contain, but is not necessarily limited to, the following essential information:

7.4.1. Summary. A summary narrative describing the proposed system solution using non-technical terms.

7.4.2. System Boundary. The system boundary shall be used for reference and confirmatory purposes. If this is not the same as the system boundary contained within the Authority's requirement then proposed variances must be explained and justified.

7.4.3. System Physical Architecture. This shall provide a high-level hierarchical diagrammatic representation of the proposed physical systems and their function.

7.4.4. Requirements Traceability Matrix. This shall show the allocation of requirements to System Requirement Document (SRD).

7.4.5. Development and Systems Integration Baseline. This shall detail which system elements and combinations of system elements that need to be developed and/or completed.

DID-020 – System Requirements Review (SRR)

1. The RAFCAM SRR is a multi-disciplined product and process assessment to approve the elicited sub-system requirements from the RAFCAM SRD.
2. As a minimum, the SRR shall;
    a. Present the proposed solution for the RAFCAM requirements.
    b. Present the hierarchy and structure of sub-system requirements.
    c. Present the results of any modelling conducted to partition key performance parameters across the sub-system requirements.

4. Drafts of presentational material and sub-system requirements documentation shall be provided to the authority in electronic format at least 10 Business Days in advance of the SRR.

5. The minutes from the SRR shall be produced by the Contractor for approval by the Authority within 10 Business Days of the meeting. The minutes shall be accompanied by copies of all material presented during the meeting.

DID-021 – Preliminary Design Review

1. The RAFCAM PDR is a multi-disciplined product and process assessment to ensure that the proposed system solution under review can proceed into detailed design, meet the stated performance requirements in the SRD.
2. The PDR shall:
   a. Detail the Entry and Exist criteria.
   b. Demonstrate as far as is practical that the solution has a reasonable expectation of satisfying the requirements.
   c. Demonstrate that the chosen solution is at a suitable level of maturity.
   d. Ensure design coherency.
   e. Ensure that through life risk and cost models for the system are agreed and declared against an issued requirements baseline.
   f. Evaluate the system and sub-systems proposed solutions to determine whether they correctly implement and allocate the system requirements.
   g. Assess each element or subsystem for technical compliance, feasibility and performance to the individual specification and any related interface documentation.
   h. Address constraints, dependencies, and Engineering speciality requirements.
   i. Ensure that the technical solution can effectively support the acceptance process.
   j. Confirm that the team is prepared to start detailed design and test procedure development.
   k. Confirm system is ‘safe by design’ and achieves the safety related system requirements.
3. The Contractor shall provide drafts of presentational material and supporting documentation in electronic format at least 10 Business Days in advance of the PDR.
4. The minutes from the PDR shall be produced by the Contractor and provided to the Authority for approval within 10 Business Days of the meeting. The minutes shall be accompanied by copies of all material presented during the meeting.

DID-022 – Critical Design Review (CDR)

1. The Contractor shall manage, arrange, and conduct a CDR.
2. The CDR shall assess the solution to ensure it will meet the SRD, Scope and achieve the Contracted delivery dates.
3. The CDR shall:
   a. finalise the solution design prior to commitment to production, demonstrating that the design is mature and shall meet the Authority's requirements.
   b. consider other technical options to reduce risk once the system's technical and manufacturing baseline is established.
4. The agenda shall be submitted by the Contractor for the Authority's approval 20 Business Days in advance of the meeting. The review shall include but is not limited to:
   a. CDR Entry and Exit Criteria.
   b. Previous Design Review Actions.
   c. Organisation.
   d. Programme.
   e. Risks and Opportunities.
   f. System Requirements.
   g. Non-compliances.
   h. Documentation (incl Drawing).
   i. System Maturity Metrics.
   j. Technical Performance Measures.
   k. Integrated Logistics Support.
   l. Training.
   m. Training Support Systems.
   n. Security.
   o. Safety.
   p. Human Factors.
   q. Architecture and Design.
   r. Technical Performance Measures.
   s. Integration and Verification.
   t. Quality Assurance.
   u. Configuration Management.
   v. DLODs Review.
   w. System is 'safe by design.
5. Drafts of presented material shall be provided to the Authority in electronic format at least 10 Business Days in advance of the CDR.
6. The minutes from the CDR shall be produced by the Contractor and provided to the Authority for agreement within 10 Business Days of the meeting. The minutes shall be accompanied by copies of all material presented during the meeting.

DID-023 – Certificate of Design

1. The Contractor shall provide a Certificate of Design for the capability that details the below:
   a. Details of Configured item;
   b. Configuration of hardware and software;
   c. Safety:
      i. Hazards;
      ii. Waste Electrical and Electronic Equipment (WEEE) Regulations 2006 statement;
      iii. Restriction of Hazardous Substances (RoHS) compliance statement (with identification of any non-RoHS components);
      iv. Low Voltage Directive 2006\95\EC;
   d. Supporting design certificates;
   e. Applicable Test results;
   f. Limitations of Use;
   g. Installation Instructions
   h. Supporting Evidence

2. The Design Certificate shall also detail any agreed deviations and if appropriate their rectification agreement.

DID-024 – Coordinating Installation Design Authority (CIDA) Engineering Change Request (ECR)

1. A CIDA ECR describes the scope of a change to a MOD facility for the installation of Information Communication Technology (ICT).
2. A CIDA ECR shall be produced by the Contractor for each installation within a MOD facility.
3. The format, content, and process for submitting CIDA ECR is detailed in JSP 604, Leaflet 4800 “Regulations for the Installation of Information Communications Technology.
    1. A CIDA ECR shall be accompanied by CIDA as Fitted Configuration Managed (CM) Drawings which meet the content and standard requirements of JSP 604 Leaflet 4800.
    2. Overall, the installation design proposed in the CIDA ECR shall conform to the technical requirements laid down in JSP 604, Leaflet 4800.

DID-025 – CIDA ‘As Fitted’ Configuration Management Drawings

1. The Contractor shall produce CIDA “As Fitted” Configuration Management (CM) Drawings for all Information Communication Technology (ICT) Installations.
2. CIDA “As Fitted” CM Drawings shall be developed in advance of any installation work in order to support submission of CIDA Engineering Change Requests.
3. CIDA “As Fitted” CM Drawings shall be updated following completion to reflect any deviations with the original proposed design.
4. CIDA “As Fitted” CM Drawings shall meet the content and standard requirements of JSP 604 Leaflet 4800, Chapter 12.
5. CIDA “As Fitted” CM Drawings produced by the Contractor shall include a Configuration Status Record as defined in DEF STAN 05-57 (Configuration Management of Defence Materiel).

DID-026 – Qualification Test Report

Background:

1. Site acceptance testing is a formal test event, within the overall acceptance process, to demonstrate that the equipment that comprise the RAFCAM Relocation Project meet the requirements defined in the System Requirements Document.

1.1 The Site acceptance test report records the outcome of all testing conducted and provides formal evidence that the testing has been conducted successfully.

Document Requirements:

3. The Acceptance Report shall provide evidence that the capabilities comply with the requirements defined in the System Requirements Document and Scope.

3.1 The Report shall record the outcome of the testing, including but not limited to:

3.2 Completed Test procedures.

3.3 Success criteria against the requirements Measures of Performance (MoPs)

3.4 The planned Programme of test activities, events, and milestones.

3.5 Resources, applicable stakeholders required to attend, tools facilities and equipment required.

3.6 Explanation of how agreed GFA will contribute to delivery of test, evaluation, and acceptance.

3.7 Test Results.

3.8 Deviations from the Test procedure.

3.9 Record of amendments and corrections to any Test procedure

3.10 Failed items and actions for rectification.

DID-027 – Test, Evaluation, and Acceptance Plan

1. The Contractor shall deliver a Test, Evaluation and Acceptance Plan which describes how the RAFCAM relocation project shall be delivered, tested, evaluated and accepted in accordance with the ITEAP and SRD.
2. The RAFCAM Projects Test and Acceptance plan shall ensure successful delivery of infrastructure and equipment capability.
3. As a minimum the plan shall describe:

3.1. Strategy for test and acceptance.

3.2. Roles and responsibilities of the acceptance team.

3.3. A list and description of planned test and acceptance activities.

3.4. The planned Programme of test activities, events and milestones.

3.5. Resources tools, facilities and equipment required for test and acceptance activities, including the Validation and Verification Requirements Matrix (VVRM).

3.6. Explain how evidence will be managed.

3.7. Describe the interdependencies between the infrastructure and equipment development.

3.8. Provide references to subordinate Test Plans, Test Schedules, Test Scenarios, Test Cases/Procedures and Test Reports

3.9. Identify and describe, Tools, Facilities and GFX.

3.10. Explanation of how GFX contributes to delivery of test, evaluation and acceptance.

3.11. Provide details of ITEA related Risks, Opportunities and Assumptions.

DID-028 – Test, Evaluation & Acceptance Schedule

Background:

1. The purpose of the Integrated Test and Evaluation and Acceptance Schedule (ITEA Schedule) is to define the logical series of Defence Line of Development (DLoD) events required to meet the capability need. Although initially at a high level and open to change, it will mature as the Programme matures and milestones are defined.

2. The ITEA Schedule shall form part of the Programme.

Deliverable Document:

3. An Integrated Test Evaluation and Acceptance Schedule (ITEA Schedule) for the RAFCAM Relocation Project. An initial draft for Authority review six working weeks prior to any TRR commencing. This document shall have Authority approval before the Contractor commences the adoption of the schedule of Testing and Evaluation to ensure that the correct level of Authority SME support is available to witness such testing events.

