Ministry of Defence

de&S

DEFENCE EQUIPMENT & SUPPORT

ARTILLERY SYSTEMS DELIVERY TEAM

ANNEX J
L118 Light Gun Design Organisation
EVM REQUIREMENTS (EXTRACTED FROM DE&S PC TAILORING GUIDE)

Contract Number: 706506451
Date

L118 Light Gun (LG) Design organisation (DO)

Level 4 Contract Requirements for Project Controls

Contents

ANNEX B - PROJECT CONTROLS REQUIREMENTS

1. Project Control System Implementation

1.1. The Contractor, in accord with CDRL (DID-PC-001A), shall develop, deliver, and update as needed over the term of the contract, a Project Management Plan (PMP) that:

1.1.1. Describes a PC system that is compliant with the Planning, Scheduling, Monitoring and Control (APM 2015); and

1.1.2. Describes how tools, processes and Suitably Qualified and Experienced Personnel (SQEP) are available to support the implementation and use of a PC system throughout the contract duration. The Contractor shall conduct Project Management in accordance with the Approved PMP until contract completion.

1.1.3. Describes how the PC system is governed, lists the accountabilities, and outlines the approval and timeframe for regular review and updating.

1.1.4. Details how configuration control is applied to the PC system. Describes the Change Control process (including but not limited to change to the PMP, engineering, technical, baseline, or contract changes).

1.1.5. 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.

2. Contract Work Breakdown Structure

2.1. The Contractor shall develop, deliver, and update a Contract Work Breakdown Structure (CWBS) in accordance with CDRL (DID-PC-002A) that meets both the Authority reporting requirements and can be aligned with the Defined Pricing Structure (DPS) where applicable.

2.2. The Contractor shall manage the Contract in accordance with the approved CWBS & CWBS Dictionary. Alignment of data from CWBS to Contract Line-Item Number (CLIN) is to be maintained to enable the Authority Contracting, Purchasing and Finance (CP&F) data requirements.

2.3. The Contractor shall maintain and update the CWBS Structure and Dictionary throughout the contract using configuration control as defined within the agreed Change Control Process. Proposed changes to the CWBS that may affect Authority or DPS requirements must be provided to the Authority, within one week 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.

2.4. The Contractor may amend the approved CWBS or CWBS Dictionary, without first obtaining the Authority's approval under clause 2.3 as long as changes are formally recorded as part of the agreed Change Control Process under delegated authority and:

2.4.1. All elements affected by the amendment are below the reporting level.

2.4.2. The amendments are consistent with the Approved CWBS; and

2.4.3. The Authority is notified within thirty days of the changes being made.

2.5. The CWBS implemented shall enable reconciliation of the PC System back to the Contract Price.

3. Contract Master Schedule (CMS)

3.1. The Contractor shall develop, deliver, and update a Contract Master Schedule (CMS) in accordance with CDRL-(DID-PC-003A). This will include the Baseline, a current forecast schedule with the updated performance against the Baseline, and a high-level summary schedule as agreed with the Authority.

3.2. The Contractor shall use the approved CMS as the primary schedule for managing the Contract.

3.3. The Contractor shall conduct schedule health checks to assure compliance with DE&S standards consistent with the Defence Contract Management Agency (DCMA) Fourteen Point Schedule Health Checks, or as otherwise agreed with the Authority.

3.4. The Contractor shall ensure that the CMS fully incorporates all of the defined scope within the CWBS and will be used as the basis of the Baseline.

3.5. Rolling wave planning may be used when establishing the baseline schedule to set the detail at an appropriate level in relation to the understanding of the work to be delivered. Typically, the planning horizon between detailed work packages and outline planning packages would be approximately 18 months or at natural project break points, as agreed with the Authority. Where planning packages are used, they are expected to have a defined scope, duration and associated budget.

3.6. The Contractor shall ensure that the CMS 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.

3.7. The Baseline must be under configuration control with any approved changes in accord with the standards defined in Annex B - Project Controls Requirements. The Baseline change log shall describe the changes to time and budget to Control Account level on the change request.

3.8. The contractor shall preserve a record of historical Planned cost and not implement retroactive changes, including but not limited to re-baselining the Baseline, unless approved by the Authority.

3.9. The Contractor may amend the agreed CMS, without first obtaining the Authority's Approval under clause 3.7 as long as:

3.9.1. payments under the Contract are not affected.

3.9.2. the Baseline dates for Contract Milestones are not affected.

3.9.3. the ability of the Authority to meet its obligations under the Contract is not affected; and,

3.9.4. it does not impact any Authority dependent activities.

3.10. Authority approval of an amendment to the Approved CMS under clause 3.9 shall be obtained when the next update to the CMS is required, as specified in the DID.

