

## DRAFT

## PART 3 – DRAFT STATEMENT OF WORK

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***Note to drafters: Within this SOW template, italics are used to provide guidance to the persons tailoring the template for use on a particular project. This guidance is not expected to be retained in the tailored SOW.***

***Standards and DIDs contain mandatory process and product requirements which are invoked by the SOW when the Standard or DID is called up. The full impact of these additional requirements needs to be considered. If a Military or Commercial Engineering Standard or a DID is called up in the SOW there is no point in repeating the requirements of the Standard or the DID in the SOW.***

***Both the products to be delivered, and the processes used to develop and support those products need to be agreed at contract negotiation. The compliance of both products and processes will be evaluated throughout the Contract.***

## 1. SCOPE

***Note to drafters: This clause should include a brief statement of what the SOW covers. The scope paragraph defines the breadth and limitations of the work to be done. Background information should be limited to only that information needed to acquaint the proposer with the basic acquisition requirement. As this clause is not intended to define the formal contractual scope (but is only the scope of the SOW itself), the items listed below should NOT be included in the "Scope" clause.***

- a. directions to the Contractor to perform work tasks.***
- b. specification of data requirements.***
- c. description of deliverable products.***

### 1.1 Purpose (Core)

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- 1.1.1** The purpose of this SOW is to communicate, to the Contractor, Commonwealth requirements and standards for work to be carried out under the Contract and to allocate work responsibilities between the Commonwealth and the Contractor.

### 1.2 Background (Optional)

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***Note to drafters: Identify the background to the Contract that may be useful to the Contractor.***

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## 2. GENERAL REQUIREMENTS

## 2.1 Scope Of Work (Core)

***Note to drafters: This clause should define the Contractor's overall scope of work under the Contract. This should cover such activities as design, develop, install, integrate, test, verify, model, simulate, conduct reviews, etc.***

***This clause should call up the relevant system specification(s) in the appropriate context. Specifications at Annex A and the OCD at Annex B should be referenced. The clause will need to be amended, depending upon the requirements for different types of Mission Systems.***

***This clause should address the major product and service deliverables of the program, ie it does not include the Contract Data Requirements.***

***Further guidance on possible additional clauses is provided in the ASDEFCON (Strategic Materiel) SOW Handbook.***

- 2.1.1** The Contractor shall perform all activities necessary to manage, design, develop, construct, integrate, test, deliver, install and commission the Supplies to the Commonwealth in accordance with the Contract.
- 2.1.2** The Contractor shall allocate the requirements for the Materiel System defined in the FPS at Annex A to the SOW into a SS for each Mission System and a SSSPEC for the Support System.
- 2.1.3** The Contractor shall:
- a. design and develop the required Mission System(s);
  - b. produce and deliver the required number of Mission Systems, as set out in the Price and Payment Schedule at Attachment B; and
  - c. Verify and Validate that each Mission System meets the requirements of its SS when the Mission System is operated in accordance with the OCD and is supported in accordance with the implemented Support System.
- 2.1.4** The Contractor shall:
- a. design the required Support System;
  - b. produce and deliver the required number of Support System elements, as required under the Contract, to enable the SSSPEC to be satisfied; and
  - c. Verify and Validate that the implemented Support System meets the requirements of the SSSPEC.

***Note to drafters: Modify the following clause to accord with the particular requirements of the Contract and ensure that the Glossary, Price and Payment Schedule and Delivery Schedule are also updated to be consistent.***

- 2.1.5** The Contractor shall coordinate its activities for the Support System with its activities for the Mission System to ensure that the Support System elements are available, when required, to enable the Milestone Dates to be achieved for the following Milestones:
- a. Acceptance of a Mission System;
  - b. Initial Operational Capability (IOC);
  - c. Operational Capability – State 2 (OC2);
  - d. [...DRAFTER TO INSERT...]; and
  - e. Final Operational Capability (FOC).

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**2.2 Delivery of Supplies (Core)**

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**Note to drafters: The following clause is not intended to include exhaustive marking and consignment documentation requirements and should only be further tailored to specify additional requirements that are required to comply with the applicable regulatory framework.**

- 2.2.1** The Contractor shall ensure that all Supplies that need to be delivered to the Commonwealth are packaged and marked for delivery such that the delivered items comply with appropriate package marking, consignment documentation and documentation language standards as may be necessary to meet the requirements of the Contract.
- 2.2.2** The Contractor acknowledges that DEF(AUST) 1000C Part 5 provides guidance on package marking standards that are acceptable to the Commonwealth.
- 2.2.3** The Contractor shall ensure that secure and legible documentation is affixed to the outside of each package for delivery to the Commonwealth, with duplicate copies inside at the top of each package, which includes the following information:
- a. the relevant major capital project identifier (project name and number);
  - b. the relevant Commonwealth contract or purchase order number;
  - c. the item name;
  - d. the item quantity;
  - e. the name of the supply source;
  - f. the consignment delivery point; and
  - g. the date of dispatch.
- 2.2.4** The Contractor shall ensure that all items delivered to the Commonwealth are accompanied by such certification of conformance from the OEM as may be necessary to meet regulatory requirements.

**2.3 Data Management System (DMS) (Optional)**

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**2.3.1 DMS Objectives**

- 2.3.1.1** The Contractor acknowledges that the objectives associated with implementing a Data Management System (DMS) are to achieve:
- a. reduced paperwork through the electronic exchange of data and the use of a virtual work environment;
  - b. reduced delivery times for data and shorter cycle times for processing the data; and
  - c. reduced risk through enhanced access to data.
- 2.3.1.2** The Contractor further acknowledges that the reliability, responsiveness and ease-of-use of the DMS and the timeliness for uploading data onto the DMS are critical to the operational effectiveness of the Commonwealth project office.

**2.3.2 DMS General Requirements**

**Note: MIL-STD-974, 'Contractor Integrated Technical Information Service (CITIS)' may provide additional background information on implementing a DMS.**

**Note to drafters: Amend the following list of data to suit the specific requirements of the project. By way of example, the Contractor's Quality Management System (QMS) procedures could be a useful inclusion on the DMS.**

- 2.3.2.1** The Contractor shall develop, implement and maintain a DMS to provide on line access to all data ("DMS Contract Data") identified in:
- a. the CDRL for delivery via the DMS; and
  - b. if applicable, the Data Accession List (DAL).

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**Note to drafters: The personnel numbers identified in the following clause are likely to be conditional upon the particular implementation approach for the DMS (eg, web page); however, the identification of these personnel numbers bound the scope of the Contractor's obligations under clause 2.3.3, particularly with respect to the provision of hardware and software. Note that the personnel numbers are intended to include all of the access requirements envisaged for the duration of the Contract. Drafters should amend the following clause to suit the requirements of the particular project.**

- 2.3.2.2** The Contractor shall provide the following personnel ("Commonwealth Authorised Users") with access to the DMS:
- a. the Commonwealth Representative;
  - b. three additional Commonwealth project office staff, other than Resident Personnel; and
  - c. all Resident Personnel.

**Note to drafters: If the Contract involves Resident Personnel (RP), access to the DMS needs to be included in the terms of reference for the RP at Attachment L to the Contract.**

- 2.3.2.3** The Contractor may provide Subcontractors with access to the DMS.

- 2.3.2.4** The Contractor shall implement a DMS that meets the objectives in clause 2.3.1. In particular, the Contractor shall implement a DMS that:
- a. provides a controlled repository for all DMS Contract Data;
  - b. caters for both classified and unclassified data;
  - c. provides on-line access to the DMS Contract Data in a timely manner for all Commonwealth Authorised Users;
  - d. enables all Commonwealth Authorised Users to access both the DMS and the DMS Contract Data at the same time;
  - e. provides access controls to limit access to DMS Contract Data that may be sensitive between certain parties (eg, subcontractor access to prime contractor performance data);
  - f. provides controls to prevent the Commonwealth Authorised Users from replacing or overwriting the Contractor's delivered versions of DMS Contract Data;
  - g. where reasonably practicable, allows the DMS Contract Data to be downloaded by a Commonwealth Authorised User for further manipulation (including printing) in the native document format;
  - h. provides access to both current and historical DMS Contract Data, including earlier versions of documents and any comments provided by the Commonwealth Representative on each of the versions;
  - i. provides an index of DMS Contract Data, which is rebuilt at least weekly, with the index to provide the CDRL Line Number or other reference number (as applicable), title, issue, file name (as applicable), status (eg, working, draft submission, final submission, Approved, and Accepted), date of most recent change, and location on the DMS;
  - j. provides access to DMS Contract Data that may not yet be in the index, but is known to the requesting party;
  - k. provides the ability for the Commonwealth Authorised Users to search the DMS Contract Data;
  - l. if DMS Contract Data is required to be delivered to the Commonwealth, provides the Commonwealth Authorised Users with the ability to electronically:
    - (i) acknowledge delivery of the DMS Contract Data, and
    - (ii) comment on the DMS Contract Data;

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- m. provides the ability to capture, store, provide access to, and maintain an audit trail of comments provided by the Commonwealth Representative on DMS Contract Data; and
- n. allows the Commonwealth Representative to administer access rights for the Commonwealth Authorised Users.

**2.3.3 DMS Implementation, Operation and Management**

- 2.3.3.1** The Contractor shall introduce the DMS into operational use in accordance with this clause 2.3 no later than 60 days after the Effective Date.

**Note to drafters: Amend the following clause to identify the required delivery locations.**

- 2.3.3.2** During the interim period between the Effective Date and when the DMS is fully available for operational use by the Commonwealth Authorised Users, the Contractor shall provide all data items, which are identified in the CDRL for delivery via the DMS, in soft copy to the Commonwealth Representative [...and the Resident Personnel...].
- 2.3.3.3** The Contractor shall develop, deliver, and update a Concept of Operation Document for the DMS in accordance with CDRL Line No MGT 1200.
- 2.3.3.4** The Contractor shall liaise with the Commonwealth Representative to determine the hardware and software required by the Commonwealth Authorised Users to access the DMS and, subject to clause 2.3.3.5, shall provide all the required hardware and software.
- 2.3.3.5** The Contractor is not required to provide:
- a. any computing hardware for the Commonwealth Authorised Users to access the DMS, except as otherwise defined in the Contract (eg, for Resident Personnel); or
  - b. any cryptographic equipment (eg, to enable the electronic exchange of classified data).
- 2.3.3.6** If the electronic data formats of the DMS Contract Data differ from those formats specified in the Contract, the Contractor shall provide all additional software programs and all necessary licences to enable the Commonwealth Authorised Users to access and manipulate the DMS Contract Data.
- 2.3.3.7** Following introduction of the DMS into operational use, the Contractor shall ensure that the DMS remains fully operational for the duration of the Contract.
- 2.3.3.8** In addition to the DMS requirements for any Resident Personnel, the Contractor shall ensure that access to the DMS is provided to the Commonwealth Representative at the Contractor's and Approved Subcontractors' premises for the duration of any attendance by the Commonwealth Representative at these premises.
- 2.3.3.9** The Contractor shall protect the DMS Contract Data against unauthorised access.
- 2.3.3.10** The Contractor shall ensure that backup of the DMS Contract Data occurs sufficiently frequently to ensure that no more than a day's data is lost due to a system malfunction (where system includes the operators and maintainers, and malfunction includes such aspects as virus attack).
- 2.3.3.11** The Contractor shall ensure that backup systems and processes are in place should the DMS be inoperable for any longer than two (2) Working Days, and shall implement these backup systems and processes within a further one (1) Working Day should this event occur.
- 2.3.4 DMS Training**
- 2.3.4.1** The Contractor shall provide all training and associated training materials, in accordance with the requirements of this clause 2.3.4, necessary to enable the Commonwealth Authorised Users to:
- a. competently utilise the DMS; and
  - b. access and manipulate the DMS Contract Data, where this data involves electronic data formats that are not identified elsewhere in the Contract.

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**Note to drafters: Amend the following clause to identify the number of staff that need to be trained and be provided with training materials.**

**2.3.4.2** The Contractor shall provide the DMS training to the Commonwealth Representative and eight additional Commonwealth project office staff nominated by the Commonwealth Representative.

**2.3.4.3** The Contractor shall complete the DMS training within 7 days of making the DMS available for operational use to the Commonwealth Authorised Users.

**Note to drafters: Amend the following clause to suit the requirements of the project.**

**2.3.4.4** The Contractor shall provide training to the Commonwealth Authorised Users at the following locations:

- a. in Canberra, for the Canberra based Commonwealth project office staff; and
- b. at the Contractor's premises, for the Resident Personnel.

**2.3.4.5** The Contractor is not required to provide training to Commonwealth Authorised Users, other than the initial training identified in this clause 2.3.4.

## **2.4 Deliverable Data Items (Core)**

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### **2.4.1 Development and Submission of Data Items**

**Note to drafters: Amend the following clause, depending upon whether or not a DMS requirement has been included in the SOW at clause 2.3.**

**2.4.1.1** The Contractor shall produce, update and deliver all data items to the Commonwealth in accordance with the Contract Data Requirements List (CDRL) at Annex C of this SOW [..., clause 2.3 ...] and this clause 2.4.

### **2.4.2 Review, Approval or Non-Approval, and Acceptance of Data Items**

**2.4.2.1** The Commonwealth Representative will:

- a. Review;
- b. Approve or not Approve;
- c. Accept or reject; or
- d. consider a CCP for Approval for,

each data item in accordance with the CDRL and this clause 2.4.