4. The ITEA Schedule may form part of the ITEAP.

Document Requirement:

5. The Schedule shall contain, but is not necessarily limited to, the following essential information:
    - 5.1 Test readiness reviews (TRR).
    - 5.2 Factory Acceptance Testing (FAT).
    - 5.3 Site Acceptance Testing (SAT).
    - 5.4 Identification of GFA requirements (equipment and personnel) in the schedule, clearly showing required by dates and required duration.
    - 5.5 Scheduling of each Acceptance activity.

DID-029 – Verification & Validation Requirements Matrix

Background:

1. The Verification and Validation Requirements Matrix (VVRM) is the central tool for confirming acceptance of the RAFCAM Relocation Project. It provides the test methodology, details acceptance criteria; documents Verification and Validation (V&V) activity and records evidence. It enables the tracing of System Requirements down to the V&V activity. Consequently, it forms the basis for decisions on acceptance and ensuring the System Requirements are met.

   1.1 The VVRM shall be provided in and electronic format compatible with The Authority SW DOORS™ (Dynamic Object Orientated Requirements System) to record and develop requirements documentation.

Document Requirements:

3. As a minimum, for each requirement, the VVRM must identify:

   - Evidence Type (inspection, analysis, demonstration, trial, or test)
   - Reference to evidence sources including, but not limited to: analysis reports, test cases and reports.
   - Contracted Compliance
   - Evidence Standards and regulations
   - System Requirement
   - Requirement Priority
   - Measure of Performance
   - Remarks

DID-030 – Test Schedule

1. The Contractor shall deliver a test schedule which describes the schedule of test events and activities to be conducted during a formal acceptance event. It shall include linkages and dependencies between tests, test procedures and test events.

2. The Test Schedule shall be and appendix to the ITEAP.

3. The Test Schedule shall be provided to the Authority 10 Business Days prior to any planned testing event.

DID-031 – Test Readiness Review (TRR)

1. The Contractor shall conduct Test Readiness Reviews (TRRs) for each Test event.

2. The agenda of TRRs conducted by the Contractor's shall include, but not be limited to;

i. Purpose of the test.
ii. Requirements to be demonstrated.
iii. Systems under test.
iv. Readiness to begin testing.
v. Design Maturity for Requirements under test.
vi. Results of preliminary, informal, unit level, sub-system, system, and qualification testing.
vii. Test Documentation, including;
    a. Issued Plans, Schedules, Scripts/Procedures.
    b. Changes to Issued documents.
    c. Resolution of Authority comments on issued documents.
    d. Expected Results and follow-on evaluation/ analysis activities.
    e. Test Environment and Resource, including equipment, facilities, and people.
    f. Risk and issues associated with the test event and migration actions.
    g. Fall-back plans should technical issues arise during testing.

3. The Contractor shall invite the Authority and other applicable stakeholders to attend each TRR.

4. The Contractor shall provide drafts of presentational material and supporting documentation to the Authority at least 10 Business Days in advance of the TRR.

5. The minutes from the TRRs shall be produced by the Contractor and provided to the Authority for agreement within 10 Business Days of the meeting. The minutes shall be accompanied by copies of all material presented during the meeting.

DID-032 – Test Plan

1. The Contractor shall deliver a Test Plan which shall describe the Contractor's approach to conducting a test, trial or series thereof which demonstrates how the system meets the contractual requirements.

2. As a minimum the test plan shall describe:

- The objective of the test including the requirements against which the test(s) will provide evidence
- Success criteria against objective and threshold Measures of Performance (MoPs)
- A list and description of key test scenarios and cases
- The planned schedule of test activities, events and milestones
- Applicable stakeholders
- Resources, tools facilities and equipment required
- References to subordinate Test Plans, Test Schedules, Test Scenarios, Test Cases/Procedures and Test Reports
- Explanation of how agreed GFX will contribute to delivery of test, evaluation and acceptance

DID-033 – Test Case Procedure

1. The Contractor shall deliver test procedures that provide a detailed description of each step and process needed to complete capability verification.

2. As a minimum, test cases shall include:

    a. Summary of test purpose and requirements under test.
    b. Description of the Test Environment and equipment, including configuration information for all hardware and software Items.
    c. Detail of agreed GFX dependencies required to support the test.
    d. A list of prerequisite conditions to start/ conduct the test.
    e. A list of test steps which:

        i. Detail the start condition.
        ii. Detail the required step/action.
        iii. Detail the expected response.
        iv. Provide space to record the response and observations.
        v. Detail any post-test analysis to be conducted.

3. As GFX can be a long lead any additional dependencies identified during the design and manufacture phase shall be requested and agreed no later than CDR to ensure that the Authority can support.

DID-034 – Test Reports

1. The Contractor shall provide Test Reports which detail the outcome of a conducted test event.

2. As a minimum, Test Reports shall include:

a. Summary of test purpose and requirements under test.
b. References to applicable test plans, schedules, and procedures.
c. Summary of test equipment and test environment including software versions and serial numbers.
d. Summary of results.
e. Detailed results.
f. Analysis.
g. List of conclusions.
h. List of issues identified.
i. List of recommendations to investigate outstanding issues, including:

i. Issue owner.
ii. Agreed action.
iii. Timescales for completion.

DID-035 – Legislation Register

Background Information

1. The Legislation Register reflects all legislation applicable to, or used in, the design, development, equipment integration onto platforms, trials and evaluation and in-service operation of the system.

2. The Legislation applicable to the project will be detailed in the Flight Simulation & Synthetic Trainers (FsAST) DT RAFCAM Relocation Safety & Environmental Legislation, Regulation and Standards Register.

Deliverable Document

3. A Legislation Register (LR**)**for the RAFCAM Relocation Project is to be maintained through-life by the Contractor as detailed below:

    a. **Phase 1.** An initial LR shall be provided at to identify compliance with all legislation and shall identify any non-compliances.

    b. **Phase 2.** A revised LR 20 Business Days month prior to each PDR, a detailed Register with a managed process for the development of a justified argument for all proposed non-compliances. This document shall have Authority approval. (NB if the PDR is to consider a group of equipment's, then only one LR listing all applicable legislation will be required for review by the Authority at that PDR. This document shall have Authority approval).

    c. **Phase 3.** A revised LR 20 Business Days Prior to CDR, A detailed Register with a managed process for the development of a justified argument for all non-compliances. This document shall have Authority approval. (NB if the CDR is to consider a group of equipment's, then only one LR listing all applicable legislation will be required for review by the Authority at that CDR. This document shall have Authority approval).

    d. **Phase 4**. 20 Business Days following all CDRs, an updated LR to support all Safety Cases which shall provide a fully justifiable argument for all non-compliances, enabling acceptance of the equipment(s) into service. This document shall have Authority approval.

    e. **Through-life.** The Legislation Register is to be updated and submitted to the Authority whenever Legislation changes are identified. This document shall have Authority approval.

Document Requirement

4. The Legislation Register shall contain, but is not limited to, the following information:

    a. **Executive Summary.** The Executive Summary shall enable the Duty Holder to provide assurance to the stakeholders that they are content that all applicable and relevant Legislation and Standards have been captured and at the correct revision state.

b. Any applicable legislation currently under assessment is to be identified in the Executive Summary with a description of the expected impact upon the project.

c. **Introduction.** The Introduction is to provide:

1. A brief description of the system/programme, detailing the applicability of the legislation to the system/programme.

2. A summary of how legislation and standards are recorded in the Legislation Register, identifying the roles and responsibilities for the management of the Legislation Register.

3. A summary of the process for capture, review and through-life management of legislation and standards.

d. **Legislation Register.** The Legislation Register is to contain all applicable and relevant legislation which:

1. Is applicable to the UK.

2. Originate in the UK and extend outside its boundaries.

3. Has been used by the Project to support a non-compliance against relevant legislation or mandatory standard.

4. Have been used by the Project because there is no relevant legislation available.

e. Against each item recorded in the Legislation Register, the following information shall be recorded:

1. **Title.**

2. **Reference.** This is to include version and date.

3. **Brief summary.**

4. **Category.** The following categories shall be used to classify the Legislation or Standards:

a. **Mandatory.** Legislation or Standards that are mandated for the system/programme.

b. **Optional.** Legislation or Standards which are not directly applicable to the system but are being used to justify an exemption to a non-compliance.

c. **Guidance.** Legislation or Standards which are being used as guidance as there is no relevant Legislation or Standard.

d. **Status**. (Future, Current, Obsolete).

e. Against each item recorded in the Legislation Register, the following information should be recorded:

1. Reference to source of Legislation or Standard, i.e. from where the documentation was acquired.

2. Review/update date.

3. Owner (organisation) of legislation or standard.

4. Reference of previous version (if applicable), and brief summary of changes since previous issue.

g. **New/Revised Legislation and Standards.** Where new or revised Legislation or Standards are identified, the Contractor is responsible for undertaking an assessment of the documentation prior to inclusion in the Legislation Register. This is to be facilitated by the use of a Legislation and Standards Template that will include an Applicability Assessment, considering the following:

1. Date of implementation.

2. Scope of the Legislation or Standard, against the system and operational role.

3. Context of changes, noting that some changes are mandatory to resolve urgent safety/operational issues.

h. Additionally, the following information shall be included within the Applicability Statement:

1. A review of Legislation or Standard to determine any applicable differences.

2. Impact assessment of identified changes against the current system/programme;

3. Future proofing of the system.

4. Provision for Agreement by the Duty Holder

DID-036 – Infrastructure

Project Execution Plan DID 036A

1. Deliverable Document

   1.1. The Contractor shall deliver an Infrastructure **Project Execution Plan** (PEP) within 60 Business Days. This shall be a coherent source of information that defines the Project Infrastructure activities and how they will be managed. It shall provide the baseline against which the progress and conduct of the project will be assessed.