3.11. Authority Approval of an amendment to the approved CMS shall not affect either party's responsibilities or obligations under the PC system.

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

4. Risk and Opportunity Management

4.1. In accordance with DID-PC-005A, the Contractor shall maintain a Risk and Opportunity Management Plan (ROMP) that enables a risk process to be jointly managed with the Authority.

4.2. The Contractor shall make it possible for the Authority to engage with the regular risk update process via regular risk reviews and formal risk reporting.

5. Change Control

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

5.1.1 Document, track and communicate changes to the Baseline

5.1.2 Reconcile current budgets to prior budgets in terms of changes to the authorised work in the detail needed by management for effective control

5.1.3 Control retroactive changes to records pertaining to work performed that would change previously reported amounts for actual costs 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

5.1.4 Prevent revisions to the program budget except for authorised changes

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5.2. The Authority shall review, and the contractor shall ensure that the change control process and procedures meet the needs of the Authority, in accord with DID-PC-006A.

6. Subcontractor Management – Project Control

6.1. The Contractor shall ensure that all Major Subcontractors shall manage their contracts in accordance with the Contractors own approved project management and Project Management Plans.

6.2. Contract elements delivered by Major Subcontractor(s) must be listed in the Contractor PMP or Contractor Management Plan (as appropriate) with the value and scope of the subcontract. Major Subcontractors must have separate Control Accounts within the Contractors Baseline.

6.3. Unless otherwise agreed by the Authority, the minimum requirement for a Project Control Management System (including CWBS, CMS and Subcontractor Baseline shall be flowed down to the appropriate material level agreed with the Authority to represent a Managerially Significant breakdown of the work where the Subcontract or group of Subcontracts requires effort:

6.3.1. in excess of 12 months and the Subcontract price exceeds £20m.

6.3.2. represents more than 20% of the contract value;

6.3.3. As deemed appropriate by the contractor; or,
6.3.4. as directed by the Authority. Authority direction will be based on a risk assessment of the scope of work being undertaken in the subcontract.

7. Subcontractor Project Controls Management Requirements

7.1. Where Project Controls Management System (PCMS) requirements flow down to a Subcontractor, the Subcontractor shall maintain and use, throughout the delivery of the Subcontract, a PCMS compliant with the Contractor requirements of this Contract.

7.2. The Contractor shall ensure the Subcontractor's PCMS is compliant during Contractor Pre-Contract Readiness Reviews, or at the point of Subcontract Award, with the requirements of this Contract.

7.3. The Contractor shall be responsible for reviewing and accepting the Subcontractor's Baseline.

7.4. The Contractor shall permit Authority Representative(s) to participate in any review associated with the Subcontractor's PCMS to ensure compliance of the Subcontract PCMS with the requirements of the Contract.

7.5. The Contractor shall give the Authority at least thirty days prior notice in writing of when a Subcontractor Review is to be carried out.

7.6. The Contractor shall make available to the Authority records and source data that supports any PCMS compliance review of a Subcontractor's PCMS within thirty days of receipt or production.

7.7. The Contractor shall include status data from approved Subcontractors within their same status as the Contractor's data when preparing Contract Cost and Schedule Status Report CSSRs in accordance with DID-PC-004A.

8. Deliverable Data Formats

8.1. The Contractor shall ensure that project/programme data can be exchanged using the Authority preferred software tools. These include:
8.1.1. Microsoft Office tools for narrative documents.
8.1.2. Primavera P6 for schedules; or outputs that can be translated to a XER or XML file as agreed by the Authority.
8.1.3. Microsoft Excel compatible for numerical reports
8.1.4. Risk Register from Active Risk Manager (ARM) or similar

8.2. 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 CMS is created in a format that allows an export file compatible with scheduling software defined above or as approved by the Authority.

ANNEX C1 – PROJECT CONTROLS MANAGEMENT PLAN - DID-PC-001A

1. **Title:** PROJECT CONTROLS MANAGEMENT PLAN (PCMP)
2. **Number**: DID-PC-001A
3. **Version:** 1.0
4. **Delivery Schedule:** Refer to Annex E.
5. **Applicable Forms:**
6. **Description:** The PCMP documents the Contractor's plans, methodologies, and processes for ensuring compliance with the PCMS requirements of the Contract. The PCMP 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 PCMS.

7. **Use/Relationship:**
   7.1. The Authority will use the PCMP to:
      7.1.1. Gain confidence that the full scope of work related to the PCMS Contractual requirements, together with associated system implementation risk have been captured and are within the plan for implementation of a compliant PCMS on the Contract.
      7.1.2. Review and assess the Contractor's proposed PCMS for:
         7.1.2.1. compliance with the requirements of the Contract.
         7.1.2.2. the PCMS ability to support effective Contract Performance Management; and
         7.1.2.3. the PCMS ability to meet the Authority's data requirements.
      7.1.3. Understand the design and functionality of the Contractor's PCMS as the basis for the conduct of PCMS related reviews.
      7.1.4. Gain confidence that the Contractor has appropriate controls procedures in place to maintain a compliant system during the course of the Contract; and,
      7.1.5. Form a basis for assessing the ongoing compliance of the PCMS.