### **2.4.3 Data Item Review**

**2.4.3.1** When the CDRL provides that a data item is to be submitted by the Contractor to the Commonwealth Representative for Review, the Commonwealth Representative may provide the Contractor with such comment, information or advice as it considers appropriate to provide. Any comment, information or advice provided:

- a. is intended to be of assistance to the Contractor and shall not be construed as a direction from the Commonwealth Representative to the Contractor;
- b. shall not be taken as Approval or Acceptance of Supplies or work that do not conform to the Contract;
- c. shall not waive any provisions of, or release the Contractor from its obligations under the Contract; and
- d. shall be addressed by the Contractor prior to the Mandated System Review at which the data item is applicable or as part of the next update cycle for that data item, whichever is the earlier.

### **2.4.4 Data Item Approval**

**2.4.4.1** If the CDRL requires a data item to be submitted by the Contractor to the Commonwealth Representative for Approval, then the Commonwealth Representative will, within the

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action period specified in the CDRL, notify the Contractor in writing that the data item is either Approved or not Approved.

- 2.4.4.2** If the Commonwealth Representative determines that any data item subject to Approval submitted by the Contractor is not in accordance with the requirements of this Contract, the Commonwealth Representative will notify the Contractor accordingly in writing. In such event, the data item shall not be considered to have been submitted and the data item shall be rectified at no additional cost to the Commonwealth.
- 2.4.4.3** If, under clause 2.4.4.1, the Commonwealth Representative provides the Contractor with notice of non-Approval of a data item, then the Commonwealth Representative shall notify the Contractor in writing of the reasons for non-Approval and may provide details of any corrective action to be taken by the Contractor before the data item will be reconsidered for Approval.
- 2.4.4.4** The Commonwealth Representative's reasons for non-Approval of a data item shall be limited to the context of any or all of the following criteria:
- a. in the judgement of the Commonwealth Representative, the data item submitted by the Contractor is not clearly understandable;
  - b. in the judgement of the Commonwealth Representative, the data item submitted by the Contractor does not provide adequate detail;
  - c. in the judgement of the Commonwealth Representative, the data item submitted by the Contractor is inconsistent with the Contract, including related data items; and
  - d. in the judgement of the Commonwealth Representative, the data item submitted by the Contractor will not meet the objective of the data item.
- 2.4.4.5** The Commonwealth Representative may not withhold Approval of a data item for minor omissions or defects in the data item which are identified in writing to the Contractor. In addition to the criteria for non-Approval detailed in clause 2.4.4.4, any subsequent Approval of an update to a data item that was previously Approved with minor omissions or defects shall be subject to the Contractor addressing those identified omissions or defects in the proposed update to the satisfaction of the Commonwealth Representative.
- 2.4.4.6** When the Commonwealth Representative provides the Contractor with notice of non-Approval in accordance with clause 2.4.4.1, the Contractor shall, within a period equal to the Commonwealth action period defined in the CDRL for the relevant data item (or within such further period as the Commonwealth Representative may allow), deliver the rectified data item for Approval.
- 2.4.4.7** If, within the time specified under clause 2.4.4.6, the Contractor submits the rectified data item as conforming to the requirements of the Contract, the Commonwealth Representative shall be entitled to exercise the rights provided by this clause 2.4 as if the data item had been submitted by the Contractor for the first time.
- 2.4.4.8** If, under clause 2.4.4.1, the Commonwealth Representative provides the Contractor with notice of Approval, then the data item shall have effect in accordance with that Approval and the task comprising the development of that data item shall be deemed to be accomplished.
- 2.4.4.9** Subject to clause 2.4.8, if the Commonwealth Representative fails to furnish to the Contractor notice, in writing, of Approval or non-Approval, under clause 2.4.4.1, within the period specified in the CDRL, then any delay shall be considered to be delay caused by the Commonwealth and shall, where appropriate, entitle the Contractor to claim a postponement of the date for delivery of Supplies under clause 6.2 of the conditions of contract.

**Note to drafters: Consider the actual period required to review each data item before inserting periods in the CDRL. Factors to be considered include: the size and complexity of the document; whether a preliminary or draft version would already have been reviewed; the need to involve external agencies or approval authorities; and conflicting requirements eg, the need to review more than one data item concurrently.**

- 2.4.4.10** Approval of a data item by the Commonwealth shall:

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- a. be construed as no more than an indication that the data item appears to the Commonwealth Representative to be capable of being used as a basis for further work;
- b. not be construed as limiting the Contractor's responsibility to provide Supplies in accordance with the requirements of the Contract; and
- c. not be construed as a waiver of any right under this Contract or any cause of action arising out of any act or omission of the Contractor or its servants, agents or employees.

**2.4.5 Data Item Acceptance**

**2.4.5.1** When the SOW or the CDRL provides that a data item is to be submitted for Acceptance, the Contractor shall deliver the data item for Acceptance in accordance with clause 6.7 of the conditions of contract.

**2.4.6 Data Items Delivered Under Contract Change Proposals**

**2.4.6.1** When the SOW or the CDRL provides that a data item is to be submitted via a CCP, the Contractor shall deliver the data item in accordance with clause 10.1 of the conditions of contract.

**2.4.7 Data Item Updates**

**2.4.7.1** The Contractor shall maintain the accuracy, completeness and currency of all data items delivered under the Contract in accordance with the CDRL.

**2.4.7.2** If, under clause 2.4.7.1, changes to any data item become necessary, the Contractor shall submit a proposed amendment to the data item to the Commonwealth.

**2.4.7.3** A proposed amendment to any data item shall be subject to the same Review and Approval processes specified in this clause 2.4 to the extent of the effect of the proposed amendment.

**2.4.7.4** Until a proposed amendment to an Approved data item is Approved, the original data item shall remain in effect.

**2.4.7.5** The Contractor shall be liable for all costs associated with data item maintenance, except in those circumstances when the need for maintenance is generated by some action for which the Commonwealth has agreed, in writing, that it accepts responsibility.

**2.4.8 Actioning of Data Items**

**2.4.8.1** The Contractor acknowledges and agrees that:

- a. the timeframes for the delivery of the data items by the Contractor and the actioning of those data items by the Commonwealth in the CDRL have been determined in light of the numbers of personnel within the Commonwealth team available to action the data items delivered by the Contractor;
- b. the Commonwealth's obligations to action the data items within the timeframes described in the CDRL is subject to the Contractor delivering the data items in accordance with the CDRL; and
- c. any delay of the Contractor in meeting its obligations under the Contract may result in the Commonwealth not being able to action the data items within the timeframes specified in the CDRL.

**2.4.8.2** If at any time the Contractor's delivery of one or more data items changes because of a delay in the Contractor meeting its obligations under the Contract, the Commonwealth shall:

- a. use reasonable endeavours to action the data items within the timeframes described in the CDRL; and
- b. is only required to action data items delivered by the Contractor at the time Commonwealth resources become available to action the data items.

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**2.4.8.3** The Commonwealth's inability to action the data items within the timeframes described in the CDRL in the circumstances described in clause 2.4.8.2 is not an event beyond the reasonable control of the Contractor for the purposes of clause 6.2.4b of the conditions of contract.

## **2.5 Draft Data Items Included as Contract Annexes (Optional)**

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**2.5.1** The draft data items to which the warranty in clause 9.7 of the conditions of contract applies are:

- a. the draft [...INSERT SPECIFIC DATE ITEM NAME...] (set out in Annex [...INSERT SPECIFIC ANNEX NAME...]);
- b. the draft [...INSERT SPECIFIC DATA ITEM NAME...] (set out in Annex [...INSERT SPECIFIC ANNEX NAME...]).

**Note to drafters: Only those draft data items still subject to Approval should be included under these warranty terms. IN PARTICULAR, DO NOT INCLUDE THE IP PLAN OR THE AIC PLAN IN THIS LIST. DO NOT INCLUDE PLANS THAT HAVE ALREADY BEEN APPROVED PRIOR TO THE EFFECTIVE DATE. To ensure that all prior Approvals are captured on Contract at the Effective Date, data items that have already been Approved during a pre-contract or formal risk reduction phase should instead be formally annotated in the CDRL with Delivery required at 'Effective Date' and Commonwealth Action and Commonwealth Action Period specified as 'Approval' 'by the Effective Date'.**

**2.5.2** With respect to those draft data items referred to in clause 2.5.1, further versions of these data items delivered in accordance with clause 2.4 shall:

- a. comply in all respects with the requirements of the Contract; and
- b. not detract from the draft data items (except with the Approval of the Commonwealth Representative) but add further relevant detail.

**2.5.3** Following Approval in accordance with clause 2.4.4 of a further version of a data item referred to in clause 2.5.1, the relevant draft data item shall be considered superseded and shall be withdrawn as an Annex to Attachment K which will be annotated as "Not Used". This change will be effected by a CCP issued by the Commonwealth.

## **2.6 Ozone Depleting Substances and Hazardous Substances (Core)**

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**2.6.1** The Contractor shall not provide Supplies containing or emitting an Ozone Depleting Substance or a Hazardous Substance unless:

- a. the substance is listed in Annex E ("authorised substance"); and
- b. the authorised substance is included in the Supplies only in accordance with the conditions specified in Annex E in respect of the authorised substance.

**2.6.2** The Contractor shall ensure that:

- a. full details of the authorised substances incorporated into or emitted by the Supplies, including location and protective measures adopted, are provided to the Commonwealth in the format of a Material Safety Data Sheet in accordance with CDRL Line Number MGT-1100;
- b. all documentation supporting the Supplies clearly identifies the nature of the hazard; and
- c. all Supplies containing or emitting the authorised substance are labelled to clearly identify the nature of the substance and its associated hazards.

**2.6.3** The Commonwealth at any time may notify the Contractor of any Ozone Depleting Substance or a Hazardous Substance which is not listed in Annex E, but which has been discovered as present in the Supplies. The Contractor may also discover an Ozone Depleting Substance or a Hazardous Substance which is not listed in Annex E, but which is present in the Supplies, and in such circumstances, the Contractor shall notify the Commonwealth Representative of that discovery as soon as practicable thereafter and, in any event, within seven (7) days.

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- 2.6.4** Where either party notifies the other party under clause 2.6.3, the Contractor shall:
- a. not use the Ozone Depleting Substance or Hazardous Substance discovered, except where otherwise Approved by the Commonwealth Representative;
  - b. within 14 days of either being notified or discovering the substance, provide a Materiel Safety Data Sheet in accordance with CDRL Line Number MGT-1100;
  - c. within 30 days of either being notified or discovering the substance, provide a CCP in accordance with clause 10.1 of the conditions of contract to update Annex E to include the newly authorised substance; and
  - d. where the Commonwealth Representative does not Approve the use of an Ozone Depleting Substance or a Hazardous Substance, take whatever measures are considered necessary or prudent by the Commonwealth Representative to remove the substance from all applicable Supplies and to avoid or mitigate the impact of that substance.
- 2.6.5** The Contractor shall, no later than seven days after discovery, advise the Commonwealth that the Contractor is aware of a non-Hazardous Substance which could be substituted for the authorised substance content without significant detriment to the performance of the Supplies.
- 2.6.6** To the extent consistent with their function, the Supplies shall not emit fumes, liquids, solids, heat, noise, electromagnetic or other radiation, which could be detrimental to personnel, the environment or the operation of other equipment.
- 2.6.7** The Contractor shall be responsible for all materials used by its Subcontractors.
- 2.7** **Commonwealth-Directed Trade Studies (Optional)**
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***Note to drafters: The following clause is a hook for the project office to identify specific trade studies that the Contractor will conduct to assess the feasibility of Commonwealth-directed investigations. Each of these trade studies should be accompanied by its own SOW (including tasks to be undertaken, criteria for evaluation, and reports to be delivered) and, where appropriate, a specification in a discrete annex to this SOW. If there are no specific trade studies envisaged, the following clause should be deleted.***

- 2.7.1** The Contractor shall conduct, in accordance with the Approved System Engineering Management Plan (SEMP) or the Approved Integrated Support Plan (ISP) (as applicable), the Commonwealth-directed trade studies identified at Annex F to this SOW.

**DRAFT****3. PROJECT MANAGEMENT****3.1 Contractor's Project Management Organisation (Core)**

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**3.1.1** The Contractor shall establish and maintain within its company structure a discrete management organisation (referred to as the 'Contractor's Project Management Organisation') with suitable capability to perform the Contract.

**3.2 Project Planning (Core)**

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**3.2.1 Contract Start Up Plan**

**3.2.1.1** The Contractor shall develop, deliver and update a Contract Start Up Plan in accordance with CDRL Line Number MGT-600.

**3.2.1.2** The Contractor shall conduct Contract start-up activities in accordance with the Approved Contract Start Up Plan.

**3.2.2 Project Management Plan**

**3.2.2.1** The Contractor shall develop, deliver and update a Project Management Plan (PMP) in accordance with CDRL Line Number MGT-100.

**3.2.2.2** The Contractor shall manage the project to which the Contract relates in accordance with the Approved PMP.

**3.2.3 Contract Master Schedule (CMS)**

**3.2.3.1** The Contractor shall develop, deliver and update a Contract Master Schedule (CMS) in accordance with CDRL Line Number MGT-110.

**3.2.3.2** The Contractor shall use the Approved CMS as the primary schedule for managing the Contract.

**Note to drafters:** *In the following clause, OPP has been specified as the Commonwealth's preferred scheduling software package. However, if the Contractor proposes an alternative package in its tender response, the project team should assess this alternative and discuss the issue with the preferred tenderer during contract negotiations. Depending upon the outcomes of those discussions, the following clause may need to be amended to accord with the agreed outcomes.*

**3.2.3.3** The Contractor shall use the scheduling software package, Open Plan Professional (OPP) Version [...INSERT VERSION...] (or an alternative Approved by the Commonwealth Representative) to develop the CMS.