2. Background Information

   2.1. The PEP, produced with contributions from the project team, sets out the processes and protocols to be used during each stage of the Infrastructure activities. The PEP is an essential management tool which must be consistent with and coherent to the Project Management Plan (PMP) DID 002. Together they will provide a complete view of the management strategy to be applied to the project, focussing on their particular process topics. Together they should allow the Authority to fully understand the strategic approach to the management of the Project covering the full breadth of management topics.

3. Requirements

   3.1. The Contractor shall deliver an Infrastructure Project Execution Plan (PEP) within 60 Business Days of contract award.

   3.2. The PEP shall be a coherent source of information that defines the Project Infrastructure activities and how they will be managed. The initial delivery of the PEP shall provide the baseline against which the progress and conduct of the project will be assessed.

   3.3. The PEP shall be consistent and coherent with the Project Management Plan.

   3.4. The PEP shall focus on the Infrastructure activities and address at least the following topics with Reference to the Project Management Plan where appropriate to avoid duplication of information:

- Infrastructure Stakeholder Group, including analysis of their influence and attitude towards the project.
- Identify the key construction personnel, including the Principal Designer, Building Control Advisor, Principal Structural Engineer, Project Manager, Information Manager and provide their experience on previous projects and appropriate qualifications.
- The PEP shall show how the assumptions provided by the Authority in the DARE have been captured within the Project.
- Description of project Infrastructure management strategy, including application of the RIBA Plan of Work, its relationship with other applicable lifecycles such as the acquisition lifecycle, and the project management tools and processes to be employed.
- Project Infrastructure organisation, including key role descriptions, terms of reference and authority levels.
- A summary of the H&S risk management process and H&S file creation, noting the role of the Authority within that activity.

- An Infrastructure Acceptance plan (including GSL) which shall form the baseline for development within the acceptance working group(s).
- Plans for Infrastructure assurance; issue resolution; stakeholder engagement and communications; project monitoring and control, including change control; information management.
- Construction quality planning.
- A detailed Infrastructure Programme, including key products, activities, dependencies, critical path, milestones, and resources. This shall be integrated into the Accepted Programme.
- The Contractor shall develop the meeting requirements in Annex 4 to this Scope document as part of their PEP.

3.5. The PEP shall be subject to review at the end of each RIBA Stage and any required changes agreed with the Authority.

3.6. The Infrastructure Programme shall be managed in Stages which reflect the RIBA Plan of Work. The strategy for management by Stages and the detail to be captured for active and passive stage shall be clearly elaborated in the PEP.

3.7. Where the Authority is required to provide the Contractor with information, guidance, or approval of a deliverable, this shall be clearly noted in the PEP.

Construction Environmental Management Plan DID 036B

1. Background Information

1.1. A CEMP is a management plan that is developed for the duration of a construction phase, usually for large scale projects which have a range of environmental or social impacts. These impacts could include noise and vibration from heavy construction traffic, noise to the disturbance and potential damage to sensitive habitats, dust and dirt or visual intrusion created by the construction activity.

1.2. Its purpose is to reduce the risk of adverse impact of construction activities (e.g., noise, air emissions, etc.) on sensitive environmental resources and to minimise disturbance to local residents. The CEMP should describe the checking, monitoring and audit processes that must be implemented to ensure works are being undertaken in accordance with these requirements, together with measures to ensure that appropriate corrective actions or mitigation measures are taken.

2. Requirements

2.1. The CEMP shall explain how the Contractor will address and minimise the site pollution topics (air, noise, traffic, utilities) for the benefit of the station and local community.

2.2. The CEMP shall comply with the policy and requirements of JSP 418.

2.3. The CEMP shall reference the Waste Management Plan and Traffic Management Plans as required.

2.4. The CEMP shall consider the impact on the environment during construction but also any residual impact or opportunities created through the construction process or building use. This shall include the use of electric plant on site and justification where this is not possible and how and when mains electric shall be employed. (See Scope requirement 7.3.49.7).

2.5. The CEMP shall explain the provisions for soil re-use and/or disposal during construction.

2.6. The CEMP shall outline the audit or compliance process to be undertaken during construction.

2.7. During RIBA stage 4 the Contractor shall:

2.7.1. Append as an Annex to the CEMP the “as designed” in-use energy consumption for the building.

2.7.2. Provide Environmental Product Declarations (EPD), as an addendum to the CEMP, for all major building materials including but not limited to concrete, steel, insulation, brick and block, plasterboard, glass, and timber.

Waste Management Plan DID-036C

1. Deliverable Document

1.1. The Contractor shall develop a construction site **Waste Management Plan** during RIBA Stage 4 for approval by the Authority.

2. Background Information

2.1. Site waste management plans are a useful management tool. A site waste management plan can help cut costs through effective waste management, use materials and resources more efficiently, and demonstrate compliance with contractual duties and your duty of care for waste.

2.2. Producing and implementing a site waste management plan should affect all businesses and individuals involved with construction projects including the Authority, architect, project managers, principal contractor, sub-contractors and tradesmen. However, the main responsibility falls on the Authority at the project development stage and the principal contractor during the construction phase.

2.3. JSP 850 BPS leaflet 0.1 gives guidance on waste management and reporting.

3. Requirements

3.1. The Contractor shall develop a construction site Waste Management Plan.

3.2. The Waste Management Plan shall be submitted to the Authority no later than 60 Business Days prior to the start of construction.

3.3. The Waste Management Plan shall explain how the in-contract waste streams will be managed.

3.4. The Waste Management Plan shall explain how construction site waste material shall be disposed of, recycled or re-used.

3.5. The Waste Management Plan should contribute to or be referenced in relation to the net-zero carbon considerations.

3.6. The Waste Management Plan shall comply with the policy and requirements for waste management as detailed within JSP 418 leaflet 3.

3.7. To support the collection and reporting of MOD waste data for both corporate reporting and site waste management planning the Contractor shall provide:

3.7.1. Measured accurate waste arisings data no later than two weeks after the end of each month during construction.

3.7.2. The data shall be provided in a format compliant with the Authority[8] IMS and contain, but not be limited to, the following information:

3.7.2.1. Weight (in tonnes)

3.7.2.2. Establishment of generation, including postcode

3.7.2.3. Waste Stream Description including European Waste Catalogue code

3.7.2.4. Disposal Route (i.e. landfill, reuse, recycled, etc)

3.7.2.5. Hazardous or non-hazardous.

[8] An Authority template is available if required.

Government Soft Landings (GSL) Plan DID-036D

1. Background Information

1.1. Government Soft Landings (GSL) is the process of aligning the interests of those who design and construct an asset with the interests of those who will use and operate it. This will ensure there will be a smooth handover of completed projects to the user community, improving Authority and user experiences, reducing the need for re-visits, and providing a product that meets and performs to MOD expectations.

1.2. MoD policy dictates that GSL must be incorporated into all new build and major refurbishment projects.

1.3. The term 'soft landing' is typically used to reflect a smooth transition from construction into handover and close out and then into facility operation. An important benefit of the smooth transition into operation coupled with the extended aftercare period is the potential to optimise facility operating performance as early as possible. The adoption of a Post Occupancy Evaluation (POE) methodology then enables the comparison of actual performance outcomes to those that were planned and designed for. This in turn informs lessons learned and enables timely action to be taken where performance is either above or below target(s).

2. Requirements

2.1. The plan shall identify the Contractor's GSL Champion.

2.2. The GSL plan shall include a stakeholder engagement strategy.

2.3. The plan shall clearly elaborate the GSL planning and engagement processes, including working groups and reviews.

2.4. The plan shall explain how training on the building systems shall be provided to the FM organisation.

2.5. The plan shall explain how the implementation of Common Components, Fixtures, Fittings, Furniture and Finishes (JSP 850 BPS 0.5) shall be managed.

2.6. The plan shall outline the process for the integration and management of the utilities.

2.7. The plan shall outline the process for the delivery of the Building Manual, including the Health and Safety File and Fire Safety Information, and how the FM organisation shall be involved in that process.

2.8. The plan shall provide guidance on the Post-Occupancy Evaluation (POE) process.

Transition Management Plan DID-036E

1. Deliverable Document

1.1. The Contractor shall establish a **Transition Management Plan** (TMP) which will define the process of acceptance of the building by the Authority, management of the building during the defect liability period and handover to the support organisation.

2. Background Information

2.1. Many issues arise during a Project resulting from a failure to correctly define process, responsibilities, inputs and outputs. These are more likely to occur during a transition period between phases of a project, and particularly when new stakeholders, or stakeholders with a change to a more active role, have become involved. The aim of the TMP is to address this uncertainty by providing a clear guide to the management of the transition period and to deliver a common understanding of the process and stakeholder roles and responsibilities.

3. Requirements

3.1. The Contractor shall establish a Transition Management Plan (TMP) during RIBA Stage 5.

3.2. The TMP shall incorporate at least the following:

3.2.1. The plan will deliver a transition strategy which is coherent with the acceptance strategy.

3.2.2. The plan shall identify the stakeholders and where input/participation is required from the Authority.

3.2.3. The TMP shall contain a milestone Programme focussing on delivery of Facilities Management (FM) documentation and training, defect management and acceptance activities.

3.2.4. The Contractor shall develop tables which illustrate the typical tasks that will need to be executed on this project as part of its GSL strategy.