   7.2. The PCMP is subordinate to the Project Management Plan (PMP) where this document exists.

8. **Applicable Standards, Governance & Related Documentation**
   8.1. The Project Controls Management Plan (PCMP) shall describe an PCMS that is compliant with the Association for Project Management (APM)
9. **Reference Documents**
   9.1. Association for Project Management (APM)
      9.1.1. Planning, Scheduling, Monitoring and Control (APM 2015)
   9.2. DCMA Fourteen Point Schedule Health Check.

10. **Requirements:**
      10.1.1. PCMP Overview
      10.1.2. The PCMP shall describe the objectives, scope, constraints, and assumptions associated with the Contractor's PCMS activities related to this contract. Any risks identified with the Contractor's PCMS implementation and operation shall be documented in the Risk Register; however, the PCMP shall describe the risk management strategies associated with any PCMS implementation and operation related risks.
      10.1.3. Configuration Management to be defined within the context of EV within the EVMP.

10.2. Project Controls Implementation

10.2.1. The PCMP shall describe the processes and schedule that the Contractor intends to use to implement the PCMS including:

10.2.1.1. a description of the areas of non-compliance between the Contractor's current project management system and the PCMS contractual requirements

10.2.1.2. the corrective actions planned to be undertaken to rectify the areas of non-compliance, including the timeframes involved.

10.2.1.3. 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.

10.2.1.4. identification of areas of risk to the proposed PCMS implementation and proposed mitigation strategy.

10.2.1.5. a summary of the implementation schedule, with the full implementation schedule being provided as part of the Contractor Master Schedule (CMS);

10.2.1.6. a description of the activity to ensure Subcontractor implementation of PC related contract requirements.

10.3. PCMS Description

10.3.1. The PCMP shall provide a description of the Contractor's PCMS that demonstrates compliance with the requirements of the contract covering all relevant PC 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

10.4. Contractor PCMS Assurance

10.4.1. The PCMP shall describe the Contractor's PCMS quality assurance strategy to ensure that the PCMS remains compliant with the requirements of the Contract, including:

10.4.1.1. The criteria to determine that an PCMS Review is required; and,

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

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

10.5. Project Controls Performance Reports

10.5.1. The PCMP shall describe the PCMS performance reporting processes and timescales used by the Contractor. The PCMP shall confirm adherence to the Contract Terms & Conditions by describing the reporting levels, structures reporting levels by CWBS elements.

10.5.2. The PCMP shall confirm the electronic formats to be used for the provision of EVMS data to the Authority in order to facilitate data transfer and analysis.

10.5.3. The PCMP shall describe the level and methodology to produce trend data.

10.6. Data Integrity Checks

10.6.1. The PCMP shall detail the methodology and frequency of data and schedule health checks.

10.6.2. The PCMP shall define the process through which it will be possible to reconcile the financial data within the system back to the contract value (price).

10.7. PCMS Related Reviews

10.7.1. The PCMP shall describe the facilities and support that will be provided to the Authority in support of PCMS Reviews. This should include but is not limited to:

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

10.7.1.2. All documentation shall be delivered electronically to the Authority.

10.7.1.3. 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.

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

10.7.1.5. Access provisions are to be made for the review of documentation in electronic formats such as PCMS process and procedures, schedules, documentation and any related data requested to support the review.

10.8. PC Flow Down to Major Subcontractors

10.8.1. Unless otherwise agreed by the Authority, the requirement for an PCMS (including PCMP, CWBS, CMS and Subcontractor Baseline shall be flowed down to the appropriate material level agreed with the Authority to represent a Managerially Significant breakdown of the work where the Subcontract or group of Subcontracts requires effort:

10.8.1.1. in excess of 12 months and the Subcontract price exceeds £20m.

10.8.1.2. represents more than 20% of the contract value; or

10.8.1.3. as directed by the Authority. Authority direction will be based on a risk assessment of the scope of work being undertaken in the subcontract.

10.8.2. The PCMP 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:

10.8.2.1. Subcontract title and description.

10.8.2.2. Subcontract type.

10.8.2.3. Subcontract value and Duration.

10.8.3. Subcontractor PCMS experience including standards that applied and any formal recognition of the applied PCMS.

10.8.4. The PCMS Description of Flow Down arrangements to each Subcontract shall include the following information:

10.8.4.1. Contractors Plans for assessing PC maturity to meet the Authority's PC 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.