**3.2.3.4** If the Contractor produces the CMS using a software package other than the package specified in clause 3.2.3.3, the Contractor shall provide all necessary programs, licenses, and training to enable the Commonwealth Representative to efficiently access and manipulate the CMS as required.

**3.2.3.5** The Contractor may amend the Approved CMS, without first obtaining the Commonwealth's Approval under clause 2.4.4, as long as:

- a. payments under the Contract are not affected;
- b. the scheduled dates for Contract Milestones are not affected; and
- c. the ability of the Commonwealth to meet its obligations under the Contract is not affected.

**3.2.3.6** Commonwealth Approval of an amendment to the Approved CMS under clause 3.2.3.5 shall be obtained when the next update to the CMS is required, as specified in the CDRL.

**3.2.3.7** Commonwealth Approval of an amendment to the Approved CMS under clause 3.2.3.5 shall not affect either party's responsibilities or obligations under Earned Value Management (EVMS) under clause 3.2.5.

**3.2.3.8** Following establishment of the Performance Measurement Baseline (PMB), the Contractor shall not reschedule the dates for Contract Milestones in any subsequent

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issue of the CMS unless a CCP has been Approved to establish a new baseline schedule within the Contractor's EVMS.

**3.2.4 Contract Work Breakdown Structure**

**3.2.4.1** The Contractor shall develop, deliver and update a Contract Work Breakdown Structure (CWBS) in accordance with CDRL Line Number MGT-120.

**3.2.4.2** The Contractor shall manage the Contract in accordance with the Approved CWBS.

**3.2.4.3** The Contractor may amend the Approved CWBS, without first obtaining the Commonwealth's Approval under clause 2.4.4, as long as:

- a. all elements affected by the amendment are below the reporting level;
- b. the amendments are consistent with the Approved CWBS; and
- c. the Commonwealth is notified within 60 days of the changes being made.

**3.2.5 Earned Value Management System****3.2.5.1 System Implementation**

**Note to drafters:** *The requirement for an Earned Value Management System is mandatory where the value of a Contract exceeds the \$A20m threshold. Exceptions from this requirement for Contracts that exceed the \$A20m threshold, but are considered low risk, may be granted from Division Heads, with advice from the DMO Standardisation Office. Consideration should also be given to the requirement for an EVMS for high risk contracts below the \$A20m threshold. Further guidance can be found in section 3.4 of the DPPM and from the DMO Standardisation Office.*

**3.2.5.1.1** The Contractor shall develop, deliver and update an Earned Value Management Plan (EVMP) in accordance with CDRL Line Number MGT-310.

**3.2.5.1.2** The Contractor shall conduct Earned Value Management (EVM) in accordance with the Approved EVMP.

**3.2.5.1.3** The Contractor shall, within a period of [...INSERT PERIOD (e.g. six-nine months)...] after the Effective Date, have an established EVMS that complies with the requirements as defined in AS 4817, the Defence Supplement to AS 4817 and the Approved EVMP.

**3.2.5.1.4** The Contractor shall, within a period of [...INSERT PERIOD (e.g. three-six months)...] after the Effective Date, hold a Mandated System Review, the Integrated Baseline Review (IBR).

**3.2.5.1.5** The Contractor acknowledges that the objective of the IBR is to enable an assessment of and subsequent Approval of the Performance Measurement Baseline (PMB).

**3.2.5.1.6** The Contractor's entry criteria, exit criteria and objectives for the IBR shall include those defined in DMO-CHECKLIST-IBR.

**3.2.5.1.7** The Contractor shall notify the Commonwealth Representative, within seven days on becoming aware that the PMB agreed under clause 3.2.5.1.4 no longer represents the plan for work.

**3.2.5.1.8** The Commonwealth may, at its discretion, conduct subsequent IBRs to reassess and subsequently Approve the PMB.

**3.2.5.1.9** The Contractor shall, within a period of [...INSERT PERIOD (e.g. six-nine months)...] after the Effective Date, allow the Commonwealth Representative to conduct a review of the Contractor's EVMS in accordance with the Earned Value Management System Review Handbook for the purpose of assessing compliance with the requirements of the Contract.

**3.2.5.1.10** The Contractor shall ensure that its EVMS continues to meet the requirements of the Contract.

**3.2.5.1.11** The Contractor shall allow the Commonwealth Representative to conduct ongoing System Assurance of its EVMS to assess continuing compliance with the requirements of the Contract.

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**3.2.5.1.12** The Contractor shall, in accordance with the Approved EVMP, provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth Representative to conduct IBRs, EVMS reviews, and System Assurance activities.

**3.2.5.2 Reporting**

**Note to drafters:** Clause 3.2.5.2.1 provides the default position for performance reporting, which may need to be modified to provide visibility of items of significant risk. The EVMP will define the reporting requirements in more detail, noting that the reporting level does not have to be at the same level throughout the CWBS and should be based on the information requirements of the individual project. Careful consideration should be given to determining the reporting levels, which will vary at different stages during the Contract based on Contract risks.

**Note to tenderers:** Note that the Commonwealth wishes to ensure that the level of reporting defined in 3.2.5.2.1 or, preferably, in the EVMP will permit visibility of items of significant risk such as software development.

**3.2.5.2.1** The Contractor shall produce Earned Value Performance Reports (EVPR) in accordance with CDRL Line Number MGT-320 to a minimum level of Level 3, unless otherwise specified in the Approved EVMP.

**3.2.5.2.2** The Contractor shall provide a Format 5 EVPR:

- a. where the cost and schedule variance, current or cumulative to date, or the variance at completion of any reporting element:
  - (i) adversely affects any activity that lies on the critical path;
  - (ii) adversely affects the top 10 risk elements as notified from time to time to the Contractor by the Commonwealth Representative; or
  - (iii) either exceeds the variance thresholds in the following table or, if different variance thresholds are defined in the Approved EVMP, exceeds those variance thresholds:

**Note to drafters:** The following table provides the default variance thresholds, which will be defined in more detail in the tenderers' EVMP. Insert Contract percent complete range (e.g. 0-25% complete); insert percentage variance (eg. +% for Cost, Schedule and VAC). Careful consideration should be given to determining the variance thresholds based on Contract risks. It is possible to have different variance thresholds for different reporting elements.

Contract Percent Complete	Percent Variance	Percent Schedule Variance	Percent Variance at Completion
[...INSERT RANGE %...]	[...INSERT %...]	[...INSERT %...]	[...INSERT %...]
[...INSERT RANGE %...]	[...INSERT %...]	[...INSERT %...]	[...INSERT %...]
[...INSERT RANGE %...]	[...INSERT %...]	[...INSERT %...]	[...INSERT %...]

- b. upon the request of the Commonwealth Representative in relation to any CWBS element.

**3.2.5.2.3** The Contractor shall conduct workshops with the Commonwealth as part of each applicable Mandated System Review, as defined in the applicable DMO Checklist, to review and agree the reporting levels and the reporting threshold for Format 5 of the EVPR for the next project phase. The agreed reporting levels and reporting thresholds shall be documented in an update to the EVMP.

**3.2.5.2.4** In addition to the standard EVMS measures, assessment of EVMS work-package achievement, including the achievement of interim milestones within Work Packages, shall, where applicable, be consistent with, and traceable to, the agreed measures documented in the Approved Measurement Plan.

**DRAFT****3.2.5.3 Change Control**

**3.2.5.3.1** The Contractor shall incorporate all revisions to the Performance Measurement Baseline (PMB), in accordance with AS 4817 and the Defence Supplement to AS 4817.

**3.2.5.3.2** If the Commonwealth Approves a CCP which results in a change to the PMB, the Contractor shall submit the updated version of the PMB to the Commonwealth within four weeks of the Approval or such other period as may be agreed between the parties.

**3.2.6 Measurement and Analysis**

**3.2.6.1** The Contractor shall develop, deliver and update a Measurement Plan in accordance with CDRL Line Number MGT-200.

**3.2.6.2** The Contractor shall conduct the measurement program in accordance with the Approved Measurement Plan.

**3.2.6.3** The Contractor shall deliver measurement data in accordance with CDRL Line Number MGT-210.

**3.2.6.4** The Contractor shall conduct measurement-planning workshops with the Commonwealth and Approved Subcontractors as a part of each applicable Mandated System Review, as defined in the applicable DMO Checklist, to agree the measures for the next project phase. The agreed measures shall be documented in an update to the Measurement Plan.

**3.2.6.5** The Contractor shall flow down the measurement requirements of this clause 3.2.6 to Approved Subcontractors.

**3.2.7 Process Improvement**

**Note to drafters: This clause assumes that a process capability assessment has been performed and has identified a number of process areas that represent risk to the project / Contract and, therefore, need to be improved. The specific process areas and associated process improvement will be documented in a Process Improvement Plan (PIP). The Contractor will need to demonstrate adherence to the plan and improvement in process capability to reduce the identified risk.**

**3.2.7.1** The Contractor shall develop, deliver and update a Process Improvement Plan (PIP) in accordance with CDRL Line Number MGT-150.

**3.2.7.2** The Contractor shall conduct process improvement activities in accordance with the Approved PIP.

**3.2.7.3** The Contractor shall support on-going capability assessments as defined in the Approved PIP.

**3.3 Monitoring and Control (Core)****3.3.1 Progress Reporting**

**3.3.1.1** The Contractor shall prepare and deliver Contract Start Up Progress Reports in accordance with CDRL Line Number MGT-610.

**3.3.1.2** The Contractor shall prepare and deliver Contract Status Reports (CSR) in accordance with CDRL Line Number MGT-300.

**Note to drafters: There are a number of mandatory reports that are components of the Contract Status Report.**

**3.3.1.3** If the Commonwealth notifies the Contractor on the basis of any Contract Start Up Progress Report, EVPR or CSR that the Contractor has failed to maintain satisfactory progress under the Contract, the Contractor shall notify the Commonwealth of the measures proposed and shall reflect the results of such measures as are necessary to re-establish Contract progress in subsequent Contract Start Up Progress Reports, EVPRs or CSRs.

**DRAFT****3.4 Key Persons Management (Core)**

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- 3.4.1.1** The Contractor shall identify, and update as required, the position/person specifications for Key Staff Positions, and the appointed Key Persons for each of the Key Staff Positions, in accordance with the Approved PMP.
- 3.4.1.2** The Contractor shall provide the Commonwealth with information and documentation to support the nomination of any person by the Contractor as a Key Person, including any proposed replacement or substitution of a Key Person under this clause 3.4, or under clause 3.8 of the conditions of contract. This documentation shall:
- a. justify the match of the nominated person to the relevant Key Staff Position;
  - b. describe how any capability shortfalls of the nominated person will be addressed; and
  - c. include an update to position/person specifications for affected Key Staff Positions to reflect any changes in duties and responsibilities that result from the replacement or substitution of a Key Person.

**3.5 Subcontractor Management (Core)**

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**3.5.1 Subcontractor Planning**

- 3.5.1.1** The Contractor shall ensure that Approved Subcontractors manage their contracts in accordance with their own management plans.

**3.5.2 Subcontractor Earned Value Management Requirements**

**Note to drafters: The requirement for an EVMS is mandatory where the value of a Subcontract or a group of Subcontracts with the same Subcontractor exceed the \$A20m threshold. Consideration should also be given to applying the EVMS requirements for high risk Subcontracts below \$A20m. Further guidance can be found in section 3.4 of the DPPM and from the DMO Standardisation Office.**

- 3.5.2.1** Unless otherwise agreed to by the Commonwealth Representative, if any Subcontract or group of Subcontracts with a Subcontractor requires work in excess of 12 months and the Subcontract price exceeds \$A20m, the Subcontractor shall maintain and use in the performance of the Subcontract an EVMS compliant with the requirements of AS 4817 and the Defence Supplement to AS 4817.
- 3.5.2.2** The Contractor shall be responsible for ensuring the Subcontractor's EVMS is compliant with the requirements of this Contract. The Contractor shall also be responsible for reviewing and accepting the Subcontractor's Performance Measurement Baseline (PMB) through an Integrated Baseline Review (IBR).
- 3.5.2.3** The Contractor shall make available to the Commonwealth records of any EVMS compliance review or System Assurance review of a Subcontractor's EVMS.
- 3.5.2.4** The Contractor shall permit the Commonwealth Representative to participate in any review associated with the Subcontractor's EVMS, including IBRs, EVMS reviews, and System Assurance activities for the Subcontract, to ensure compliance of the Subcontract EVMS with the requirements of the Contract.
- 3.5.2.5** The Contractor shall give the Commonwealth at least 30 days prior written notice of when a review is to be carried out.
- 3.5.3 Subcontractor Monitoring and Control**
- 3.5.3.1** The Contractor shall ensure that the Approved Subcontractors monitor progress against their own plans.
- 3.5.3.2** The Contractor shall ensure that Approved Subcontractors provide the identified measurement data in accordance with the Approved Measurement Plan.
- 3.5.3.3** The Contractor shall ensure that the Approved Subcontractors implement corrective actions to address any deviations from any plan.

**DRAFT****3.5.4 Subcontract Status Reporting**

- 3.5.4.1** The Contractor shall ensure that Approved Subcontractors prepare and deliver Subcontract status reports to the Contractor at the same intervals that the Contractor reports to the Commonwealth Representative.
- 3.5.4.2** The Contractor shall include the Subcontract status reports from Approved Subcontractors as components of the CSR, in accordance with CDRL Line Number MGT-300.
- 3.5.4.3** The Contractor shall include EVM data from Approved Subcontractors, which has the same status as the Contractor's EVM data, when preparing EVPRs in accordance with CDRL Line Number MGT-320.
- 3.5.4.4** Upon request, the Contractor shall provide the Commonwealth Representative with a copy of the Subcontract status reports.