3.2.5. The Contractor shall develop within the tables a RACI column which shall be allocated against at least the following tasks.

3.2.5.1. Delivery of the training required by the DIO FM organisation.

3.2.5.2. Delivery of the Building Manual, Health and Safety File, Fire Safety Information and maintenance documentation.

3.2.6. The TMP shall outline the role and responsibility of the on-site representative during the defect correction period.

3.2.7. The TMP shall be agreed with the Authority during RIBA Stage 5, before the start of RAF CAM equipment installation and before Completion.

Construction Traffic Management Plan DID-036F

1. Background Information

1.1. Construction traffic and its impact on the site and its local environment is a major concern for the existing site users and local residents. This plan shall help to mitigate risks associated with the movement of traffic and understand the impact on the local environment. It also shows that the Contractor has adequately planned the movement of materiel to and from the site. It should be aligned and make reference to the waste management and construction environment management plans.

2. Requirements

2.1. The Contractor shall develop a Construction Traffic Management Plan.

2.2. The plan shall be aligned to and consistent with the waste management plan, identifying where traffic is derived from the management of waste.

2.3. The plan shall identify where approval or support from the Authority is required to accommodate the movement of plant.

2.4. The Construction Traffic Management Plan shall address at least the following:

- Volume and timing of material delivery traffic.
- Delivery Program and location for large construction vehicles such as cranes, piledrivers, etc.
- Any turning space requirements and road entry procedures.
- Road cleaning provision.
- Risks to other road users and their mitigation.

Sustainability and Resilience Plan DID 036G

1. Background Information

1.1. MoD policy, reflecting government legislation and guidelines, is putting great emphasis on the use of sustainable technology (This includes the application of solar power, rainwater/grey water harvesting, the use of recycled and recyclable materials, etc). The design of this building shall reflect those aims.

1.2. Policy direction for MOD Main, TLB & DIO Staff PI 01/2020: New build and major refurbishments in water stressed areas must incorporate rainwater or grey water systems to reduce water abstraction demand unless there are overriding technical or operational reasons.

1.3. In addition, Government policy confirms that all new buildings must have the highest level of energy performance that can be achieved whilst remaining cost effective over the lifetime of the building components. The proportion of the energy used from embedded / local low carbon sources shall be maximised whilst remaining cost effective over the lifetime of a new building.

1.4. Hence the Authority is seeking to maximise the potential of the building for sustainable and climate resilient design. The government has made clear its intention to significantly reduce levels of carbon emission through the innovative use of building design and construction. The Authority is keen to understand how the Tenderer intends to influence the design of this building so that it will contribute to the Government's aims for significant reduction in CO2 levels and optimised water management.

2. Requirements

2.1. The sustainability and resilience plan shall detail the techniques to be applied to the building design which support the Government's carbon reduction plans.

2.2. The plan shall identify the management and design process which will influence building design to deliver a sustainable solution.

2.3. The plan shall identify any specific risks and constraints which limit implementation of sustainable processes, providing justification as appropriate.

2.4. The plan shall identify how a surface water management system will be assessed as part of the surface water drainage strategy[9].

2.5. The Plan shall consider how the building design shall seek and exploit opportunities to substitute potable water use with rainwater and grey water.

[9] The Contractor should note that under current commercial arrangements established within Project Aquatrine the use of a SUDS system is prohibited.

Interface Management Plan DID 036H

1. Background Information

1.1. The Project requires delivery of a building and a series of equipment systems, some under development, which must interface correctly into the fabric of the building. Suitable access must be provided and suitable physical and utility connections which must interface correctly to facilitate immediate use of the facility. Failure to manage these interfaces will lead to significant delays and re-work. The Authority see this as a risk to the Project which must be actively managed and reported.

2. Requirements

2.1. The Contractor shall define within this document the physical, electrical, and other utility interface requirements between the RAF CAM equipment and the building.

2.2. Interface shall also consider the requirement for space around the equipment to ensure the safe use and maintenance of the equipment and to allow emergency egress from the building.

2.3. This document shall be brought under configuration control and updated as required during the design process.

2.4. It shall include the requirements for the Spatial Disorientation Trainers, the installation of which are out of scope of this contract.

Note: The Authority will provide the final SDT interface requirements to the Bidder at a time agreed within the contract.

2.5. The Contractor shall explain how the interface management process will develop during building design and construction with key review points captured and input into the Programme.

2.6. The Contractor shall demonstrate how the interface management process will support acceptance of the interfaces.

Construction Phase Plan DID 036l

1. Deliverable Document

   1.1. In accordance with CDM 2015 the Contractor shall deliver a **Construction Phase Plan** (CPP) during RIBA Stage 4.

2. Background Information

   2.1. The Construction Phase Plan is a statutory requirement under the CDM 2015 Regulations. It sets out the arrangements for securing health and safety during the construction phase (the period that construction work is carried out). See HSE publication L153: *Managing Health and Safety in Construction* (HSE Books, 2015) for more information.

3. Requirements

   3.1. The Contractor shall deliver a Construction Phase Plan during RIBA Stage 4.

   3.2. The CPP shall be updated at regular intervals to reflect the changing nature of the construction site and activities.

   3.3. The CPP shall comply with the requirements of CDM 2015 and shall contain at least the following:

      3.3.1. A brief description of the Project.

      3.3.2. A section on the management of the work, including key personnel and communication needs.

      3.3.3. The arrangements for controlling the significant site risks. This should address both site risks and health risks.

      3.3.4. The Health and Safety File.

DID-037 – Transport Plan

A Transport Plan shall be required for each individual piece of equipment being moved unless it is on the same consignment as another, in which case, one Plan for both items will suffice.

1. The Contractor shall deliver a Transport Management Plan for anything classified as official-sensitive and above, which shall include, but is not limited to, the following sections;
1. Overview
    1. Detail and description of item/s.
    2. Security grading.
    3. Security overview and concerns.
    4. Originating address.
    5. Delivery address.
    6. Methods of carriage and transport overview.
    7. Date of dispatch.
    8. Date of delivery.
    9. Overnight instruction and overview (if applicable).
    10. Delivery contact and telephone number.
2. Consignment Details.
    1. Full description of materials being transported.
    2. Number of separate packages/containers.
    3. Weight (for each package/container).
    4. Dimensions (for each package/container).
    5. Method of packaging/type of container.
    6. Special/unique features and/or instructions for transport.
3. Details of main Consignor.
    1. Consigner details.
        1. Company name.
        2. Company address.
        3. Point of contact and position of contact within the company.
        4. Telephone number of point of contact.
    2. Mode of transportation.
4. Detailed route and carrier information.
    1. Freight (road/air/rail/sea)
    2. Carrier.
    3. Detailed route guide including road names (similar to the AA and/or Google route planner).
    4. Vehicle details (including licence plate).
    5. Secondary vehicle details (including licence plate), if applicable.
    6. Driver name/s and contact details.
5. Transportation Security Plan.
    1. Proposal for general security of consignment.
    2. Communication link during transit.
    3. Routine check plan.
    4. Frequency of consignment checks.
    5. Planned procedure in the event of breakdown.
    6. Any additional information.

DID-038 – Integrated Logistics Support Plan

Introduction

1. The Contractor shall deliver an Integrated Logistics Support Plan (ILSP) which documents the management plans of the Contractor for data gathering and analyses, ILS task management, control, and execution; and interface of the ILS programme task(s), which shall conform to Def Stan 00-600 and shall include, but is not limited to, the following information.

    1.1. Introduction;
        1.1.1. Purpose and Scope
        1.1.2. ILSP Summary
        1.1.3. Document Update Procedure

    1.2. Summary of System Characteristics;
        1.2.1. Support Solution Description.
        1.2.2. System/Equipment Description.
        1.2.3. Operating Environment.
        1.2.4. System Performance Requirements.
            1.2.4.1. Availability Requirements.
            1.2.4.2. Reliability Requirements.
            1.2.4.3. Maintainability Requirements.
            1.2.4.4. Other Requirements.

    1.3. ILS Programme Management - Organisation and Performance;
        1.3.1. Objectives, Policies & management.
        1.3.2. ILS Organisational Structure.
        1.3.3. Sub-Contractor ILS Management.
        1.3.4. Approach to delivering ILS requirements.
        1.3.5. Control & Reporting.
        1.3.6. Logistic Demonstration.

    1.4. ILS Programme Plan;
        1.4.1. ILS Programme Plan.
        1.4.2. ILS Programme Tasks.
        1.4.3. ILS Milestone Chart.

2. The following ILS element plans shall be delivered as annexes to DID-038.

Annex A – Supportability Analysis Plan (SAP)

1. The Contractor shall deliver a Supportability Analysis Plan (SAP) which shall detail the Contractor's approach and description of how the Supportability Analysis (SA) will be conducted to meet the SA programme requirements as part of the engineering effort. The SAP will conform to Def Stans 00-600, it shall include, but is not limited to, the following information:
    1.1. Introduction
        1.1.2. Purpose and scope.
        1.1.3. SA organisational structure & interfaces.
        1.1.4. SA approach.