10.8.4.2. Plans for subcontract report data incorporation against WBS and Schedule Reports.

10.8.4.3. Proposed timing of Subcontract data incorporation

11. **Preparation Instructions:**
    11.1. The data item shall comply with the general format, content and preparation instructions contained in this DID.
    11.2. Where referenced information is included, it shall refer to the lower-level PCMS procedures, these referenced procedures and any related instructions shall be delivered as attachments to the PCMP.
    11.3. 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.

ANNEX C2 – CONTRACT WORK BREAKDOWN STRUCTURE (CWBS) AND DICTIONARY – DID-PC-002A

1. **Title:** CONTRACT WORK BREAKDOWN STRUCTURE (CWBS) and Dictionary
2. **Number:** DID-PC-002A
3. **Version:** 1.0
4. **Delivery Schedule:** Refer to Annex E.
5. **Applicable Forms:** N/A
6. **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, schedule and technical achievements at completion.

7. **Use/Relationship:**
   7.1. 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.
   7.2. 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.
   7.3. CWBS at the nominated reporting level will be used in the CSSR.
   7.4. The CWBS is related to, and shall be consistent with, the Contractor's Project Controls Management Plan (PCMP) (DID-PC- 001A) and the Contractor Master Schedule (CMS) DID-PC-003A.

8. **Applicable Standards, Governance & Relevant Documentation**
   8.1. As per the example provided in the tender submission

9. **Requirements**
   9.1. The data item shall comply with the general format, content and preparation instructions contained in this DID.
      9.1.1. 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.
      9.1.2. All contract scope must be included in the CWBS Dictionary.
      9.1.3. 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.
      9.1.4. The CWBS Dictionary shall define in detail the scope of work included against each CWBS element. It shall correlate all Contract deliverables (CLINs, CDRLs 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.
      9.1.5. The CWBS shall be consistent with the DPS where appropriate.
      9.1.6. The CWBS will also include additional data as described below.

   9.2. Contract Work Breakdown Structure
      9.2.1. The CWBS is a hierarchical family tree arrangement of WBS elements, defined by:
         9.2.1.1. Specific interface points to the Authority's WBS.
         9.2.1.2. Incorporating any contractually required high-level WBS structure; and
         9.2.1.3. Lower-level elements of the Contractor's WBS necessary to provide an appropriate framework throughout the project for product and service definition

and control.
Including allowing invoicing alignment to CLINs to provide the Authority with P3M system monthly reconciliation.

9.2.2. The CWBS Structure shall comprise of:

9.2.2.1. CWBS/WBS Code. The preferred convention is to use a numeric structure starting with the Authority WBS Code for the relevant CWBS element.

9.2.2.2. CWBS Element Level. The level of the CWBS element.

9.2.2.3. 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.

9.3. Contract Work Breakdown Structure Dictionary

9.3.1. 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):

9.3.1.1. CWBS/WBS Code. The same codes used in the structure.

9.3.1.2. 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.

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

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

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

9.3.1.6. Scoping Statement version number & Revision date

9.3.2. 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 short 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.

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

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

9.3.3.2. 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.

9.3.3.3. 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.

9.3.4. Typical features of the Scope Definition include:

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

9.3.4.2. BOUNDARIES: Explicit statements of what is in or out of scope to describe the boundaries. Consider including things by exception (obvious boundaries don't 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)

9.3.4.3. 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?

9.3.4.4. 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.

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

9.3.4.6. 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.

9.3.4.7. 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.

9.3.4.8. Cross-reference to the conditions of contract and Statement of Work (SOW) that informed the scope definition, or other traceability references (a reference matrix for SOW clauses to the WBS may be desirable), or the applicable standards or references that determine the scope.

9.4. Subcontracted Activities

9.4.1. 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:

9.4.1.1. the WBS shall maintain a product structure reflecting the specification tree.

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

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

9.4.1.4. a commercially clean interface can be maintained with the Subcontractor by creating a Subcontract Management WBS element for each such Subcontract.

10. **Preparation Instructions:**

N/A

11. **Data Format & Delivery Instructions**

11.1. 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 PCMP.

11.2. 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.

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

ANNEX C3 – CONTRACTOR MASTER SCHEDULE (CMS) – DID-PC-003A

1. **Title:** CONTRACTOR MASTER SCHEDULE (CMS)
2. **Number:** DID-PC-003A
3. **Version:** 1.0
4. **Delivery Schedule:** Refer to Annex E.
5. **Applicable Forms:** N/A
6. **Description:** The CMS describes the contracted activities, milestones and decision points to enable the objectives and deliverables of the contract to be satisfied. The CMS will define the project schedule status through a comparison of the current schedule status and appropriate accepted baseline schedule.