**3.6 Risk Management (Core)**

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- 3.6.1** The Contractor shall develop, deliver and update a Risk Management Plan (RMP) in accordance with CDRL Line Number MGT-400.
- 3.6.2** The Contractor shall conduct the risk management program in accordance with the Approved RMP.
- 3.6.3** The Contractor shall maintain a Risk Register for the Contract in accordance with the Approved RMP.
- 3.6.4** The Contractor shall update the Risk Register prior to the submission of the CSR to ensure that each CSR represents the current status of the Contract risks.
- 3.6.5** The Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access the Risk Register for the duration of the Contract.

**3.7 Issue Management (Core)**

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- 3.7.1** The Contractor shall address management of, and planning for, Issue management in the PMP.
- 3.7.2** The Contractor shall conduct Issue management in accordance with the Approved PMP.
- 3.7.3** The Contractor acknowledges that the objective of conducting Issue management is to ensure that significant Issues are addressed in a timely manner.
- 3.7.4** The Contractor shall maintain an Issue Register for the Contract in accordance with the Approved PMP.
- 3.7.5** The Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access the Issue Register for the duration of the Contract.

**3.8 Maintenance of Contractual Documents (Core)**

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**3.8.1 Configuration Management of the Contract**

- 3.8.1.1** The Contractor shall incorporate all changes to the Contract and maintain a configured copy of the Contract.
- 3.8.1.2** The Contractor shall archive all superseded versions of the Contract.
- 3.8.1.3** The exact status of the Contract at any previous time shall be able to be determined from the archived versions of the Contract material.

**3.8.2 Subcontract Configuration Management**

- 3.8.2.1** The Contractor shall incorporate all changes to its Subcontracts and maintain configured copies of these Subcontracts.
- 3.8.2.2** The Contractor shall archive all superseded versions of Subcontracts.

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**3.8.2.3** The exact status of the Subcontracts at any previous time shall be able to be determined from the archived versions of the Subcontract material.

**3.9 Customer Liaison (Core)**

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**3.9.1 Progress Meetings**

**3.9.1.1** The Contractor shall conduct progress meetings at intervals of no greater than 3 months unless otherwise agreed with the Commonwealth Representative.

**3.9.1.2** Progress meetings shall be co-chaired by the Commonwealth Representative or nominated representative and the Contractor's Project Manager or nominated representative.

**3.9.1.3** The Contractor shall prepare and deliver all progress meeting agendas in accordance with CDRL Line Number MGT-500.

**3.9.1.4** The progress meetings shall not be conducted until the Commonwealth Representative has agreed the time and place of the progress meeting.

**3.9.1.5** Progress meetings shall be held at the Contractor's premises unless otherwise agreed by the Commonwealth Representative.

**3.9.1.6** The Contractor shall prepare and deliver minutes for each progress meeting in accordance with CDRL Line Number MGT-510.

**3.9.1.7** The Contractor shall provide the facilities, materials and services reasonably required for the conduct of the progress meetings.

**3.9.2 Extraordinary Meetings**

**3.9.2.1** When scheduling extraordinary meetings, the party calling the meeting shall provide the other party with reasonable advance notice of such meetings.

**3.9.2.2** The Contractor shall conduct extraordinary meetings as agreed by the parties.

**3.9.2.3** If the Commonwealth Representative calls the meeting, the Commonwealth Representative shall advise the Contractor of the specific requirements for the meeting, the nature of the issues to be discussed, and the requirements for preparation and delivery of associated information by the Contractor.

**3.9.2.4** If the Contractor calls the meeting, the Contractor shall advise the Commonwealth Representative of the specific requirements for the meeting, the nature of the issues to be discussed, and the requirements for preparation and delivery of associated information by the Commonwealth.

**3.9.2.5** The party calling the meeting shall chair extraordinary meetings unless otherwise mandated by the Commonwealth Representative.

**3.9.2.6** The party calling the meeting shall deliver an agenda to the other party before each extraordinary meeting in accordance with the data item content requirements and the delivery and action period timings specified in CDRL Line Number MGT-500.

**3.9.2.7** Unless otherwise agreed by the Commonwealth Representative, the Contractor shall provide the facilities, materials and services reasonably required for the conduct of extraordinary meetings.

**3.9.2.8** The party that chairs the meeting shall prepare and deliver minutes for each extraordinary meeting in accordance with the data item content requirements and the delivery and action period timings specified in CDRL Line Number MGT-510.

**3.9.3 Contract Performance Reviews**

***Note to tenderers: Contract performance reviews are over and above normal customer/supplier Contract reviews. The intent is to examine project activities in a holistic sense to identify areas for improvement. These reviews may be conducted by senior managers from both customer and supplier organisations.***

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- 3.9.3.1** The Contractor shall participate in Contract performance reviews at intervals not exceeding six months or as otherwise agreed. Such reviews may be appended to a normal progress meeting if agreed by both parties.
- 3.9.3.2** Contract performance reviews will involve both appraisal by the Commonwealth of the Contractor team's performance and appraisal by the Contractor of the Commonwealth team's performance.
- 3.9.3.3** Appraisals will consider factors such as the quality of the evolving products and ongoing services as well as the evaluation of final products and services.
- 3.9.3.4** The parties acknowledge that the aim of Contract performance reviews is to facilitate early identification and mitigation of the adverse effects of Contractor and/or Commonwealth team performance.
- 3.9.3.5** The parties further acknowledge that the results of the appraisal may be recorded in the Defence Company ScoreCard against the performance parameters outlined in the Defence Company ScoreCard Policy Statement.

**3.10 Independent Verification and Validation (IV&V) (Optional)**

**Note to drafters: The scope of IV&V activities must be clearly identified here to enable the tenderer to estimate the scope of work imposed on the tenderer in supporting the IV&V activities. If the scope of IV&V activities is unknown, then a fixed man-hour level of effort should be stated.**

- 3.10.1** The Commonwealth may appoint an Independent Verification and Validation (IV&V) agent to verify and validate any aspect of the Contractor's activities at any stage of the Contract.
- 3.10.2** The Contractor shall facilitate the work of the IV&V agent by:
- a. providing access to the Contractor's facilities;
  - b. providing access to all documentation regarding the Contract for the purposes of the IV&V activities, including requirements, source code, review records, design and test data and information management systems used for the Contract;
  - c. providing access to any tools required to review the project data; and
  - d. providing the IV&V agent access to the Contractor's staff in order to clarify issues when necessary.

**3.11 Life Cycle Cost (LCC) (Core)****3.11.1 Life Cycle Cost Program Management**

- 3.11.1.1** The Contractor shall develop, deliver and update a Life Cycle Cost Management Plan (LCCMP) in accordance with CDRL Line Number MGT-900.
- 3.11.1.2** The Contractor shall conduct the LCC program in accordance with the Approved LCCMP.

**3.11.2 Life Cycle Cost Modelling and Analysis**

**Note to drafters: Drafters should refer to DI(G) LOG 03-4 for Defence policy on LCC Analysis. Prior to the release of the RFT, the project team should determine the most applicable LCC modelling tool(s) for the project and modify the following clause accordingly. Additionally, if the Contractor proposes an alternative tool in its tender response, the project team should assess this alternative and discuss the issue with the preferred tenderer during contract negotiations. Depending upon the outcomes of those discussions, the following clause may need to be amended to accord with the agreed outcomes.**

- 3.11.2.1** The Contractor shall use [...INSERT LCC TOOL...] (or an alternative Approved by the Commonwealth Representative) to develop an LCC model of the Mission System and the Support System in accordance with the Approved LCCMP.
- 3.11.2.2** The Contractor shall utilise the LCC model developed under clause 3.11.2.1 to:

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- a. capture LCC data relating to the Mission System and the Support System, and to update that data as the design of each system matures and better information becomes available;
- b. undertake LCC analyses of the developing Mission System and Support System;
- c. assist with the identification of LCC drivers for the developing Mission System and Support System;
- d. analyse the identified LCC drivers, including performing sensitivity analyses;
- e. undertake trade-off analyses to identify design solutions that minimise LCC; and
- f. assist with design trade-off decisions both within and between the Mission System and the Support System.

**3.11.2.3** Where the Contractor produces an LCC model (or part thereof) using software packages other than a Defence endorsed tool, the Contractor shall provide all necessary programs, licenses, and training to enable the Commonwealth to efficiently access and manipulate the LCC model as required.

### **3.11.3 Life Cycle Cost Program Reviews and Reports**

**Note to drafters: The following clause assumes that Support System requirements (such as performance measures) have been included in the FPS, and the support concepts, which would otherwise be documented in the Logistics Support Concept (LSC) and Use Study, have been documented in the OCD. If neither of these assumptions hold true, then the following clause will require amendment.**

**3.11.3.1** In accordance with the Approved System Review Plan (SRP), the Contractor shall utilise the LCC model developed under clause 3.11.2.1 to demonstrate to the Commonwealth at each Mandated System Review that the Contractor's developmental activities under the Contract will result in a combined Mission System and Support System that:

- a. minimises LCC, as demonstrated in accordance with the Approved LCCMP; and
- b. meets the other requirements of the Contract,

when both the Mission System and Support System are operated and supported in accordance with the Operational Concept Document (OCD).

**Note to drafters: The CDRL highlights that the following CDRL Item has multiple deliveries, including prior to each Mandated System Review and at the end of the Contract.**

**3.11.3.2** The Contractor shall develop, deliver and update an LCC Report and Model (LCCRM) in accordance with CDRL Line Number MGT-910.

**3.11.3.3** Subject to clause 3.11.3.5, the Commonwealth will provide a response to the LCCRM, in writing, to the Contractor advising its Approval or otherwise of any proposal to minimise LCC that results in a transfer of costs between:

- a. the Mission System and the Support System; or
- b. any of the Commonwealth, the Contractors (and Subcontractors), and the Contractors (Support) (and Subcontractors (Support)).

**3.11.3.4** The Commonwealth's response to the LCCRM under clause 3.11.3.3 will be provided:

- a. at a Mandated System Review, if the LCCRM is due to be addressed at that Mandated System Review; or
- b. within 30 days of receipt of the LCCRM, if the LCCRM is not due to be addressed at a Mandated System Review; or
- c. within some other period of time as agreed between the parties.

**3.11.3.5** Following Approval of a proposal to minimise LCC in accordance with clause 3.11.3.3, the Contractor shall submit a CCP to incorporate the proposal into the Contract.

### **3.12 Transition into Operational Service (Core)**

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***Note to drafters: The scope of the Contractor Transition Plan will be dependent upon a range of factors, including the concept for logistics support (as documented in the OCD), whether or not the Contractor is involved in support (eg, via interim support arrangements), and whether or not a separate Contract (Support) will be enacted with the Contractor. Nevertheless, Transition is a typical area of risk and the following clauses provide the minimum set to ensure that the Contractor will be an integral part of the Transition process.***

**3.12.1 Contractor Transition Plan**

**3.12.1.1** The Contractor shall develop, deliver and update a Contractor Transition Plan (CTXP) in accordance with CDRL Line Number MGT-1000.

**3.12.1.2** The Contractor shall conduct all of its Transition activities in accordance with the Approved CTXP.

**3.12.2 Transition Meeting (Optional)**

***Notes to drafters: The timeframe of 120 days in the following clause is indicative only and the project team should determine an applicable timeframe, depending upon the nature and scope of the Transition activities.***

***Despite the following requirement for a specific Pre-Transition Meeting, Transition should be included in the agenda for progress meetings (refer clause 3.9.1) from early in the Contract.***

***The location of the Pre-Transition Meeting (and subsequent meetings) also needs to be determined to ensure that the objectives can be achieved most effectively (eg, at the address of the in-service support agency).***

**3.12.2.1** At least 120 days before the first Test Readiness Review (TRR) for the Mission System (or other time agreed between the Parties), the Contractor shall conduct a Pre-Transition Meeting at the Commonwealth's premises to:

- a. ensure that the Transition responsibilities of the Commonwealth, the Contractor and Subcontractors are well-understood by all Parties;
- b. ensure that the Transition activities of the Commonwealth, the Contractor and Subcontractors are progressing satisfactorily and in accordance with the Approved CMS;
- c. address risk-mitigation strategies for any Transition-related risks, in accordance with the Approved RMP; and
- d. address any requisite changes to the Approved CTXP as an outcome of the Pre-Transition Meeting, including any requirements for subsequent Transition Meetings.

**3.12.2.2** Subject to clause 3.12.2.1, the Contractor shall organise and conduct the Pre-Transition Meeting as an extraordinary meeting in accordance with clause 3.9.2 (Extraordinary Meetings).

**3.12.2.3** Subsequent Transition Meetings shall also be organised and conducted as extraordinary meetings in accordance with clause 3.9.2.

**3.12.3 Transition Register (Optional)**

**3.12.3.1** The Contractor shall develop, deliver, and update a Transition Register, as defined in the Approved CTXP, in accordance with CDRL Line Number MGT-1010.

**3.13 Government Furnished Material (GFM) Management (Optional)****3.13.1 Delivery and Receipt of GFM (Optional)**

**3.13.1.1** The Commonwealth shall deliver or provide access to GFM to the Contractor at the place and times stated in Annex A to Attachment E.

**3.13.1.2** The Contractor shall acknowledge in writing receipt of the GFM to the Commonwealth Representative within seven days of delivery, or such other period as may be agreed in writing by the Commonwealth Representative.