    1.2. Supportability Analysis Plan;

1.2.1. SA candidate list (tailored list of equipment that will be subjected to SA).
1.2.2. SA activities.
1.2.3. SA Programme.
1.2.4. Data collection and comparative data sources.
1.2.5. SA design update procedure (feeding back SA requirements to design team)

1.3. Supportability Analysis Tasks Plans;
1.3.1. The following tasks are normally conducted by the Contractor and shall be covered by the plan, unless tailored out but the Contractor and justified for not being performed.
1.3.2. The Contractor shall provide a description of the procedure for implementing the following activities, unless tailored out;
i. Mission hardware, software, firmware, and support system standardisation;
ii. Comparative system;
iii. Technological opportunities;
iv. Supportability and supportability related design factors;
v. Functional requirements identification;
vi. Support system alternatives;
vii. Evaluation of alternatives and trade-off analysis;
viii. Maintenance Task Analysis;
ix. Early fielding analysis;
x. Post production support analysis;
xi. Supportability test, evaluation, and verification.

Annex B – Availability, Reliability and Maintainability Plan (ARMP)

1. The Contractor shall deliver an Availability, Reliability and Maintainability Plan in accordance with Def Stan 00-040 which shall include, but is not limited to, the following information:
1.1. Introduction;
1.1.1. Purpose and Scope.
1.1.2. ARM Requirement Summary.
1.1.3. ARM Organisation & Interfaces.

1.2. Reliability Plan;
1.2.1. Data selection, data storage & data flow.
1.2.2. Methodologies, Tools & Techniques.
1.2.3. The procedure for implementing the requirements of a Failure Modes, Effects and Criticality Analysis (FMECA).
1.2.4. Procedure for implementing and managing a Data Reporting, Analysis and Corrective Action System (DRACAS).

1.3. Maintainability Plan;
1.3.1. Data selection, data storage & data flow.
1.3.2. Methodologies, Tools & Techniques.
1.3.3. A description of the procedure for implementing the requirements of Reliability-Centred Maintenance (RCM).
1.3.4. A description of the procedure for implementing the requirements of a Level of Repair Analysis (LORA).

1.4. Reliability and Maintainability Cases, that comply with Def Stan 00-042 are to be produced and delivered on a quarterly basis, as part of the ongoing assurance activity.

Annex C – Reliability Centred Maintenance Plan (RCMP)

1. The Contractor shall deliver a Reliability Centred Maintenance Plan (RCMP), to manage Engineering Failures, which describes the specific techniques to be used and tasks to be performed and defines their development and integration into the overall SA programme. The RCMP shall conform to Def Stan 00-045 and shall include, but is not limited to, the following information:
   1.1. Introduction;
   1.2. Purpose and Scope
   1.3. Reliability Centred Maintenance Requirements
   1.4. Description of the coding system used to link the FMECA to RCM task analysis.
   1.5. Structurally Significant Item and Functionally Significant Item selection criteria and listing.
   1.6. Example of Zonal Plan production.
   1.7. Procedures for updating the RCM to reflect design changes.
   1.8. Procedures for the use of redesign recommendations to provide design guidance.
   1.9. The data sources used to ascertain failure rates and/or failure patterns.
   1.10. Roles and responsibilities:
      1.10.1. Preventative maintenance
      1.10.2. Corrective maintenance

Annex D – Support and Test Equipment Plan

1. The Contractor shall deliver a Def Stan 00-600 compliant Support and Test Equipment Plan which shall include, but is not limited to, the following information:
   1.1. Introduction;
      1.1.1. Purpose and Scope
      1.1.2. Support and Test Equipment Requirements
      1.1.3. Applicable standards
      1.1.4. Strategy
      1.1.5. Organisation / Resources

   1.2. S&TE Identification;
      1.2.1. Where S&TE will be used
      1.2.2. The type of S&TE to be used
      1.2.3. The name of any vendors used
      1.2.4. Critical S&TE Redundancy Plan

   1.3. S&TE Management;
      1.3.1. Modification Policy (Corrective, Adaptive, Perfective & Preventative).
      1.3.2. Change Control Policy.
      1.3.3. Fault Management (Reporting, Investigation, Action).
      1.3.4. Integration & Transition.
      1.3.5. Testing, Certification & Qualification.
      1.3.6. Security & Safety.
      1.3.7. Configuration Management.
      1.3.8. How S&TE will be managed to ensure system availability.

1.4. S&TE;
- 1.4.1. Documentation.
- 1.4.2. Licences & IPR issues.
- 1.4.3. Technical support.

Annex E – Technical Documentation Plan

1. The Contractor shall deliver a Technical Documentation Plan in accordance with Def-Stan 00-600 which shall include, but is not limited to, the following information:

1.1. Introduction;
- 1.1.1. Context
- 1.1.2. Aim
- 1.1.3. Objectives of TD plan
- 1.1.4. Applicability
- 1.1.5. Document Context

1.2. Technical Documentation Requirements
- 1.2.1. General
- 1.2.2. Standards and specification
- 1.2.3. Level of detail
- 1.2.4. Equipment breakdown
- 1.2.5. Documents to be delivered

1.3. Organisational structure;
- 1.3.1. Roles and responsibilities
- 1.3.2. Control of subcontract effort

1.4. Technical Documentation (TD) preparation and production
- 1.4.1. Description of general TD processes
- 1.4.2. Data sources
  - 1.4.2.1. Reuse of existing TD
  - 1.4.2.2. LSA Data
  - 1.4.2.3. Level Of Repair Analysis (LORA) Data
  - 1.4.2.4. Engineering source data and changes

1.5. Delivery
- 1.5.1. Description of final delivery process including any final review and up issue procedures. The contractor is to use a shared system, to be agreed with the Authority, to deliver and store documentation and notify the authority of any changes. Where this is not possible, the authority must be notified, and another method agreed.
- 1.5.2. Delivery Programme
- 1.5.3. Project activities and milestones

1.6. Quality Assurance (QA)
- 1.6.1. Breakdown of any QA assurance processes, including validation and verification procedures.

1.7. Document interfaces
- 1.7.1. Breakdown of how any design databases, ILS analysis results, LSA results and how they relate to each other.

1.8. Status reporting / Amendments

1.8.1. Description of how updates will be managed, and configuration control maintained including any processes or procedures that will be used to do so.

1.9. Risk Management
1.9.1. Description of how the company intends to manage risks.

1.10. Security
1.10.1. Breakdown of material classification and how the company plan to manage classified data.

Annex F – Package, Handling, Storage and Transportation Plan (PHS&T)

1. The Contractor shall deliver a Packaging, Handling, Storage and Transportation Plan in accordance with the requirements of advice and guidance given in the Defence Logistics Framework (DLF), which shall include, but is not limited to, the following information:

1.1. Introduction;
1.1.1. Context
1.1.2. Aim
1.1.3. Objective of PHS&T plan
1.1.4. Applicability
1.1.5. Document context
1.1.6. Updating Procedure

1.2. PHS&T Requirements;
1.2.1. General
1.2.2. Packaging
1.2.3. Handling
1.2.4. Storage
1.2.5. Transportation
1.2.6. Quality Assurance (QA)

1.3. PHS&T Activities and milestones
1.3.1. Introduction
1.3.2. Milestones
1.3.3. Reviews
1.3.4. Disposal
1.3.5. Programme

Page Break

Annex G – Training Management and Training Equipment Plan (TM&TEP)

1. If new equipment is provided the Contractor shall deliver a JSP 822 compliant Training Management and Training Equipment Plan. The plan shall include, but is not limited to, the following information:

1.1. Introduction;
1.1.1. Purpose and Scope
1.1.1.1. Training Requirements
1.1.1.1.1. For operators
1.1.1.1.2. For maintainers

1.2. Training Analysis Approach;
- 1.2.1. Capture of training needs
- 1.2.2. Training Needs Analysis
- 1.2.3. Training Risks
- 1.2.4. Outline of the required competencies, qualifications and experience suggested for RAF CAM personnel

1.3. Training Programme;
- 1.3.1. Overview
- 1.3.2. Objectives & Outcomes
- 1.3.3. Content
- 1.3.4. Materials & Aides
- 1.3.5. Assessment Criteria
- 1.3.6. Training Validation
- 1.3.7. Training Programme

Annex H – Configuration Management Plan (CMP)

1. The Contractor shall deliver a Configuration Management Plan in accordance with Def Stan 05-057, which shall include, but is not limited to, the following information:

1.1. Introduction;
- 1.1.1. Project overview
- 1.1.2. Purpose
- 1.1.3. Scope
- 1.1.4. Specifications, standards, manuals, and other documents applicable to CM.
- 1.1.5. Security instructions
- 1.1.6. Instructions for management of CM document
- 1.1.7. Special features

1.2. Programme
- 1.2.1. CM milestones
- 1.2.2. CM Lifecycle including a plan for transfer of CI's if appropriate

1.3. Organisation and responsibilities
- 1.3.1. Policies, processes, and directives relating to CM
- 1.3.2. Responsibilities and authority for Configuration Change Management of all participating sub-contractors
- 1.3.3. Identify the configuration change organisation and Dispositioning Authority (Configuration Control Board) responsibilities
- 1.3.4. The relationships between the Prime Contractor, sub-contractors, and the Design Organisation for the management of configuration change
- 1.3.5. Contract
  - 1.3.5.1. The contractual CM requirements and any specific controls to ensure compliance with any additional requirements.
  - 1.3.5.2. The means for reporting difficulties in complying with CM contract requirements.
  - 1.3.5.3. The arrangements for achieving CM system requirements when sub-contracts are employed.

1.4. Resources

1.4.1. Explanatory information on Configurable Items (CI's) in the system design, development environment and manufacturing phase.
1.4.2. CM tools, repositories, and registers

1.5. Interface Management
1.5.1. CM arrangements for Non-Development Items / COTS / GFA.
1.5.2. Tools and test equipment
1.5.3. Arrangements for co-ordination with other project requirements

1.6. Selection of CI's
1.6.1. This section shall contain sufficient information to meet the requirements of Clause 3.4 and shall outline the baseline generation procedures, Clauses 3.5 and 3.6 of Def Stan 05-057.