7. **Use/Relationship:**

7.1. The Authority will use the CMS to:

7.1.1. Provide visibility into the Contractor's planning baseline and current forecast schedules.
7.1.2. Understand and evaluate the Contractors approach to meeting the requirements of the contract.
7.1.3. Monitor Contractor progress in meeting the requirements of the contract.
7.1.4. As a source of input when completing Authority planning activities; and,
7.1.5. Understand the required touch points between the Contractor's and the Authority's work.

7.2. The CMS relates to the following documents required within the contract:

7.2.1. Project Controls Management Plan (PCMP);
7.2.2. Project Management Plan (PMP); and,
7.2.3. Contract Work Breakdown Structure (CWBS).

7.3. The CMS shall be traceable and integrated with:

7.3.1. The CWBS (DID-PC-002A) – all activities and milestones on the schedule will be coded to the lowest level of the CWBS that represent the scope to which the activity pertains.
7.3.2. Contract Milestones – shall be clearly identifiable within the logic linked activity network.
7.3.3. The Contractor's PCMS – the integration of scope, schedule and budget will be undertaken around the CWBS, which will form the primary structure for PC Performance reporting; and,
7.3.4. Each submission of the CMS shall be consistent with the associated Contract Performance Report (CPR) delivered within this Contract.

8. **Applicable Standards, Governance & Related Documentation**

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

8.2. Defence Contract Management Agency (DCMA) Fourteen Point Schedule Health Checks, or as otherwise agreed with the Authority.

9. **Requirements:**

9.1. The CMS shall be capable of comparing planned and current forecast data and being displayed in a variety of formats to include.

9.1.1. A Gantt chart

9.1.2. A listing of all tasks, together with planned (baseline and current progress including forecast) and actual start and finish dates

9.1.3. A listing of project milestones (to include all contract milestones) together with original, rescheduled, forecast and actual completion dates

9.1.4. All activity durations within the schedule shall be in days unless otherwise agreed by the Authority.

9.1.5. All resource units within the schedule shall be in hours and costs shall be in Great British Pounds Sterling unless otherwise agreed by the Authority.

9.2. The CMS shall be capable of being displayed at the following levels:

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

9.3. The CMS shall identify the following aspects.

9.3.1. Activities and associated durations

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

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

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

9.3.5. Total float and free float of the overall schedule

9.3.6. 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.

9.3.7. Cost Profiles, depicting manpower, materials and equipment.

9.3.8. The baseline budget for all activities aggregating to the total Baseline.

9.3.9. Subcontracting schedules to include all major sub-contract activities and outputs at the appropriate level of detail, reflecting complexity and risk.

9.3.10. 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.

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

9.4. A Basis of Schedule (BOS) shall be produced and maintained under configuration control. The BOS should include the following.

9.4.1. How the CMS has been produced.

9.4.2. Detail methodologies used to establish estimated durations.

9.4.3. Key assumptions and exclusions.

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

9.4.5. Risks, including risk analysis techniques used, and any mitigations embedded in the schedule.

9.4.6. The standards used to establish duration lengths and use of constraints, ensuring no open-ended activities and compliance with DE&S Schedule guidance.

9.4.7. 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,

9.4.8. The Configuration and assurance procedures that will be used to manage and ensure the ongoing integrity of the CMS.

10. **CMS Reports** - The following reports, which collectively comprise CPR Format 6, are required:

10.1. Baseline Reports

10.1.1. Reports that describe and reflect the initial baseline

10.1.2. Subsequently approved changes that caused a revision of the baseline.

10.1.3. A Schedule narrative shall be provided with the original baseline and any subsequent baseline revisions outlining how the schedule 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.

10.1.4. A set of Authority agreed schedule health metrics.

10.1.5. Schedule Risk Analysis shall be conducted on the Contractor schedule, at least quarterly and on the Authority's request, a Schedule Risk Analysis Report and electronic copies of the SRA schedule and the Contractor SRA models shall be provided to the Authority.

10.2. Progress Reports (Statused Current Working Schedule)

10.2.1. Electronic copy of the progressed schedule each reporting period that has formed the basis of the CSSR for that period.

10.2.2. A Schedule narrative shall be provided with the progressed schedule 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 schedule 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.

10.2.3. 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.

10.2.4. Critical Path, Sub-Critical Path and Float Erosion Analysis Reports. Critical path analysis against the baseline and current forecast dates within the CMS. Summary / variance commentary of movements / changes to the critical path to be reported.

10.2.5. Interdependencies (Give/Get Milestones) Table. To indicate key interdependencies between supply chain, MoD and contractor schedules. Report should indicate movements in the period relating to both the baseline schedules and the current forecast version of these schedules. Variance commentary to be provided.