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- 3.13.1.3** If GFM is not accompanied by an issue voucher from the Commonwealth, the Contractor shall report that omission in the acknowledgment of receipt for that GFM.
- 3.13.1.4** The Contractor shall, within 14 days of delivery, or such other period as may be agreed in writing by the Commonwealth Representative:
- a. inspect GFM for defects or deficiencies and any physical damage which impact on, or are likely to impact on, the intended use of the GFM; and
  - b. report in writing its satisfaction or dissatisfaction with the GFM to the Commonwealth Representative.
- 3.13.1.5** Unless otherwise agreed between the parties, the Contractor shall not use GFM which has been found on inspection to be damaged, defective or deficient.
- 3.13.1.6** In addition to the requirement under clause 3.13.1.4, the Contractor shall, at least 21 days prior to the date that any work is to be commenced in relation to the Government Furnished Equipment (GFE), carry out appropriate functional testing to the extent feasible of any GFE item or part thereof to determine that the GFE is serviceable for use as required by the Contract.
- 3.13.1.7** Any deficiency significantly affecting the function of GFE as required by the Contract shall be reported in writing to the Commonwealth by the Contractor within seven days of functional testing, or such other period as may be agreed by the Commonwealth Representative.
- 3.13.2 Use of GFM (Optional)**
- 3.13.2.1** The Contractor shall skilfully incorporate GFM into the Supplies or utilise GFM in production of the Supplies in accordance with the Contract.
- 3.13.2.2** The Contractor shall return GFM that is not incorporated into the Supplies (other than consumable items of GFM) to the Commonwealth as directed by the Commonwealth Representative.
- 3.13.3 Care of GFM (Optional)**
- 3.13.3.1** The Contractor shall provide facilities to store and handle all GFM as it is received.
- 3.13.3.2** The Contractor shall carry out calibration of all GFE requiring such calibration.

**Note to drafters: If the GFM requires preventative or periodic maintenance then a clause needs to be added stating that the Contractor shall perform such maintenance.**

**3.14 Australian Industry Capability (AIC) Management (Core)**

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**Note to drafters: Where only an AIC Schedule (Appendix 1 to the AIC Plan) is required, drafters must modify the AIC Plan DID accordingly, and delete clauses 3.14.4 to 3.14.7 below and replace with 'Not Used'.**

- 3.14.1** The Contractor shall comply with the AIC Plan.
- 3.14.2** The Contractor shall further develop, deliver and update the AIC Plan in accordance with CDRL Line Number MGT-700.
- 3.14.3** If the Contractor proposes an update to the AIC Plan in accordance with clause 3.14.2, the Contractor shall submit a CCP to incorporate the proposed change into the Contract.
- 3.14.4** The Contractor shall develop and deliver AIC Progress Reports in accordance with CDRL Line Number MGT-710.
- 3.14.5** Prior to, or following, the submission of the first AIC Progress Report, a review may be conducted by the Commonwealth at the Contractor's premises to assess and verify the:
- a. implementation of the AIC Plan; and
  - b. adequacy of the Contractor's financial management information system and data collection methods.

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**3.14.6** AIC progress reviews may be undertaken annually by the Commonwealth at the Contractor's and Approved Subcontractor's premises to Verify the nature and level of the work actually performed and the achievement of the AIC Plan as reported by the Contractor. The Contractor and Approved Subcontractors shall facilitate any review conducted by the Commonwealth.

**3.14.7** The Contractor shall flow down the AIC performance review requirements of this clause 3.14 to Approved Subcontractors.

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**3.15 Intellectual Property (IP) Management (Core)**

**3.15.1 Intellectual Property Plan**

**3.15.1.1** The Contractor shall comply with the IP Plan.

**3.15.1.2** The Contractor shall further develop, deliver and update the IP Plan in accordance with CDRL Line Number MGT-800.

**3.15.1.3** If the Contractor proposes an update to the IP Plan in accordance with clause 3.15.1.2, the Contractor shall submit a CCP to incorporate the proposed change into the Contract.

**3.15.2 IP Records, Progress Reports And Reviews**

**3.15.2.1** The Contractor shall develop, deliver and update relevant IP records in accordance with CDRL Line Number MGT-810.

**3.15.2.2** The Contractor shall document progress against the IP requirements of the Contract in the IP Progress Report section of each CSR in accordance with CDRL Line Number MGT-300.

**3.15.2.3** The Commonwealth may conduct a review at the Contractor's or any Approved Subcontractor's premises to assess and verify implementation of the IP requirements of the Contract. Such reviews may be undertaken annually at the Contractor's or any Approved Subcontractor's premises and the Contractor or Approved Subcontractor shall facilitate the review.

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**3.16 Defence Security Compliance (Core)**

**3.16.1** The Contractor shall ensure that all security procedures, training, facilities, fittings and clearance requests are established and maintained to meet the requirements of clause 10.10 of the conditions of contract.

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**3.17 Resident Personnel (Optional)**

**3.17.1** Resident Personnel (RP) will be collocated at the Contractor's premises during the Contract. The number of RP, terms of reference, and duration of their collocation are set out in Attachment L to the Contract.

**3.17.2** The Contractor shall provide and maintain at its premises all of the facilities identified in Attachment L to the Contract and give such assistance as is reasonably required to support the RP.

**3.17.3** The facilities provided shall be of an equal standard to that provided to Contractor's personnel of similar status, and take into account requirements for health, safety and comfort.

**3.17.4** The Contractor shall provide all reasonable assistance to facilitate the Commonwealth arranging clearances for Commonwealth personnel requiring access to the Contractor's premises when these premises are located outside Australia.

**3.17.5** The Commonwealth will comply with, and will require persons afforded access under clause 3.17 to comply with, any relevant Contractor safety and security arrangements and regulations and codes of behaviour that apply to particular Contractor's premises or sites relevant to the Contract.

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**3.18 Business Resource Planning (Core)**

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- 3.18.1** The Contractor shall conduct business resource planning in accordance with the Approved PMP to demonstrate that resources are adequate to complete all current and planned work.
- 3.18.2** The Contractor shall document business resource planning performance in the Business Resource Planning Report section of each CSR in accordance with CDRL Line Number MGT-300.
- 3.18.3** The Commonwealth may conduct reviews and audits at the Contractor's premises to verify the Contractor's Business Resource Planning Report. The Contractor shall facilitate each review and audit.
- 3.18.4** If the Commonwealth considers that the Contractor has not demonstrated adequate resources to continue to maintain satisfactory progress under the Contract, the Contractor shall take remedial action in accordance with clause 3.3.1.3 of the SOW.

**3.19 Stocktaking of Contractor Managed Commonwealth Assets (Core)**

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- 3.19.1** The Contractor shall develop, deliver and update a Commonwealth Assets Stocktaking Plan (CASP) as part of the PMP in accordance with CDRL Line Number MGT-100.
- 3.19.2** Without limiting clause 2.4 of the SOW, the Commonwealth Representative will assess the CASP to ascertain whether it is sufficient to discharge Defence's responsibilities to account for its assets, as set out in DI(G) LOG 4-3-014.
- 3.19.3** The Contractor shall:
- a. institute, maintain and apply a system for, the accounting for and control, handling, preservation, protection and maintenance of CMCA; and
  - b. undertake stocktakes and reporting for CMCA;
- in accordance with the Approved CASP.
- 3.19.4** The Contractor shall develop and deliver a Commonwealth Assets Stocktaking Reports (CASR) as part of the CSR in accordance with CDRL Line Number MGT-300.
- 3.19.5** Without limiting clause 2.4 of the SOW, the Commonwealth will assess the CASR to ascertain whether it sufficiently accounts for the Commonwealth assets in the possession of the Contractor and will at its discretion notify the Contractor whether the stocktaking report is acceptable or not.
- 3.19.6** The Contractor shall promptly conduct investigations into every discrepancy arising from stocktakes of CMCA.
- 3.19.7** The Contractor shall immediately notify the Commonwealth Representative of any deficiencies that are discovered through a stocktake of CMCA where:
- a. loss of attractive or sensitive items of any value, including weapons and associated controlled repair parts, classified equipment, and controlled medical supplies, is suspected or confirmed; or
  - b. fraud, theft, or misappropriation is suspected or confirmed; or
  - c. a tolerance reporting threshold of 5% has been exceeded either in:
    - (i) total deficiencies as a percentage of the total stock codes counted; or
    - (ii) the value of discrepancies as a percentage of the total value of all stock codes counted.

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## 4. SYSTEMS ENGINEERING

**Note to drafters: The engineering aspects of this SOW have been aligned with EIA-632 that specifies 33 high-level process requirements for engineering a system. EIA-632 specifies these requirements in abstract terms and does not mandate particular methods to satisfy them. As such, the SEMP is expected to capture the Contractor's tailoring of EIA-632 as applicable for the Contract and the Contractor's internal procedures.**

**The requirements of Clause 4 of the SOW should apply to the design and development of the Mission System as well as to significant end items of technical equipment that form part of the Support System. These elements should be clearly defined in Clause 2.1, 'Scope of Work'.**

**Note to tenderers: Under the philosophy embodied in this SOW, the Commonwealth controls system functional requirements and the Contractor controls the design and product requirements and is responsible for development and maintenance of the lower level development and production of Configuration Item (CI) specifications.**

#### 4.1 Systems Engineering Management (Core)

##### 4.1.1 Engineering Organisation and Planning

4.1.1.1 The Contractor shall develop, deliver and update a Systems Engineering Management Plan (SEMP) in accordance with CDRL Line Number ENG-100.

4.1.1.2 The Contractor shall conduct its program of engineering activities in accordance with the requirements of EIA-632, "Processes for Engineering a System", as tailored by the Approved SEMP.

4.1.1.3 All engineering plans for the Contract shall be subordinate to the SEMP.

4.1.1.4 The SEMP shall:

- a. define the scope and purpose of subordinate plans; and
- b. delineate the interrelationship between subordinate plans.

4.1.1.5 The Contractor shall ensure that all Contractor and Subcontractor activities are consistent with the Approved SEMP.

4.1.1.6 The Contractor shall ensure that all Subcontractors develop, update and implement appropriate technical plans, commensurate with the scope of work for each Subcontractor, which results in an integrated and cost-effective technical effort in accordance with the Approved CMS.

##### 4.1.2 Engineering Schedule

4.1.2.1 The Contractor shall develop, deliver and update a time-based schedule of engineering activities as part of the Contract Master Schedule (CMS).

4.1.2.2 The Contractor shall capture all technical milestones, including System Reviews, and their key dependencies in the CMS.

##### 4.1.3 Authorised / Accredited Engineering Organisation (AEO) (Optional)

**Note to drafters: Drafters should refer to the applicable Technical Regulatory reference for guidance pertaining to the AEO clauses. If, after reading the guidance, the Contractor is not required to become an AEO, delete this clause and replace it with 'Not Used'.**

**Insert the applicable Technical Regulatory reference into the clause below.**

4.1.3.1 The Contractor shall ensure that design and engineering activities are performed in accordance with the technical regulatory requirements defined in the [...INSERT TECHNICAL REGULATORY REFERENCE...].

4.1.3.2 The Contractor shall develop and deliver an AEO application, in accordance with CDRL Line Number ENG-105, to seek from the Commonwealth Representative, AEO status for the level and scope of engineering and engineering activities required by this Contract.

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**Note to drafters: Insert into the clause below the number of months, in words and numbers (e.g. three (3)), for the Contractor to become authorised / accredited.**

- 4.1.3.3 AEO status, appropriate to the design and engineering activities required by this Contract, is to be attained within [...INSERT NUMBER IN WORD AND (NUMBER)...] months of the Effective Date and shall be maintained, for the duration of the Contract.

**Note to drafters: Select “Approved AEO Application” or “Letter of Engineering Authority” as applicable.**

- 4.1.3.4 The Contractor shall ensure that all design and engineering activities are undertaken, whether by the Contractor or a Subcontractor, within the design organisation and procedures described in the latest [...INSERT ‘Approved AEO Application’ OR ‘Letter of Engineering Authority’...] and its subordinate documentation.

**Note to drafters: Insert name of Technical Regulatory Authority and select “Approved AEO Application” or “Letter of Engineering Authority” as applicable.**

- 4.1.3.5 The Contractor is accountable to the [...INSERT NAME OF APPLICABLE COMMONWEALTH TECHNICAL REGULATORY AUTHORITY...] to ensure that all design and engineering activities provided by subcontractors are performed in accordance with the applicable technical regulatory framework requirements and the requirements of the [...INSERT ‘Approved AEO Application’ OR ‘Letter of Engineering Authority’...] and subordinate documents.

#### 4.1.4 Authorised/Accredited Maintenance Organisation (AMO) (Optional)

**Notes to drafters: Drafters should refer to the ASDEFCON (Strategic Materiel) SOW Handbook for guidance pertaining to the AMO clauses. If, after reading the guidance, the Contractor is not required to become an AMO, mark this clause as ‘Not Used’.**

**Insert the applicable Technical Regulatory reference into the clause below.**

- 4.1.4.1 The Contractor shall ensure that maintenance activities are performed in accordance with the technical regulatory requirements defined in the [...INSERT TECHNICAL REGULATORY REFERENCE...].

- 4.1.4.2 The Contractor shall develop and deliver an Authorised/Accredited Maintenance Organisation (AMO) application, in accordance with CDRL Line Number ENG-106, to seek from the Commonwealth Representative AMO status for the level and scope of maintenance activities required by this Contract.

**Note to drafters: Insert into the clause below the number of months, in words and numbers (e.g. three (3)), for the Contractor to become Authorised / Accredited.**

- 4.1.4.3 AMO status, appropriate to the maintenance activities required by this Contract, is to be attained within [...INSERT NUMBER IN WORDS AND (NUMBERS)...] months of the Effective Date and shall be maintained, for the duration of the Contract.

**Note to drafters: Select “Approved AMO application” or “Maintenance Authority Certificate” as applicable.**

- 4.1.4.4 The Contractor shall ensure that all maintenance activities provided by the Contractor under this Contract are undertaken in accordance with the [...INSERT ‘Approved AMO Application’ OR ‘Maintenance Authority Certificate’...] and its subordinate documentation.