1.7. Configuration Change Management
This section shall fulfil the requirements of Clause 3.7 to Clause 3.11 of Def Stan 05-057 and present plans for;
1.7.1. Implementing a Configuration Change Management process that provides total visibility for the management of change through the product life cycle
1.7.2. Processing and submitting Engineering Change Proposals or In-Service Modification proposals to an approved format to the Configuration Control Board (CCB)
1.7.3. Promulgating decisions concerning Engineering Change Proposals or In-Service Modification proposals
1.7.4. Ensuring that approved changes and Concessions are recorded in Configuration Status Accounting (CSA) and reflected in the Configuration Status Record (CSR)
1.7.5. Implementing a system for change priorities

1.8. Configuration Status Accounting
1.8.1. This section shall satisfy the requirements of Clause 3.12 and shall contain processes for collecting, recording, processing, and maintaining all configuration documentation and data necessary for the creation and maintenance of the CSR including;
1.8.1.1. Formats and data elements for all configuration documentation including software;
1.8.1.2. Specification, outline, control, and manufacturing drawings;
1.8.1.3. Design Records and Certificates of Design;
1.8.1.4. Concessions;
1.8.1.5. Computer software documentation;
1.8.1.6. Proposed and authorised change proposals;
1.8.1.7. Correlation of change proposals on interfacing CIs;
1.8.1.8. Formal review periodicity and the means for being viewed remotely

1.9. Configuration Audits
This section shall satisfy the requirements of Clause 3.14 of Def Stan 05-057 and shall include;
1.9.1. Procedures for carrying out the FCA and the PCA
1.9.2. Format for the reporting results of the FCA and PCA
1.9.3. Programmes for the conduct of the Configuration Audits including the relevant design reviews up to the time CIs are accepted by the Authority and transferred to UMC

1.10. Data Management
- 1.10.1. Description of all data media;
- 1.10.2. How the management of data shall be controlled and verified throughout the contracted product life cycle;
- 1.10.3. Access/limitation to data and prevention of data corruption;
- 1.10.4. Means for the distribution and presentation of data;
- 1.10.5. Data ownership at the working and organisational levels;
- 1.10.6. Technical publications, and user data;
- 1.10.7. Data storage details including data preservation

1.11. Training
- 1.11.1. CM training required to fulfil the contract

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Annex I – Obsolescence Management Plan (OMP)

1. The Contractor shall deliver a Def Stan 00-600 and DLF compliant Obsolescence Management Plan which shall include, but is not limited to, the following information:

1.1. Introduction;
- 1.1.1. Purpose and Scope
- 1.1.2. Obsolescence Requirements

1.2. Obsolescence Management;
- 1.2.1. Obsolescence Strategy
- 1.2.2. Known Obsolescence Risks
- 1.2.3. Monitoring & Reporting
- 1.2.4. Risk Mitigation Activities
- 1.2.5. Tools & Techniques
- 1.2.6. Technology Insertion
- 1.2.7. New Equipment
- 1.2.8. Legacy equipment

Annex J – Software Support Plan (SSP)

1. The Contractor shall deliver a Def Stan 00-600 compliant Software Support Plan which shall include, but is not limited to, the following information:

1.1. Introduction;
- 1.1.1. Purpose and Scope
- 1.1.2. Software Requirements (start up, restart, restore)
- 1.1.3. Applicable standards
- 1.1.4. Strategy
- 1.1.5. Organisation / Resources
- 1.1.6. Roles and responsibilities

1.2. Software Identification;
- 1.2.1. Where software is used in design
- 1.2.2. The type of software used
- 1.2.3. The software vendor
- 1.2.4. Critical Software & Redundancy Plan

1.3. Software Management

1.3.1. Modification Policy (Corrective, Adaptive, Perfective & Preventative)
1.3.2. Change Control Policy
1.3.3. Fault Management (Reporting, Investigation, Action)
1.3.4. Integration & Transition
1.3.5. Testing, Certification & Qualification
1.3.6. Security & Safety
1.3.7. Configuration Management
1.3.8. How software will be managed to deliver system usage requirements.

1.4. Software Support;
1.4.1. Documentation
1.4.2. Software engineering environment
1.4.3. Software tools
1.4.4. Support & test equipment
1.4.5. Software licences & IPR issues
1.4.6. Technical support

Annex K – Disposal Plan

1. The Contractor shall be prepared to liaise with the Defence Equipment and Sales Authority (DESA), to produce a DLF compliant Disposal Plan for all MOD owned equipment (where necessary, dealing with DESA strategic partners). Initially the contractor should create a disposal plan which shall include, but is not limited to, the following information:
1.1. Introduction;
1.1.1. Purpose and Scope
1.1.2. Disposal Requirements
1.1.3. Roles and responsibilities
1.2. Replaceable Unit Disposal Plans
1.2.1. Hardware
1.2.2. Software
1.2.3. Hazardous Equipment
1.2.4. Security Caveated or Sensitive Equipment

Annex L – Supply Management Plan

1. The Contractor shall deliver a Supply Management Plan which shall include, but is not limited to, the following information:
1.1. Introduction;
1.1.1. Purpose and Scope
1.1.2. Supply Support Requirements

1.2. Supply Planning;
1.2.1. Spares Modelling (which shall comply with defstan 00-600)
1.2.2. Spares Provision List (which shall comply with DEFORM 82)
1.2.3. Initial Provisioning (Shall comply with DEFCON 82)
1.2.4. Re-provisioning
1.2.5. Redundant material (for Physical stock held), which shall comply with DEFCON 601
1.2.6. The Supply Chain (if items are to enter the Joint Supply Chain (JSC), they are to comply with DEFCON 117). Where items are to

enter the JSC, the supplementary information at Appendix 1 (below) will apply.

1.3. Supply Management;
- 1.3.1. Packaging (which shall be Def Stan 81-041 complaint. It shall be Def Stans 00-088 and 00-810 compliant where explosives are involved)
- 1.3.2. Handling
- 1.3.3. Storage
- 1.3.4. Transportation
- 1.3.5. Stock Management System
- 1.3.6. Repair & Overhaul
- 1.3.7. Monitoring of spares usage & consumption
- 1.3.8. Spares obsolescence
- 1.3.9. Spares disposal

Annex M – Human Factors Integration Plan

1. The Solution Provider shall implement a Human Factors Integration (HFI) programme of work in line with JSP 912 and Defence Standard 00-251 that ensures that all Human Factors System Requirements (HFSR) are addressed, and HF considerations managed and mitigated, through the project lifecycle.

2. The Solution Provider shall produce a Human Factors Integration Plan (HFIP) that details the required HF approach, management, and planned activities for the HFI stages of Detailed System Design (HFI-4.0) and Test and Acceptance (HFI-5.0).

   2.1. The Solution Provider HFIP shall demonstrate how the HFI activities meet the requirements of the MOD HFI process, and how User Centred Design (UCD) will be implemented for the RAF CAM Relocation.
   2.2. The contents of the Solution Provider HFIP shall be in line with the HFI Product Description: HFI Plan – Solution Provider, available on the Human Factors Information Management System (HuFIMS).
   2.3. The Solution Provider HFIP shall be written with reference to the HF approach, management, and activities detailed in the MOD HFIP.
   2.4. The Solution Provider HFIP shall be prepared as part of the tender response. The draft HFIP shall be updated based on MOD feedback and formally issued within 20 days of contract award.
   2.5. The Solution Provider HFIP shall be updated annually between contract award and Full Operating Capability (FOC).

3. The Solution Provider shall nominate a designated HFI Manager who is responsible for the delivery of the Solution Provider HFI programme.
   3.1. The Solution Provider HFI Manager shall meet the SQEP requirements detailed in the MOD HFIP.
   3.2. The Solution Provider HFI Manager should be named in the Solution Provider HFIP.

4. The Solution Provider shall support the RAF CAM Relocation HFI Working Group (HFIWG).
   4.1. The Solution Provider should attend each HFIWG meeting. HFIWG meetings will be held quarterly from contract award until acceptance of the HFSR.

4.2. The Solution Provider shall provide input to the HFIWG as detailed in this DID and the HFIWG Terms of Reference (TOR).

5. The Solution Provider shall contribute to the identification, management, and closure of HF considerations.
    5.1. The Solution Provider shall document the process that they will use to manage HF considerations in the Solution Provider HFIP.
    5.2. The Solution Provider shall describe any newly identified HF considerations for inclusion in the HF Risks, Assumptions, Issues, Dependencies, and Opportunities (RAIDO) Register.
    5.3. The Solution Provider shall provide a status update for the HF considerations at the HFIWG.
    5.4. The Solution Provider shall undertake actions and collect evidence to bring the HF considerations to closure as agreed through the HFIWG.

6. The Solution Provider shall conduct the HF activities detailed in the Solution Provider HFIP.
    6.1. The Solution Provider shall present progress against the HF activities and the outcomes from these activities at the HFIWG.
    6.2. Where user feedback events are held, the Solution Provider shall prepare minutes from that event that include items agreed as suitable and areas where changes are required. The minutes shall be provided to MOD within 20 Buisness Days of the event for agreement.
    6.3. A HF Case Report shall be prepared which includes the results of HF analysis, impact of analysis on the system design, HF input to the design, summary of HF input to the Safety Case, and summary of user testing. The HF Case Report should follow the guidance contained in HFI Product Description: HFI Case Report and HFI Log, available on HuFIMS.