10.2.6. A set of agreed schedule health metrics for the submitted progressed schedule.

11. Preparation Instructions:

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

11.2 The CMS shall be the primary schedule used for the contract; all other schedules produced in support of this are considered as subordinate to this primary schedule.

12. **Data Format & Delivery Instructions:**

12.1. Acceptable file formats are those that are compatible with the Authority IT System.

12.2. CMS deliveries shall include the original baseline schedule and Basis of Schedule, all agreed baseline amendments, the current working schedule together with forecast completion dates and durations.
12.3. Contractor schedules updated to reflect current progress shall be provided to the Authority on a monthly basis to the end of the calendar month unless agreed otherwise. The monthly reports shall be provided within 4 days of the end of the reporting period unless otherwise specified in the Conditions of Contract.
12.3. A Control Level schedule hard copy as well as electronic submission in the native file format (P6, or alternate package supported by Terms & Conditions of Contract).
12.4. Each submission of the CMS shall be consistent with the associated Status Report.

ANNEX C4 –CONTRACT AND SCHEDULE STATUS REPORT (CSSR) – DID-PC-004A

1. **Title:** CONTRACT AND SCHEDULE STATUS REPORT (CSSR)
2. **Number:** DID-PC-004A
3. **Version:** 1.0
4. **Delivery Schedule:** Refer to Annex E.
5. **Applicable Forms:**
6. **Description:** The CSSRs are prepared by the Contractor to provide the Authority with progress data designed to report multiple aspects of contract performance and future planning activity. Example of CSSR Format has been provided as part of Annex G9.

7. **Use/Relationship:**
   7.1. The Authority will use the CSSRs to:
      7.1.1. Assess and evaluate contract performance and as the basis for contract performance meetings and reviews.
      7.1.2. Assess the impact of existing and potential problems encountered resulting in significant cost and schedule variances and as the basis for discussing potential mitigation actions.
      7.1.3. Provide accurate, timely status information to aid Authority view of Contractor performance and as the basis for summarisation of performance across the Authority.
      7.1.4. CSSRs directly relate to the requirements specified in the Project Controls Management Plan (PCMP) 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.

8. **Applicable Standards, Governance & Related Documentation:**
   8.1. Planning, Scheduling, Monitoring and Control (APM 2015) Guidelines unless otherwise stated in the Contract terms.

9. **Requirements:**
   9.1. Data provided within the CSSRs shall relate to the authorised contract work undertaken in support of this contract, demonstrating compliance to PC requirements.
   9.2. Data provided shall include both priced and unpriced effort.
   9.3. 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.

10. **Preparation Instructions:**
    10.1. 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 PCMS requirements of the Contract.

11. **Data Format & Delivery Instructions:**
    11.1. The data item shall comply with the general format, content and preparation instructions contained in this DID.
    11.2. CSSRs are to be delivered in both static and 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.
    11.3. Reports shall be delivered on a monthly basis.

ANNEX C5 – RISK AND OPPORTUNITY MANAGEMENT PLAN (ROMP) – DID-PC-005A

1. **Title:** RISK MANAGEMENT
2. **Number:** DID-PC-005A
3. **Version:** Draft
4. **Delivery Schedule:** TBC.
5. **Applicable Forms:**
6. **Description:** The Contractor shall maintain a Risk and Opportunity Management Plan (ROMP) that enables a formal risk process to be managed in conjunction with the Authority. The Contractor shall make it possible for the Authority to engage with the regular risk update process via regular risk reviews and formal risk reporting.
7. **Use/Relationship:**
   7.1. The Authority will use the risk management process to:
      7.1.1. Assess and evaluate potential events that might have either a positive or negative impact on the delivery of the baseline scope of work.
      7.1.2. Enable joint risk management effort between the Authority and the Contractor.
8. **Applicable Standards, Governance & Relevant Documentation**
   8.1. APM Project Risk Analysis and Management guide (PRAM).
   8.2. APM Interfacing Risk and Earned Value Management guide.
   8.3. APM Prioritising Project Risks guide.
9. **Requirements**
   9.1. The ROMP defines roles, responsibilities, methodology (process), tools and techniques specific to the project and how threats and opportunities are to be managed through life as part of the overall project management strategy.
   9.2. In the ROMP the contractor must take due cognisance of the scope of the project (performance, cost and time) to establish a mutually agreed risk appetite (agreed tolerances) that enables the contractor to develop their scoring criteria for cost time and performance.
   9.3. The process shall:
      9.3.1. Establish ownership for significant project risks.
      9.3.2. Reduce overall project risk exposure.
      9.3.3. Ensure all scope is considered to give a balanced view of risk.
      9.3.4. Deliver information in support of the overall project decision making and governance processes.
      9.3.5. Enable quantitative analysis to support forecasts of project cost and schedule out-turn.