**Note to drafters: Insert name of Technical Regulatory Authority and select “Approved AMO Application” or “Maintenance Authority Certificate” as applicable.**

- 4.1.4.5 The Contractor is accountable to the [...INSERT NAME OF APPLICABLE COMMONWEALTH TECHNICAL REGULATORY AUTHORITY...] to ensure that all maintenance activities provided by Subcontractors are performed in accordance with the applicable technical regulatory framework requirements and the requirements of the

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[...INSERT 'Approved AMO Application' OR 'Maintenance Authority Certificate'...] and subordinate documents.

**4.1.5 Conduct of System Reviews**

**Note to tenderers: The intent, where possible, is to encourage progressive development and Commonwealth review of products associated with a particular development phase. The formal System Review meeting should then be a checkpoint that ensures all activities have been addressed.**

- 4.1.5.1 The Contractor shall develop, deliver and update a System Review Plan (SRP) in accordance with CDRL Line Number ENG-200.
- 4.1.5.2 The Contractor shall conduct all Mandated System Reviews and all Internal System Reviews in accordance with the Approved SRP.
- 4.1.5.3 The Contractor shall hold all Mandated System Reviews at the Contractor's premises unless otherwise agreed by the Commonwealth Representative.

**Note to drafters: If work on the Contract is being undertaken at a number of locations, consideration should be given to the most suitable location to meet the review objectives (eg. Contractor or Subcontractor premises).**

- 4.1.5.4 Unless otherwise agreed between the parties, the Contractor shall not commence a Mandated System Review until all entry criteria defined in the SRP for that review have been met.
- 4.1.5.5 Prior to each Mandated System Review, the Contractor shall deliver the Agenda for that review in accordance with CDRL Line Number ENG-210.
- 4.1.5.6 Prior to each Mandated System Review, the Contractor shall deliver the Review Package for that review in accordance with CDRL Line Number ENG-220.
- 4.1.5.7 The Contractor shall ensure that Contractor representatives and Subcontractors' representatives participate in each Mandated System Review as appropriate to the subject and objectives of that System Review.
- 4.1.5.8 The Contractor and the Commonwealth Representative shall co-chair each Mandated System Review.
- 4.1.5.9 Following each Mandated System Review, the Contractor shall deliver Minutes of that System Review in accordance with CDRL Line Number ENG-230.
- 4.1.5.10 The Contractor shall not claim completion for a System Review until both the Commonwealth Representative and the Contractor are satisfied that all the exit criteria defined in the SRP for that review have been met.

**Option: For use if the Commonwealth wishes to attend the Contractor's Internal System Reviews.**

- 4.1.5.11 The Contractor shall invite the Commonwealth to all Internal System Reviews.
- 4.1.5.12 Prior to each Internal System Review, the Contractor shall deliver the Agenda for that System Review in accordance with CDRL Line Number ENG-210.

**Option: For use if the Commonwealth requires visibility of the Contractor's Internal System Reviews.**

- 4.1.5.13 Following each Internal System Review, the Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access the records that document the outcomes of the System Review.

**4.1.6 Independent Review Team (Optional)**

- 4.1.6.1 The Contractor shall appoint an independent review team that consists of appropriately qualified subject matter experts that have not contributed to the elements under review.

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- 4.1.6.2** The Contractor's independent review team shall participate in each Mandated System Review by:
- a. prior to the review meeting, reviewing the Review Package and supporting documentation;
  - b. prior to the review meeting, advising the Commonwealth and Contractor chairs of any areas of concern;
  - c. at the review meeting, formally advising the Commonwealth and Contractor chairs as to whether they believe that the objectives of the System Review have been met; and
  - d. attending the review meeting and formally presenting their findings for inclusion in the Minutes.

**4.1.7 Technical Performance Measures**

**Note to drafters: This clause needs to be tailored depending upon the previous work conducted by the Commonwealth (ie. work related to COI, MOP that may be documented in the OCD). Particular TPMs may be mandated by the Commonwealth or developed in conjunction with the Contractor, usually based on an evaluation of risk. Project office staff need to ensure that the Measurement Plan accurately reflects the specification of each TPM, including the frequency of reporting.**

- 4.1.7.1** The Contractor shall manage TPMs as part of the measurement program in accordance with clause 3.2.6 of the SOW.
- 4.1.7.2** The Contractor shall derive a top-down set of measures, which establishes the relationships from customer needs, requirements and objectives to measurable system technical design criteria.
- 4.1.7.3** The Contractor shall ensure that each of the measurable system technical design criteria is traceable to the SS.
- 4.1.7.4** The Contractor shall identify, in the Approved Measurement Plan, a critical subset of the measurable system technical design criteria as TPMs.

**4.2 System Definition (Core)**

**Note to drafters: The reviews of this clause may be tailored to reflect the needs of the Contract. This clause currently defines two reviews for the system definition phase, the System Requirements Review (SRR) and the System Definition Review (SDR).**

**4.2.1 Operational Concept Document**

**Note to tenderers: The Commonwealth may update the OCD to ensure that the OCD and the developing system requirements remain consistent.**

- 4.2.1.1** During the System Definition phase, and prior to each Mandated System Review, the Contractor shall propose changes to the Commonwealth developed Operational Concept Document (OCD) that would address any inconsistencies between the OCD and the System Specification.
- 4.2.1.2** Where the Contractor proposes to change the OCD in accordance with clause 4.2.1.1, the Contractor shall submit a CCP to incorporate the proposed change into the Contract.

**4.2.2 System Requirements Validation**

- 4.2.2.1** The Contractor shall develop and validate a set of requirements for the Mission System based on:
- a. the initial Commonwealth requirements as defined by the Function and Performance Specification (FPS);
  - b. an analysis of the OCD to extract Commonwealth end-user needs and objectives in the operational context to confirm that all functional and performance requirements and constraints for the Mission System are captured;

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- c. the requirements of government regulatory organisations;
- d. other Defence stakeholder requirements as facilitated by the Commonwealth Representative; and
- e. the Contractor's domain experience.

**4.2.2.2** The Contractor shall develop, deliver and update the validated Mission System requirements as the System Specification (SS) in accordance with CDRL Line Number ENG-310.

**4.2.2.3** In developing and updating the SS in accordance with clause 4.2.2.2 and the Support System Specification (SSSPEC) in accordance with clause 5.2.2.1.2, the Contractor shall as a minimum:

- a. show traceability from each requirement of the FPS to the SS and SSSPEC with rationale for any modifications;
- b. show traceability from each requirement of the SS and SSSPEC to the FPS and the OCD with rationale for any modifications; and
- c. where necessary, refine, with rationale for any modifications, the requirements stated in the FPS to a level that further defines functional, performance or constraint requirements of the Mission System and Support System.

**Note to tenderer: The FPS represents DMO's agreement with Defence Capability staff on the requirements for the capability to be delivered. As such it is not normally expected to change over the life of the Contract. Where, as a result of the Contractor's development activities and in particular during the system definition phase, the Contractor proposes SS or SSSPEC requirements that would be in conflict with the FPS, the Commonwealth Representative needs to gain internal approval. The following clause is intended to provide the Commonwealth Representative with the mechanism for achieving such approval.**

**4.2.2.4** If proposed SS or SSSPEC requirements are in conflict with the FPS, the Contractor shall submit an Application for Deviation in accordance with clause 8.4 of the SOW for Commonwealth Representative Approval.

**Note to drafters: Generally, the SS would be placed on Contract after successful completion of the System Definition Review. The SS is intended to be the basis for the remaining engineering effort of the Contract. The phase at which the SS should be placed on Contract should be based on the requirements of the particular project.**

**4.2.2.5** The Contractor shall submit a CCP to establish the SS as the Functional Baseline for the Mission System and hence the basis for development and Verification of the Mission System.

### **4.2.3 System Requirements Review**

**4.2.3.1** The Contractor acknowledges that the objectives of the System Requirements Review (SRR) are to:

- a. validate that the system requirements for both the Mission System and the Support System are complete and well formulated, both individually and in sets;
- b. ensure that the set of system requirements are consistent with the Commonwealth's intent; and
- c. ensure that both the Commonwealth and the Contractor have a common understanding of the requirements.

**4.2.3.2** At the completion of an initial analysis phase, the Contractor shall hold a Mandated System Review, the SRR.

**4.2.3.3** The Contractor's entry criteria, exit criteria and objectives for SRR shall include those defined in DMO-CHECKLIST-SRR.

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**4.2.4.1** The Contractor acknowledges that the objectives of the System Definition Review (SDR) are to:

- a. demonstrate convergence on, and achievability of, technical requirements for both the Mission System and the Support System; and
- b. demonstrate readiness to initiate the subsequent system design phase for both the Mission System and the Support System.

**4.2.4.2** At the completion of the system definition phase, the Contractor shall hold a Mandated System Review, the SDR.

**4.2.4.3** The Contractor's entry criteria, exit criteria and objectives for SDR shall include those defined in DMO-CHECKLIST-SDR.

**4.3 System Design (Core)**

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***Note to drafters: The reviews of this clause may be tailored to reflect the needs of the Contract. This clause currently defines two reviews for this phase, the Preliminary Design Review (PDR) and the Detailed Design Review (DDR).***

**4.3.1 Preliminary Design Review**

**4.3.1.1** The Contractor acknowledges that the objectives of the Preliminary Design Review (PDR) are to confirm:

- a. that all subsystem and enabling product building blocks have been defined appropriately;
- b. that all subsystem building block designs satisfy their parent requirements; and
- c. that the approaches to the next level have been appropriately planned and that risks are identified with appropriate mitigation plans in place.

**4.3.1.2** At the completion of the preliminary design phase, the Contractor shall hold a Mandated System Review, the PDR.

**4.3.1.3** The Contractor's entry criteria, exit criteria and objectives for PDR shall include those defined in DMO-CHECKLIST-PDR.

**4.3.2 Detailed Design Review**

**4.3.2.1** The Contractor acknowledges that the objectives of the Detailed Design Review (DDR) are to demonstrate:

- a. that specifications, drawings and software development documentation have been appropriately defined;
- b. that building block end product designs satisfy their parent requirements;
- c. that enabling product requirements have been adequately defined; and
- d. that the building blocks are either ready for further development, adequately defined for procurement, or adequately defined for fabrication.

**4.3.2.2** At the completion of the detailed design phase, the Contractor shall hold a Mandated System Review, the DDR.

**4.3.2.3** The Contractor's entry criteria, exit criteria and objectives for DDR shall include those defined in DMO-CHECKLIST-DDR.

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**4.4 System Implementation (Core)****4.4.1 General**

**Note to drafters: This clause should address any Contract-specific requirements relating to system implementation and integration including, for example:**

- d. access to and limitations associated with specific Commonwealth facilities, Contractor facilities or Subcontractor facilities;**
- e. availability of systems and equipment that are not classified as GFE/GFM (e.g. platforms and other systems and equipment requiring modification or integration);**
- f. Commonwealth visibility of integration activities; and**
- g. visibility of integration related defects and their closure.**

**The DID for the Site Installation Plan is available through the ASDEFCON (Complex Materiel) Standard Assets.**

**Option: For use only if site-installation activities on Commonwealth-managed sites, including Facilities, are likely to be required.**

**4.4.1.1 Planning**

- 4.4.1.1.1** The Contractor shall develop, deliver and update a Site Installation Plan (SIP) in accordance with CDRL Line Number ENG-175 to address site-installation activities at Commonwealth-managed sites (including Facilities).

**4.4.1.2 Program Activities**

- 4.4.1.2.1** The Contractor shall perform site-installation activities in accordance with the Approved SIP.

**4.4.2 Software Development**

**Note to drafters: The software engineering aspects of this SOW have been aligned with ISO 12207, which covers all software life-cycle phases. In the case when a Contractor is not involved in software development, the Contractor is still expected to satisfy this SOW for the acquisition and supply life-cycle processes of ISO12207 as a minimum. As such, the SMP is to capture the Contractor's tailoring of ISO12207 and integrate applicable software safety standards including data deliverables, as applicable for the Contract and the Contractor's internal procedures.**

- 4.4.2.1** The Contractor shall develop, deliver and update a Software Management Plan (SMP) in accordance with CDRL Line Number ENG-600.
- 4.4.2.2** The Contractor shall plan and conduct its software engineering activities in accordance with the following requirements of ISO12207, as tailored by the Approved SMP:

**Note to drafters: The following clauses need to be tailored consistently with the requirements of the Contract. In general, items a., b. and c. will always apply. Where the Contractor is not required to operate a software system under the Contract, item d. below should be deleted. Where the Contractor is not required to maintain software under the Contract, item e. below should be deleted.**

- a. Section 5.1 for the acquisition of systems or equipment containing software, software products and services;
- b. Section 5.2 for the supply of systems or equipment containing software, software products and services;
- c. Section 5.3 for definition, modification and development of software including firmware;
- d. Section 5.4 for the operation of systems or equipment containing software, software products and services; and

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- e. Section 5.5 for the maintenance of systems or equipment containing software, software products and services.

**4.4.2.3** The Contractor shall perform software lifecycle processes in accordance with Section 6 of AS/NZS ISO 12207, as tailored by the Approved SMP.

**4.4.2.4** The Contractor shall organise software lifecycle processes in accordance with Section 7 of AS/NZS ISO 12207, as tailored by the Approved SMP.

**4.4.2.5** The Contractor shall require each Approved Subcontractor to plan and conduct software engineering activities in accordance with the requirements of ISO12207, as tailored by the Subcontractor in its plans for conducting software engineering activities.