7. The Solution Provider shall assess and manage the HF impact associated with design changes. Design changes and HF input to the changes shall be reported to the HFIWG.

8. The Solution Provider shall provide HF input to project documents and milestones. The project documents to which HF input will be provided should be captured in the Solution Provider HFIP. It is anticipated that this will include input to the Verification and Validation Requirements Matrix (VVRM), Test, Evaluation and Acceptance Plan (TEAP), Safety Case, Preliminary Design Review (PDR) and Critical Design Review (CDR).

9. The Solution Provider shall manage the HFSR.
    9.1. The Solution Provider HFI Manager shall own the HFSR from the Solution Provider perspective.
    9.2. The Solution Provider HFI Manager should identify the requirements owned by other domains to which HF is a stakeholder.
    9.3. Each HFSR shall be associated with an acceptance method that is documented in relevant project documentation, such as the VVRM and/or TEAP.
    9.4. Where clarification is required on the HFSR, this should be raised in the HFIWG.
    9.5. Where potential non-compliances or trade-offs are identified for the HFSR, these shall be reported via the HFIWG.
    9.6. Test Plans and Test Case Procedures shall be prepared for the acceptance of all HFSR that require demonstration or testing. The HFSR

Test Plans and Test Case Procedures shall be provided to MOD for review.

9.7. Test Reports shall be prepared for all HFSR test events. The HFSR Test Reports shall be provided to MOD for review.

9.8. The findings from HFSR test events shall be presented at the HFIWG.

Annex N – Supportability Case

1. The Contractor shall deliver a Supportability Case IAW Def-Stan 00-600 pt. 2 to provide a reasoned, auditable argument created to support the contention that a defined system will satisfy the Support requirements of the Project. The SC shall include, but is not limited to;
   1.1. ILS claims
   1.2. Supportability Case Reports. These shall be used to update provide periodic updates to the Supportability Case at predetermined points as agreed with the authority. These will be in the format as specified in Annex A of Def-Stan 00-600 Pt 2.
   1.3. Supportability evidence framework.

The supportability case is to be used as the top-level control document to provide a reasoned and traceable argument based on evidence that a system satisfies the support requirements of a Project and will continue to do so over time.

Appendix 1. – Separate Spares Provisioning List

1. The Contractor shall deliver a Spares Provisioning List which shall include, but is not limited to, the following information:
   1.1. A breakdown of every spare to be held, by;
      1.1.1. Name
      1.1.2. Part Number
      1.1.3. Quantity Held
      1.1.4. Parent System \ Part
      1.1.5. Special Notes (e.g. hazardous)

2. The Contractor shall conduct spares modelling or simulation to identify and develop the Spares Provisioning List. The Contractor shall make available to the Authority, the following spares modelling information;
   2.1. Modelling tools used
   2.2. Contractor derived data
   2.3. Assumptions
   2.4. Results
   2.5. Modelling methodology and the results of any sensitivity analysis performed during the derivation of the proposed spares support solutions
   2.6. Visibility of Level of Repair Analysis, modelling inputs, results and the estimation of any scrap rates and identification of Long Lead Items

3. The Contractor shall use an Authority approved modelling tool from the list below, or provide sufficient details of model used, input data and results to allow the Authority to Verify and Validate the modelling tool and assure the results.
   3.1. VMetric™ Version 3.7
   3.2. SYSTEM ANALYZER™
   3.3. Service Planning and Optimization (SPO)™

3.4. SIMLOG™ Version 134
3.5. Fault Equipment Repair and Reliability Enquiry Tool (FERRET)
3.6. SIMLOX Versions 3.0 and 4.0
3.7. Product Lifecycle Analysis Environment (PLANET) Version 1.0.0.1
3.8. Equipment Design Cost Analysis System (EDCAS) Version 3.7.2
3.9. Optimum Use of Spares (OPUS10) Versions 5.2, 6.0, 7.0, 8.1
3.10. Monterey Activity-Based Analytical Platform (MAAP) Version 3.8 and 3.10.6
3.11. RAMLOG
3.12. Repair Policy Analysis 90 (RPA 90) Version 2
3.13. Customised Optimum Repair Policy Selection (CORPS)

4. The Contractor shall review and update the Spares Provisioning List after the system design has been agreed and frozen, to ensure that the proposed Spares Provisioning List is still appropriate to support the Critical Design Review.

DID-039- Sub-Contractor Management Plan

The Contractor shall deliver a Sub-Contractor Management Plan which shall include, but not limited to, the following sections;

1. Introduction
2. List of sub-contractors and their involvement with the delivery of the contract including, but not limited to, the following information:
3. Company Name.
4. Location.
5. Services or Goods being supplied.
6. Areas of responsibility.
7. Percentage value of overall contract.
8. Demonstration of Environmental Management Systems in accordance with ISO14001
9. Modern Slavery with sub-headings to include:
    1. The assessment plan outcome
    2. A plan to deal with any areas of concern

DID-040 - Sustainability and Environmental Appraisal Tools (SEAT)

1. Background Information

1.1. To comply with the mandate for mainstreaming sustainable practices into Defence business, all estate strategies, policies, decision-making processes and associated programmes, plans, projects (including estate rationalisation and disposal) and related activities shall be subject to relevant sustainability and environmental appraisal. The outcomes (risks and opportunities) shall be used to inform decisions to deliver a sustainable and resilient estate and support the delivery of Government requirements and targets.

1.2. Hence the Authority is required to manage the impacts of its business as this affects the environment, society, and the economy; the three elements of sustainable development. To assist with decision-making and to assess (appraise) the effects of all programmes, plans and projects, the Authority has produced the Sustainability and Environmental Appraisal Tools (SEAT). These shall be applied to the RAF CAM Relocation project.

1.3. The tools and methodologies are used to assess and manage the effects of developments and activities across Authority consistent with the principles of sustainability.

1.4. A well conducted appraisal will ensure all the factors of the development that could have a sustainability impact have been assessed accordingly. This will include:

- The requirement or objectives of the project.
- Legal obligations and sustainable development policy requirements.
- An appraisal of options and the costs and benefits of those options.
- The assessment of risks and the analysis of their sensitivity (significance).
- Monitoring and evaluation to manage those associated risks.

2. SEAT

2.1 SEAT comprises the following principal tools:

- Sustainability Appraisal (SA)
- Strategic Environmental Assessment (SEA)
- Environmental Impact Assessment (EIA)
- Habitats Regulations Assessment (HRA)
- Defence Related Environmental Assessment Methodology (DREAM)
- Climate Impact Risk Assessment Methodology (CIRAM)

2.2 In preparation for this project the Authority commissioned an RAF Cranwell (CRN) site Climate Impact Risk Assessment Methodology (CIRAM) report and initial Sustainability Appraisal[1]. Both are available to support this work.

2.3 The initial Sustainability Appraisal and associated Preliminary Ecological Survey2 have resulted in the tailoring of the SEAT activities. The following tools need not be applied:

- Strategic Environmental Assessment (SEA)
- Environmental Impact Assessment (EIA)
- Habitats Regulations Assessment (HRA)

2.4 SEAT Tools

2.4.1 Sustainability Appraisal.

8.3.4.1.1 Implementation of the SA agreed with the Sponsor shall be key to delivering a sustainable project. Progress against specific actions will be monitored as part of the contract and assessed during the various build phases. Successful implementation will be assessed as part of project closure.

2.4.2 DREAM

2.4.2.1.1 MOD policy requires that all new build projects receive a minimum 'excellent' rating (70%) under DREAM or an equivalent tool.

2.4.2.1.2 DREAM is an environmental performance assessment tool for new build and refurbishment projects. It enables MOD to meet its policy requirements whilst ensuring Authority, designers and project managers deal positively with environmental issues.

2.4.2.1.3 The RAF CAM Project Relocation will implement the DREAM tool.

2.4.2.1.4 DREAM is a web-based tool. Access is limited to this specific project application.

2.4.2.1.5 A DREAM Survey Stage assessment has been completed for the RAFCAM Relocation project by the Authority and shall be used as a baseline for further DREAM assessments.

2.4.3 CIRAM

2.4.3.1 CIRAM is a risk assessment tool, based on MOD's own risk management methodology, designed to improve the resilience of MOD establishments to climate related hazards and ensure the continuity of defence outputs. It has been developed to meet MOD's business and statutory commitments.

2.4.3.2 CIRAM identifies the risks posed by current and projected impacts of climate or extreme weather events on the outputs of MOD establishments and identifies actions required to maintain and optimise operational capability.

2.4.3.3 A review of CIRAM is initiated by various events including new infrastructure projects.

2.4.3.4 An initial CIRAM report has been created.

3. Requirements

3.1. The Contractor shall deliver a SEAT Management Plan which shall be a development of the Outline Plan delivered as part of the Tender, incorporating additional elements as agreed with the Authority.

3.2. The plan shall include at least a detailed Programme, comprehensive milestone plan, stakeholder management plan, detailed working group terms of reference, and management and reporting information.

3.3. The plan shall confirm the SEAT strategy for the Project, key personnel and their experience in the field and the SEAT deliverables to be established within the contract.

3.4. The plan shall explain how working groups would be established, managed, and reported against.

3.5. The plan shall explain how, working with the Authority, the CIRAM and DREAM reports would be updated during design and construction.

3.6. The plan shall be subject to approval by the Authority in accordance with the contract documentation review and approval process.

DID-041– List of Contractor Key Personnel

The Contractor shall provide the following detail on the personnel involved in the Contract.

Name	Email	Telephone Number	Role	Authroised signatories

13. Meetings

The Contractor shall facilitate Authority chaired meetings as defined within the below, including the provision of secretarial duties as described in paragraph of this Scope.