   Formal Reports
   9.4. In support of the risk management process the following reports are required:
      9.4.1. Risk register. Full risk register for contracted scope, defining risk (case, event, consequence), owner, proximity, current and target impact (probability and cost/schedule/performance impact) and associated management responses. The register shall cover both risks (threats) and opportunities.
      9.4.2. Risk and opportunity change report. Standard Risk Report - Risk & Opportunities Change Report. Report of risks that have been escalated to a higher level for action/ information.
      9.4.3. Risk profile. Risk exposure profiled over the duration of the contract.

9.4.4. Risk / opportunity pre & post mitigation response. Waterfall charts highlighting reduction in risk as a result of mitigation actions.

9.4.5. Risk & Opportunities Process Health metrics report. Information reported for each month and includes Total number of risks, risks added, closed, updated, review planned, review overdue, scoring updated - increased - decreased, risk escalated / de-escalated, plan added - updated, responses added, response completed before due date, response completed after due date, response completed before trigger date, response completed after trigger date, responses updated.

10. **Preparation Instructions:**

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

11. **Data Format & Delivery Instructions**

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

11.2. Documents are to be delivered in both static and electronic format to the Authority and in accordance with the CDRL timescales.

11.3. Reports shall be delivered on a monthly basis.

ANNEX C6 – BASELINE CHANGE CONTROL – DID-PC-006A

1. **Title:** BASELINE CHANGE CONTROL
2. **Number:** DID-PC-006A
3. **Version:** Draft
4. **Delivery Schedule:** TBC.
5. **Applicable Forms:**
6. **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).

7. **Use/Relationship:**

7.1. The Authority will use the change management process to:

7.1.1. Assess and approve potential changes to the baseline where they break defined thresholds as agreed with the authority.

7.1.2. Assess and understand potential impact to the funding profile and key dates as agreed with the MOD Front Line Command via the CASP;

7.1.3. Understand the status of changes and as such the basis of the performance measurement baseline.

7.1.4. Enable the Authority to obtain visibility of specific change request documentation where it is requested.

8. **Applicable Standards, Governance & Relevant Documentation**

8.1. DEFCON 620: Contract change control procedure.

8.2. DEFCON 503: Formal amendments to contract.

8.3. APM Planning, Scheduling, Monitoring and Control (PSMC) guide.

9. **Requirements**

9.1. The change control process shall:

9.1.1. Document, track and communicate to stakeholders' changes to the Performance Measurement Baseline.

9.1.2. Ensure that the full impact of any change is articulated, including scope, schedule and budget.

9.1.3. Ensure that all changes are assessed and endorsed by the right group of stakeholders.

9.1.4. Reconcile current budgets to prior budgets in terms of changes to the authorised work in the detail needed by management for effective control.

9.1.5. 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.

9.1.6. Allow a forward view of potential changes.

9.1.7. Prevent revisions to the budget except for authorised changes.

9.1.8. Be in accordance with best practice as defined by the standards referenced above (i.e., not be used to cover poor performance).

9.2. The Contractor's Change Control Process is required to accept and control:

9.2.1. 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.

9.2.2. Internally raised changes that impact the contract – will always require formal approval from the Authority (DEFCON 620). Changes that impact the contract include any that has an impact on contractually agreed scope, milestones, or the funding split across financial years.

9.2.3. Externally directed changes – raised by the Authority and formally submitted to the Contractor in accordance with DEFCON 503. This DEFCON also requires that the Contractor submit their response back to the Authority in a set format and timescales.

9.3. 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.

10. Formal Reports

10.1. In support of the change management process the following reports are required:

10.1.1. 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.

10.1.2. Contingency drawdown reports. Indicates contractor forecast contingency burn rate (i.e., Risk Drawdown, uncertainty or associated BCR) for both cost and schedule

11. Preparation Instructions:

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

11.2. The agreed change thresholds shall be defined within the PCMP.

12. Data Format & Delivery Instructions

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

12.2. Documents are to be delivered in both static and electronic format (MS Excel, XER 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.

ANNEX C7 – COST COLLECTION REPORTS – DID-PC-007A

1. **Title:** COST COLLECTION REPORTS
2. **Number:** DID-PC-007A
3. **Version:** Draft
4. **Delivery Schedule:** TBC
5. **Applicable Forms:**
6. **Description:** The majority of cost information will be provided via the PCMS as part of the normal reporting against the system (see DID-PC-001A and DID-PC-004A). The intent of the cost collection reports is to supplement this information where there is an additional business need for the Authority.

7. **Use/Relationship:**
   7.1. The Authority will use the cost data provided to support its financial reporting obligations.