**4.4.2.6** The Contractor shall approve Subcontractor tailoring of ISO12207, ensuring it is consistent and compatible with the Contractor's SMP and the Contract.

**4.4.2.7** The Contractor shall develop, deliver and update a Software List in accordance with CDRL Line Number ENG-610.

#### **4.4.3 Hardware Development (Optional)**

**Note to drafters:** *This clause may mandate or recommend particular standards as guidance, generally specific to the domain of the Contract. Consideration should be given to aligning the choice of these standards with the Contractor's work practices. Unless specifically required in a separate plan, the processes for all hardware development activities should be identified in the SEMP (eg. by reference to the Contractor's standard internal procedures).*

**4.4.3.1** The Contractor shall develop and update hardware development processes and procedures that define the conduct of all Contractor hardware development activities for the Contract.

**4.4.3.2** The Contractor shall document all hardware development processes and procedures in the SEMP.

**4.4.3.3** The Contractor shall conduct all hardware development activities for the Contract in accordance with the Approved SEMP.

### **4.5 System Analysis, Design And Development (Core)**

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#### **4.5.1 Technical Documentation Tree**

**4.5.1.1** The Contractor shall:

- a. develop and update a hierarchy of specifications and design documentation, which reflects the hierarchy of Mission System design products; and
- b. document this hierarchy as the Technical Documentation Tree, in accordance with CDRL Line Number ENG-500.

**4.5.1.2** The Contractor shall develop and update the specifications and design documentation as defined by the Technical Documentation Tree.

**4.5.1.3** The Contractor shall deliver the specifications and design documentation defined by the Technical Documentation Tree, as Design Documentation in accordance with CDRL Line Number ENG-510.

#### **4.5.2 Design Traceability**

**4.5.2.1** The Contractor shall develop, deliver and update a Requirements Traceability Matrix (RTM), in accordance with CDRL Line Number ENG-400.

**4.5.2.2** The Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access the RTM for the duration of the Contract.

**4.5.2.3** The Contractor shall use the RTM to maintain traceability of all specifications in the Technical Documentation Tree.

**4.5.2.4** The Contractor shall trace each specification requirement to one or more requirements in the next lower level in the specification hierarchy (downward traceability).

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**4.5.2.5** The Contractor shall trace each specification requirement to one or more requirements in the next higher level in the specification hierarchy (upward traceability).

**4.5.3 Engineering Information System**

**4.5.3.1** The Contractor shall establish an Engineering Information System (EIS) to capture, maintain and control relevant technical information and digital databases for the project to which the Contract relates including:

- a. inputs and outputs of process tasks; and
- b. rationale for decisions and assumptions.

**Note to tenderers: The relevant technical information includes both technical information produced by the Contractor and Subcontractors.**

**Note to drafters: The following clause needs to be tailored to more clearly define what is intended as "access" for the particular Contract. This may take the form of day-to-day access by resident Commonwealth staff (ie, the RP) or on-line access to a remote Commonwealth team. The issue of access to both Contractor's and Subcontractors data should be considered.**

**4.5.3.2** The Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access the EIS for the duration of the Contract.

**4.5.4 Engineering Drawings**

**Note to drafters: Different parts of the Mission System and Support System may require the delivery of drawings at different levels. In this situation, the following clause should be modified to reflect this requirement.**

**4.5.4.1** The Contractor shall develop, deliver and update a complete set of Level [...INSERT REQUIRED LEVEL e.g. 2...] Engineering Drawings in accordance with CDRL Line Number ENG-700 and the Approved TDP.

**4.5.5 System Models (Optional)**

**Note to drafters: This clause may specify the level of access required by the Commonwealth into particular models developed for the program (ie, the Commonwealth may wish to identify specific models that would be created and maintained by the Contractor during the Contract). There are likely to be many system and lower-level models developed at various levels of abstraction and fidelity. These models may include functional models, performance models, interaction models, architecture models, environment models, and operational scenarios. Most of the models should be documented in the EIS; however, the models addressed here are those of special significance to the Commonwealth.**

**4.5.5.1** The Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access all engineering models proposed for use as part of a formal Verification or Validation activity.

**4.5.5.2** If requested by the Commonwealth Representative, the Contractor shall deliver all engineering models and associated documentation, which are used as part of a formal Verification or Validation activity.

**4.6 Specialty Engineering (Core)**

**4.6.1 Growth, Evolution and Obsolescence Program**

**Note to drafters: This clause is needed to address the issues relating to the increasing discrepancy between the lifecycle of COTS equipment and software and the lifecycle of the system.**

**4.6.1.1 Program Objectives**

**4.6.1.1.1** The Contractor acknowledges that the objectives of the Contractor's growth, evolution and obsolescence program are to ensure that:

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- a. technology evolution and obsolescence issues are appropriately considered in the design of the Mission System and Support System;
- b. the Contractor's design, development and production programs will not deliver equipment that has obsolescence problems at the time of delivery; and
- c. the Contractor's solutions for the Mission System and Support System minimise LCC when technology evolution and obsolescence issues are taken into consideration.

**4.6.1.2 Planning**

**4.6.1.2.1** The Contractor shall develop, deliver and update a Growth Plan (GP) in accordance with CDRL Line Item ENG-150.

**4.6.1.3 Program Activities**

**4.6.1.3.1** The Contractor shall conduct the growth, evolution and obsolescence program in accordance with the Approved GP.

**4.6.1.3.2** In developing the design solutions for the Mission System and Support System, the Contractor shall analyse, in accordance with the Approved GP, potential areas of growth and technology evolution over the design, development and production phases and Life of Type (LOT) of the systems.

**4.6.1.3.3** The Contractor shall incorporate the strategies and design approaches, as defined in the Approved GP, into the design and design artefacts for the Mission System and Support System.

**4.6.2 Integrated Reliability, Maintainability and Testability Engineering Program****4.6.2.1 Program Objectives**

**4.6.2.1.1** The Contractor acknowledges that the objectives of the Contractor's Integrated Reliability, Maintainability and Testability (IRMT) engineering program are to simultaneously optimise:

- a. the operational readiness and mission success of the Mission System;
- b. the demand for maintenance manpower and logistic support;
- c. the provision of essential management information; and
- d. the impacts of the IRMT engineering program on overall program cost and schedule.

**4.6.2.2 Planning**

**4.6.2.2.1** The Contractor shall develop, deliver and update an IRMT Plan (IRMTP), in accordance with CDRL Line Number ENG-130.

**4.6.2.3 Program Activities**

**Notes to drafters: Selection of RMT activities will depend on the project requirements. Drafters should note that the potential RMT activities include the Failure Mode, Effects and Criticality Analysis (FMECA) and Reliability Centred Maintenance (RCM) activities under the ILS clause. Selection of activities to be specified should be tailored in consultation with the appropriate RAM centre of expertise.**

**4.6.2.3.1** The Contractor shall conduct the IRMT engineering program in accordance with the Approved IRMTP.

**4.6.2.3.2** The Contractor shall address any requirements to conduct Failure Mode, Effects and Criticality Analysis (FMECA) and Reliability Centred Maintenance (RCM) under clause 5 of the SOW as part of the IRMT engineering program.

**4.6.3 Logistics Engineering****4.6.3.1 Mission System Standardisation Opportunities (Optional)**

**Notes to drafters:**

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- a. *The extent to which analysis of Standardisation Opportunities may be conducted will depend to a large degree on the nature of the acquisition being pursued. In the case of an acquisition being Commercial-Off-The-Shelf (COTS) or Military-Off-The-Shelf (MOTS) or a modification of a COTS or MOTS solution, the effectiveness and value in conducting this analysis will be somewhat limited.***
- b. *In the case when standardisation needs to be addressed, not just within the boundaries of the solution being offered, but standardisation with respect to extant Commonwealth equipment and items, the Commonwealth will need to ensure that the Contractor identifies timing and scope of the information that needs to be delivered from the Commonwealth to the Contractor.***

**4.6.3.1.1** The Contractor shall analyse, in accordance with the Approved ISP, the design of the Mission System to identify potential Standardisation Opportunities to improve the supportability of the Mission System.

***Note to drafters: The ISP will require the Contractor to describe how they conduct trade studies, technological opportunities analysis, analysis of system alternatives etc and where this information will be recorded.***

**4.6.3.1.2** The Contractor shall develop, deliver and update to the Commonwealth, in accordance with the Approved ISP, the range of Standardisation Opportunities resulting from the analyses conducted under clause 4.6.3.1.1.

**4.6.3.2 Mission System Technological Opportunities (Optional)**

***Notes to drafters:***

- a. *The ability to take advantage of Technological Opportunities will depend to a large degree on the nature of the acquisition being pursued. In the case of an acquisition being Commercial-Off-The-Shelf (COTS) or Military-Off-The-Shelf (MOTS) or a modification of a COTS or MOTS solution, the effectiveness and value in conducting a technological opportunities analysis will be somewhat limited.***
- b. *In the case of other types of acquisitions, a value judgement needs to be made on this analysis depending on the maturity of the solution being offered by the Contractor. If the Contractor's proposed solution is using state-of-practice technology versus state-of-art technology, the risks of pursuing potentially high-risk new technology needs careful examination before requiring the Contractor to conduct such analysis.***

**4.6.3.2.1** The Contractor shall analyse, in accordance with the Approved ISP, the design of the Mission System to identify potential Technological Opportunities to improve the supportability of the Mission System.

***Note to drafters: The ISP will require the Contractor to describe how they conduct trade studies, technological opportunities analysis, analysis of system alternatives etc and where this information will be recorded.***

**4.6.3.2.2** The Contractor shall develop, deliver and update to the Commonwealth, in accordance with the Approved ISP, the range of Technological Opportunities resulting from the analyses conducted under clause 4.6.3.2.1.

**4.6.3.3 Mission System Supportability-Related Design Factors**

***Notes to drafters: For guidance on potential supportability design characteristics (other than Technological Opportunities, Standardisation Opportunities, reliability, maintainability and testability), refer to MIL-HDBK-502.***

***If this analysis activity is invoked in the Contract, ensure that the supportability characteristics defined by the Contractor are consistent with the requirements in the Contract specification.***

***Supportability-related design characteristics, when identified, should be documented in the System Specification developed by the Contractor.***

**4.6.3.3.1** The Contractor shall define supportability-related design factors for the Mission System.

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**4.6.3.3.2** The Contractor shall document, in the System Specification (CDRL Line Item ENG-310), the defined supportability-related design factors for the Mission System.

**4.6.3.4 Logistics Support Analysis Record (LSAR) (Optional)**

***Option: For use if a Logistics Support Analysis Record (LSAR) is being developed and delivered as part of the Contract.***

**4.6.3.4.1** The Contractor shall update the Logistics Support Analysis Record (LSAR) to reflect the outcomes from undertaking the activities under clauses 4.6.1, 4.6.2 and 4.6.3 of this SOW.

**4.6.4 Human Engineering**

***Note to drafters: This clause may mandate or recommend particular Human Engineering (HE) standards as guidance, such as MIL-HDBK-46855A and MIL-STD-1472F. Consideration should be given to:***

- a. aligning the choice of these standards with the Contractor's work practices; and***
- b. establishing an HE Working Group to develop the relevant system aspects in a joint Commonwealth-Contractor environment as the design progresses.***

***Note to drafters: In the case of aircraft-related contracts, AAP7001.054 provides relevant guidance.***

***Often, the high-risk nature of HE and human-computer interaction in particular warrants a more-detailed statement of the Commonwealth's involvement in the HE process. This clause of the SOW may need to address:***

- a. how the HE requirements may be specified, ie what documentation may need to be developed;***
- b. the Commonwealth Approval rights over HE documentation; and***
- c. Commonwealth visibility of intermediate stages of developing HE solutions to enable wider end-user review and feedback.***

**4.6.4.1 Program Objectives**

**4.6.4.1.1** The Contractor acknowledges that the objectives of the Human Engineering (HE) program are to:

- a. develop or improve the human interfaces of the Mission System and Support System;**
- b. achieve required effectiveness of human performance during system operation, maintenance, support, control, and transportation; and**
- c. make economical demands upon personnel resources, skills, training, and costs.**

**4.6.4.2 Planning**

**4.6.4.2.1** The Contractor shall develop, deliver and update a Human Engineering Program Plan (HEPP) in accordance with CDRL Line Number ENG-120.

**4.6.4.3 Program Activities**

**4.6.4.3.1** The Contractor shall conduct the HE program in accordance with the Approved HEPP.

**4.6.4.3.2** The Contractor's HE program shall include determination of physical layout, Human System Interface (HSI) development, and human workload analysis.

***Note to drafters: A DID for the Human Engineering Program Report is available in the ASDEFCON (Complex Materiel) Standard Assets.***

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**4.6.4.3.3** The Contractor shall develop, deliver and update a Human Engineering Program Report in accordance with CDRL Line Number ENG-125.

**4.6.5 Electromagnetic Environmental Effects**

***Note to drafters: This clause may mandate or recommend particular electromagnetic interference and compatibility standards as guidance, such as MIL-STD-461, MIL-STD-464 and commercial equivalents.***

***Consideration should be given to aligning the choice of these standards with the Contractor's work practices and the appropriate regulatory and operational environment for the Mission System and Support System.***

***In the case of aircraft-related contracts, DGTA-SCI must be consulted to establish airworthiness certification requirements. AAP7001.054 provides relevant guidance.***

**4.6.5.1 Program Objectives**

**4.6.5.1.1** The Contractor acknowledges that the objectives of the electromagnetic environmental effects (E3) program are to:

- a. [...INSERT APPLICABLE OBJECTIVES...]