Meeting	Host	Location	Frequency	Purpose
Project Kick Off meeting	Contractor	Contractors premises	With 30 Business Days from Contract Award	Initial meeting to discuss Contract Authority requirements.
System Requirement Review	Contractor	Contractors premises	Within 60 Business Days of Contract Award	
Test, Evaluation and Acceptance Meetings	Contractor	Contractors premises or RAF Cranwell	As required throughout the Contract	Course Evaluation and Acceptance
Monthly Performance Meetings	Contractor	Contractors premises or RAF Cranwell	Every calendar month, starting from Contract Award until Completion.	Shall include, but not limited to: 1. General Update 2. KPI and QPI Reporting 3. EVM Reports 4. Programme analysis – Progress against the agreed milestones and forward plan. 5. Project Management and Timescales Issues. 6. Risk management 7. Validation and Acceptance Testing and Reliability Demonstrations. 8. Health and Safety (including accidents, incidents and near misses). 9. Safety, Environmental and Quality. 10. Security. 11. Finance and Commercial. 12. Joint Authority / Contractor Quality Assurance Group 13. Logistic update – (deliverables against Integrated Support Document DID, any equipment issues impacting Integrated Logistics Support (ILS), any risks, threats, or opportunities associated to this area, obsolescence). 14. Report on Modern Slavery assessment tool (annually). 15. Value Engineering review. 16. AOB
Security Working Group	Contractor	Contractors premises or RAF Cranwell	6-calendar monthly	Security aspects in compliance with JSP 440

Safety and Environment Meetings (PESC)	Contractor	Contractors premises or RAF Cranwell	6-calendar monthly	To manage the Project's safety/environmental activities, including: 1. To set and keep under review the Project's safety/environmental strategy, targets and objectives; 2. To define and agree the system boundaries for Safety & Environmental responsibility; 3. Manage the implementation of control measures deemed necessary to reduce identified risks to Broadly Acceptable or Tolerable and ALARP and environmental risks to agreed levels of acceptability; 4. Review emergency and contingency procedures; 5. To advise the Chairperson of the PESC on the Safety & Environmental responsibilities associated with the Project; 6. To advise the Chairperson of the PESC on any changes to Legislation, Standards or Statutory Regulations and any restrictions with which the Project must comply; 7. To review, monitor, classify and allocate new system hazards and potential accidents as they are identified; 8. To carry out reviews of the Project's SEA and progress on achieving safety/environmental targets, to a predetermined programme; 9. Consideration of high, medium and low priority environmental aspects and reducing them towards the BPEO; 10. To endorse Category D hazards as Broadly Acceptable and Category C hazards as Tolerable and ALARP, where appropriate ALARP arguments and evidence is provided (where an LSED has been provided to do so);

				11. To report Category B hazards to the Chief Engineer for action/endorsement and provide recommendations for acceptance; 12. To report Category A hazards to the DTL, Chief Engineer and SEMC for action/endorsement and provide recommendations for acceptance and or reclassification; 13. To review the Project's SEA to ensure that it is comprehensive; 14. To review any DASOR that has been raised against the STE or the Platform and to assess its implications offering advice to the ADH organisation on how best to remove or reduce any Air Safety risk; 15. To carry out periodic husbandry checks at the site of maintenance/service contractors' premises and record the results in the PESC minutes; 16. Engineer who undertakes the PESC, should hold at least one PESC on the site of maintenance/service in a 12-month period once built, especially if they have not visited the site in between PESCs for any other reason.
Preliminary Design Review (PDR) Working Group *These can be held separately for equipment and infrastructure.*	Contractor	Contractors premises	30 Business Days prior to Preliminary Design Review	1. Brief the Authority on the current designs for the new RAF CAM building. 2. Brief the Authority on the proposed equipment solution to satisfy the SRD. 3. Brief the Authority on proposed support solution, 4. Collect comments and amendments to any designs.
Preliminary Design Review .	Contractor	Contractors premises	Milestone	1. Present the final Preliminary Designs (including the equipment solution), for RAF CAM and answer any questions or address any comments from the Authority. 2. All outputs in line with DID-XXX Preliminary Design Review.

Critical Design Review (CDR) Working Group *These can be held separately for equipment and infrastructure.*	Contractor	Contractors premises	30 Business Days prior to Critical Design Review	1. Brief the Authority on the final building designs for RAF CAM. 2. Brief the Authority on the proposed final equipment solution to satisfy the SRD. 3. Brief the Authority on proposed final support solution, 4. Collect comments and amendments to any designs.
Critical Design Review	Contractor	Contractors premises	Milestone	1. Present and agree the final design for the RAF CAM building and equipment solution. 2. All outputs in line with DID-XXX Critical Design Review
Logistic Demonstration	Contractor	Contractors premises or RAF Cranwell	Post CDR, but prior to Completion.	1. Demonstrate compliance against logistic requirements. 2. Demonstration of how system is to be supported. 3. Demonstration support solution can operate as defined in supporting plans, documentation etc.
Lesson Learned	Contractor	Contractors premises or RAF Cranwell	At the end of Stage 1 and Stage 2	3. Review of Lessons Learnt captured by the Contractor. 4. Identify actions to bring forward to the next stage.
CIS working group	Contractor	Contractors premises	As required	Aim: To establish the CIS specification and design requirements for the Project. Input • CIS Specification Part A and Part B <u>Output</u> • CIS Specification Part C • Updated Parts A and B if required
Fire health and safety working group	Contractor	Contractors premises	As required	Aim: To provide assurance to the Authority that the building design, including the building systems, meet the required fire, and health and safety legislation, system and station requirements. <u>Input</u> • Contract requirements • Building design <u>Output</u> • Health and Safety File • Fire Safety Information
Sustainability and Environment (S&E) working group	Contractor	Contractors premises	As required	Aim: To provide assurance to the Authority that the building and systems will exceed the minimum S&E requirements dictated by government legislation and policy. It shall also provide guidance on maximising the application of renewables, recycling and

				minimising the negative impact on the local environment. Input • DREAM • Sustainability Appraisal • Construction Environmental Management Plan • Waste Management Plan • Building design • Sustainability and Resilience Plan Output • Target reports as required by the contract.
Government Soft Landings (GSL) working group	Contractor	Contractors premises	As required	To implement GSL policy for the RAF CAM Relocation project. To inform and provide guidance to the design teams on the building design to enable successful integration with the facilities maintenance teams at RAF Cranwell. Input • Design documentation and plans • Building system information • Warranty information • Servicing requirements Output • Assured building design • Building Manual • List of Special tools
Infrastructure Acceptance working group	Contractor	Contractors premises	As required	To support the development of the acceptance process for the building. (This may be integrated within a Project acceptance working group). The IAWG shall report to the CIWG Input • PEP • V&V matrix • Transition Management Plan Output • Acceptance Plan
RIBA Stage 2 closure review	Contractor	Contractors premises	Once	Having undertaken Design Reviews with the Authority and Project Stakeholders present the outputs from the Stage for endorsement by the Authority. Input • Project Brief Derogations • Architectural concept • Stage Report • Project Strategies. • Outline Specification Output • Approved Stage Report

RIBA Stage 3 closure review	Contractor	Contractors premises	Once	To review with the Authority the updated specifications resulting from the Spatial Coordination activities of the Stage. Input • Updated Project Brief Derogations • Architectural concept • Stage Report • Updated Project Strategies • Updated Outline Specification Output • Approved Stage Report
RIBA Stage 4 closure review	Contractor	Contractors premises	Once	To provide assurance to the Authority that all the design information required for manufacture and construction of the building is complete. Input • Construction Phase Plan • Confirm compliance of the design to the building regulations • Final specifications, including CIS and Security • Project derogations Ouput • Endorsed Construction Phase Plan and Project Derogations • Endorsed final specifications
RIBA Stage 5 Practical Completion review	Contractor	RAF Cranwell	Once	A contractual review that certifies that the construction work is practically complete under the Building Contract and allows the Authority to take possession of and to use the building. Input • Building Manual and any Verified Construction Information • Proposed Defect List • Asset Information • Transition Management Plan • Facilities Management preparation assessment Output • Practical Completion certificate. • Agreed Defect List
Defect progress meetings	Contractor	RAF Cranwell	Monthly	Meeting to review the progress with the resolution of the Defect List, sentence proposed additions to the List, and review maintenance and system concerns. Input • Updated Defects List • New issues for sentencing • Maintenance issues for review • Warranty items review Output • Revised Defect List

				• Action register for maintenance. • Warranty tracker
RIBA Stage 6 Final Completion review	Contractor	RAF Cranwell	Once	A contractual review that facilitates formal conclusion of the Building Contract and Stage 6, winding up the design and construction teams' involvement in the building's life. Input • Final Defect List • Review of Maintenance arisings Output • Approved Final Certificate
Infrastructure Management Board	Contractor	Contractor premises or RAF Cranwell	Quarterly	The IMB shall be responsible for the periodical management and assurance of the infrastructure works during the design and construction. Input • Progress report including working group summaries Construction quality report
Acceptance Project Board (APB)	Contractor	RAF Cranwell	Once	The APB will convene specifically to accept the RAF CAM Capability when recommended to do so by the CIWG. Input • Final Certificate • Vand V summary • CIWG recommendation • Defect summary Output • Building handover

14. Conformation that the Scope is a Contract Document

Signed by or on behalf of:

THE SECRETARY OF STATE FOR DEFENCE

……

Signed by or on behalf of:

THE CONTRACTOR

……..