8. **Applicable Standards, Governance & Relevant Documentation**
   8.1. DEFCON 647 - Financial Management Information

9. **Requirements**
   9.1. In support of the financial management process the following reports are required:
      9.1.1. Transaction Report. List of the transactions (data) to support an invoice.
      9.1.2. In-Year Cash Forecast. The Contractor shall provide a cash forecast summary for both in-year and 10-year periods.
      9.1.3. Fee Projection. Where the fee is variable, a report indicating the value of the fee still available to be claimed.
      9.1.4. Cost Report. A report detailing costs that have been incurred in month to include those not yet invoiced. The report will be required at a frequency defined by the Authority.

10. **Preparation Instructions:**
    10.1. NA

11. **Data Format & Delivery Instructions**
    11.1. Documents are to be delivered in both static and electronic format to the Authority and in accordance with the CDRL timescales.
    11.2. Reports shall be delivered on a frequency as agreed with the Authority.

ANNEX D – DID EVALUATION PRO-FORMA

Data Item Description Evaluation Pro-forma

Any agreed tailoring to the requirements in the following templates must be incorporated in the specific Contract terms and conditions. The DID's themselves should not be altered.

The content requirements within the data items 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 PCMS requirements within the Contract.

CDRL Deliverable Title	
DID No	
Version	
Date of Delivery	
Review Deadline	[XX days post-delivery*]
Reviewed by:	[List names of those who have reviewed this document*]
Accepted/Rejected Decision	[Please detail if the deliverable has been accepted or rejected based on whether the document conforms to the requirements within the relevant DID.*]

Section/ Para No/ Reference	**Comments/Observations Please note any specific non-conformances against the relevant DID**	**Reviewer**

* Content in grey should be considered as a prompt

ANNEX E – CONTRACT DATA REQUIREMENT LIST (CDRL)

The CDRL will incorporate a full list of contract deliverables covering all aspects of Project Controls; below are those aspects that relate to EVM only.

Ref No	Title	DID Ref if applicable	Delivery Schedule	Decision Required	Acceptance Criteria	Intended Use
CDRL-PC-001A	Project Controls Management Plan (PCMP)	DID-PC-001A	Initial– as part of Tender submission Final Delivery – Contract Award +30 days Updates – 30 days prior to implementation significant changes to Contractor PCMS	Review Accept/Reject Accept/Reject Accept/Reject	Document Compliance with DID-PC-001A	Demonstrate compliance with Nominated PC Standard and the contractor's proposed means of meeting the Authority's PC management and data requirements.
CDRL-PC-002A	Contract Work Breakdown Structure (CWBS)	DID-PC-002A	Initial– as part of Tender submission Final– Contract Award + 30 days	Review Accept/Reject	Compliance with DID-PC-002A and conformance with Authority WBS	Ensure intended scope is captured in the contractor's Baseline.
CDRL-PC-003A	Contractor Master Schedule (CMS)	DID-PC-003A	Initial delivery – Tender submission – In accordance with the tender submission deadline Post Contract Award + 60 Days. Updates to be provided on a monthly basis (or alternative timescale	Review Accept/Reject	Compliance in accordance with DID-PC-003A. Delivery does not constitute Authority Acceptance of the initial delivery or the baseline	Assess progress achieved and predicted outcome

Ref No	Title	DID Ref if applicable	Delivery Schedule	Decision Required	Acceptance Criteria	Intended Use
			to be agreed by the Delivery Team)			
CDRL -PC-004A	Contract and Schedule Status Report (CSSR)	DID-PC-004A	Initial delivery – Contract Award + 60 days Subsequent Delivery – end of calendar month +3 days	Accept/Reject	Compliance in accordance with DID-PC-004A	Assess performance and progress achieved
CDRL -PC-005A	Risk and Opportunity Management Plan (ROMP)	DID-PC-005A	Initial delivery – Contract Award + 60 days Subsequent Delivery – end of calendar month +21 days	Accept/Reject	Compliance in accordance with DID-PC-005A	Assess risk position.
CDRL -PC-006A	Change Control	DID-PC-006A	Initial delivery – Contract Award + 60 days Subsequent Delivery – end of calendar month +3 days	Accept/Reject	Compliance in accordance with DID-PC-006A	Assess pending changes.
CDRL -PC-007A	Cost Collection	DID-PC-007A	Initial delivery – Contract Award + 60 days Subsequent Delivery – end of calendar month +3 days	Accept/Reject	Compliance in accordance with DID-PC-007A	Assess cost incurred.

ANNEX G9: COST AND SCHEDULE STATUS REPORT FOR CONTRACTORS

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

	This Period	Last Period	This Period
Overall		G	A

	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

	This Period					This Year					Last Period	This Period
	WBS No.	Actuals	Forecast	Var. (£)	Var. (%)	Actuals	Forecast	Budgeted	Var (£)	Var (%)		
Budget											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
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	