**4.6.5.2 Planning**

**4.6.5.2.1** The Contractor shall develop, deliver and update a [...INSERT APPLICABLE PLAN...] in accordance with CDRL Line Number [...INSERT APPLICABLE CDRL LINE NUMBER...].

**4.6.5.3 Program Activities**

**4.6.5.3.1** The Contractor shall conduct the E3 program in accordance with the Approved [...INSERT APPLICABLE PLAN...].

**4.6.6 Safety**

***Note to drafters: This clause may mandate or recommend contemporary safety standards that satisfy Regulatory or Project Safety requirements. Project Safety requirements must be understood early in the lifecycle to ensure that appropriate safety standards are chosen and adopted. The Commonwealth preferred approach is to always work with robust Safety Standards that the Contractor is experienced with and are commensurate with the safety risks of the Contract. Software Safety must be considered in any System Safety Program. Furthermore, there is merit in the project team ensuring OHS risks are captured and considered early in the lifecycle along with the technical Mission and Support System safety risks.***

***In the case of airworthiness projects, DGTA-ADF must be consulted to establish airworthiness certification requirements relating to safety. AAP7001.054 refers.***

***In the case of explosive ordnance projects, Director Ordnance Safety must be consulted to establish EO-worthiness requirements.***

***In the case of land projects, DTRA must be consulted to establish land worthiness requirements. TRAMM refers.***

***In the case of maritime projects, DGNAVSYS must be consulted to establish RAN certification requirements. ABR6492 refers.***

***Note to tenderers: The tenderer shall identify its proposed software safety standards in the SMP.***

**4.6.6.1 Program Objectives**

**4.6.6.1.1** The Contractor acknowledges that the objectives of the system safety program are to:

- a. implement and manage an auditable hazard management system that is both approved and based on an approved standard;

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- b. reduce, eliminate or mitigate the effects of identified hazards in accordance with safety requirements;
- c. develop and deliver a Mission System and Support System that are safe within acceptable levels of risk; and
- d. verify that the final system designs for the Mission System and Support System satisfy the previously identified safety requirements, and that no new hazards have been introduced during system design.

**4.6.6.2 Planning**

**4.6.6.2.1** The Contractor shall develop, deliver and update a Systems Safety Program Plan (SSPP) in accordance with CDRL Line Number ENG-110.

**4.6.6.3 Program Activities**

**4.6.6.3.1** The Contractor shall conduct all safety-related activities for the Contract in accordance with the Approved SSPP.

***Option: For use if a Preliminary Hazard Analysis was not completed prior to the Effective Date or for use if an updated Preliminary Hazard Analysis Report is required to be delivered under the Contract.***

**4.6.6.3.2** The Contractor shall develop, deliver and update a Preliminary Hazard Analysis Report (PHAR) in accordance with CDRL Line Number ENG-525.

***Note to drafters: Each Technical Regulatory Authority has Safety Case Report requirements that may need to extend or replace the ASDEFCON SCR deliverables. Domain publications refer.***

**4.6.6.3.3** The Contractor shall develop, deliver and update a Safety Case Report (SCR) in accordance with CDRL Line Number ENG-520.

**4.6.7 System Security**

***Note to drafters: This clause is intended to address the design of appropriate security features of the Mission and Support Systems. It should include a security program in accordance with the Defence Security Manual (DSM) or equivalent, development of a security architecture plan, an accreditation plan, issues of timing and Commonwealth involvement.***

**4.6.7.1 Program Objectives**

**4.6.7.1.1** The Contractor acknowledges that the objectives of the system security program are to:

- a. [...INSERT APPLICABLE OBJECTIVES...]

**4.6.7.2 Planning**

**4.6.7.2.1** The Contractor shall develop, deliver and update a [...INSERT APPLICABLE PLAN...] in accordance with CDRL Line Number [...INSERT APPLICABLE CDRL LINE NUMBER...].

**4.6.7.3 Program Activities**

**4.6.7.3.1** The Contractor shall conduct the system security program in accordance with the Approved [...INSERT APPLICABLE PLAN...].

**4.6.8 Aircraft Type Certification (Optional)**

***Note to drafters: SOW clauses need to address the contents of the Type Certification Program and associated plan. The Type Certification Plan must present a comprehensive proposal for the aircraft Certification Basis Description (CBD) that allows certification risk to be assessed. This CBD must be prepared in accordance with AAP7001.054.***

***In the case of aircraft-related contracts, DGTA-SCI must be consulted to establish airworthiness certification requirements. AAP7001.054 provides relevant guidance.***

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***In addition to the areas already noted in this SOW template, the following areas must be considered:***

- a. Aircraft Structural Integrity;***
- b. Engine Structural Integrity;***
- c. Aircraft Electrical Loads Analysis;***
- d. Stores Clearance;***
- e. Environmental Control Systems Analysis.***

**4.6.9 Access to the Radiofrequency Spectrum**

***Note to drafters: If access to the Radiofrequency Spectrum is likely to be required or may be offered as a 'solution', then the following paragraphs must be inserted into this clause and CDRL Line Number ENG-530 must be included in the CDRL.***

***Drafters should ensure that technical requirements relating to access to the Radiofrequency Spectrum, including interoperability requirements, are included in the Function and Performance Specification (FPS), with the associated Verification requirements included in the Verification Cross Reference Matrix (VCRM) that accompanies the FPS. Additionally, drafters should ensure that the operational context and appropriate operational scenarios are included in the Operational Concept Document (OCD). Finally, drafters should ensure that any significant Verification requirements are included in the Test Concept Document (TCD).***

***Drafters should ensure that the requirements pertaining to access to the Radiofrequency Spectrum are harmonised with the related requirements pertaining to Electromagnetic Environmental Effects.***

- 4.6.9.1** The Contractor shall develop, deliver and update an Equipment Certification to Access Radiofrequency Spectrum (ECARS) in accordance with CDRL Line Number ENG-530.

***Note to drafters: If Radiofrequency Spectrum issues are likely to be significant, consideration should be given to including requirements for site surveys and associated survey reports if these requirements are not addressed elsewhere in the SOW or have not been otherwise addressed (e.g. through pre-Contract activities). A site survey to investigate the likely Radiofrequency Spectrum issues at proposed equipment locations could be a worthwhile activity to include as part of the offer definition phase.***

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## 5. INTEGRATED LOGISTICS SUPPORT

## 5.1 Integrated Logistics Support Program (Core)

## 5.1.1 ILS Program Objectives

5.1.1.1 The Contractor acknowledges that the objectives of the Contractor's Integrated Logistics Support (ILS) program are to achieve the following outcomes:

- a. a Mission System that has been designed for supportability;
- b. a Support System that has been designed to meet the Mission System support requirements, while seeking to minimise Life Cycle Cost (LCC) to the Commonwealth; and
- c. the implementation of the Support System.

## 5.1.2 ILS Program Management

## 5.1.2.1 Planning

**Note to drafters: The following set of ILS program plans (and subsequent clauses in the ILS clause of this SOW) should be tailored based on the scope and risks associated with the ILS program. The ISP contains a series of optional clauses, such that, if the specific plans listed below are not included in the Contract, then the ISP must address the issues that would otherwise be addressed in the specific plans.**

5.1.2.1.1 The Contractor shall develop, deliver and update the following ILS program plans:

- a. an Integrated Support Plan (ISP) in accordance with CDRL Line Number ILS-100;
- b. a Supply Support Development Plan (SSDP) in accordance with CDRL Line Number ILS-800;
- c. a Training Support Plan (TSP) in accordance with CDRL Line Number ILS-900;
- d. a Technical Data Plan (TDP) in accordance with CDRL Line Number ILS-1000;
- e. a Support and Test Equipment Plan (S&TEP) in accordance with CDRL Line Number ILS-1100; and
- f. a Facilities Plan (FACP) in accordance with CDRL Line Number ILS-1200.

5.1.2.1.2 The Contractor shall conduct the ILS program in accordance with the Approved ILS program plans.

5.1.2.1.3 The Contractor shall develop a schedule of ILS program activities as part of the Contract Master Schedule (CMS).

## 5.1.2.2 Mandated System Reviews

**Note to drafters: The Mandated System Reviews in the following clause are indicative only, and the inclusion of specific reviews should be based upon the scope and risks associated with that element of the Contract. SRR, SDR, SSDDR, and FCA/PCA should not be tailored out of the SOW.**

5.1.2.2.1 As part of the ILS program, the Contractor shall conduct the following System Reviews in accordance with clause 4.1.5:

- a. Mandated System Reviews, as follows:
  - (i) SRR, at which both the Mission System and Support System are addressed;
  - (ii) SDR, at which both the Mission System and Support System are addressed;
  - (iii) PDR, at which Mission System Supportability and Support System Components are addressed;
  - (iv) DDR, at which Mission System Supportability and Support System Components are addressed;

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- (v) Support System Detailed Design Review (SSDDR);
- (vi) Task Analysis Requirements Review (TARR);
- (vii) Long Lead Time Items (LLTIs) Review(s) (LLTIR(s));
- (viii) Provisioning Preparedness Reviews (PPR) for Spares, Support and Test Equipment (S&TE), and Training Equipment;
- (ix) Facilities Readiness Review (FACRR);
- (x) Training Readiness Review (TNGRR); and
- (xi) Functional Configuration Audit (FCA) and Physical Configuration Audit (PCA) for Support System Components; and

b. Internal System Reviews.

**5.1.2.2.2** If the Commonwealth Representative agrees, the Contractor may conduct those Mandated System Reviews, which form a part of the ILS program, concurrently with other Mandated System Reviews if the entry criteria, exit criteria, and objectives of those reviews can be simultaneously achieved.

**5.1.2.3 Support System Detailed Design Review**

**5.1.2.3.1** The Contractor acknowledges that the objectives of the Support System Detailed Design Review (SSDDR) are to demonstrate that:

- a. specifications and/or drawings or software development documentation for Support System Components have been appropriately defined;
- b. the design of the Support System Components will enable the Mission System and Support System Functional Baselines to be met;
- c. the design of the Support System Constituent Capabilities have been adequately defined; and
- d. the Support System Components are either ready for further development, adequately defined for procurement, or adequately defined for fabrication.

**5.1.2.3.2** At the completion of the detailed design phase for the Support System, the Contractor shall hold a Mandated System Review, the SSDDR.

**5.1.2.3.3** The Contractor's entry criteria, exit criteria, and objectives for the SSDDR shall include those defined in DMO-CHECKLIST-SSDDR.

**5.1.2.4 Task Analysis Requirements Review**

**5.1.2.4.1** The Contractor acknowledges that the objectives of the Task Analysis Requirements Review (TARR) are to:

- a. demonstrate that Support Resources, procedures, and Competencies associated with each task are sufficiently complete to enable the production of task based publications and Training Course Materials; and
- b. allow for the review of the completed Task Analysis Report (TAR).

**5.1.2.4.2** At the completion of task analysis for the Support System Constituent Capabilities, the Contractor shall hold a Mandated System Review, the TARR.

**5.1.2.4.3** The TARR may be conducted as a series of reviews, as dictated by the Contractor's development program.

**5.1.2.4.4** The Contractor's entry criteria, exit criteria, and objectives for the TARR shall include those defined in DMO-CHECKLIST-TARR.

**5.1.2.5 Long Lead Time Items Review**

**5.1.2.5.1** The Contractor acknowledges that the objective of the Long Lead Time Items Review (LLTIR) is to review the Contractor's recommendations for procurement of Long Lead Time Items (LLTIs), prior to formal procurement action of the LLTIs being initiated.

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- 5.1.2.5.2** Prior to procuring any LLTIs, the Contractor shall hold a Mandated System Review, the LLTIR.
- 5.1.2.5.3** The Contractor's entry criteria, exit criteria, and objectives for the LLTIR shall include those defined in DMO-CHECKLIST-LLTIR.
- 5.1.2.6 Spares Provisioning Preparedness Review (Core)**
- 5.1.2.6.1** The Contractor acknowledges that the objective of the Spares Provisioning Preparedness Review (SPPR) is to review the Recommended Spares Provisioning List (RSPL) and the associated Spares-optimisation model prior to formal action to procure or develop Spares being initiated.
- 5.1.2.6.2** Prior to producing or procuring any Spares that are not classified as LLTIs, the Contractor shall hold a Mandated System Review, the SPPR.
- 5.1.2.6.3** The Contractor's entry criteria, exit criteria, and objectives for the SPPR shall include those defined in DMO-CHECKLIST-SPPR.
- 5.1.2.7 S&TE Provisioning Preparedness Review**
- 5.1.2.7.1** The Contractor acknowledges that the objective of the S&TE Provisioning Preparedness Review (S&TEPPR) is to review the S&TE Provisioning List (S&TEPL) prior to formal procurement action of S&TE being initiated.
- 5.1.2.7.2** Prior to producing or procuring any S&TE that are not classified as LLTIs, the Contractor shall hold a Mandated System Review, the S&TEPPR.
- 5.1.2.7.3** The Contractor's entry criteria, exit criteria, and objectives for the S&TEPPR shall include those defined in DMO-CHECKLIST-S&TEPPR.
- 5.1.2.8 Training Equipment Provisioning Preparedness Review**
- 5.1.2.8.1** The Contractor acknowledges that the objective of the Training Equipment Provisioning Preparedness Review (TEPPR) is to review the Training Equipment and Materials List (TEML) prior to formal procurement action of Training Equipment being initiated.
- 5.1.2.8.2** Prior to producing or procuring any Training Equipment that is not classified as LLTI, the Contractor shall hold a Mandated System Review, the TEPPR.
- 5.1.2.8.3** The Contractor's entry criteria, exit criteria, and objectives for the TEPPR shall include those defined in DMO-CHECKLIST-TEPPR.
- 5.1.2.9 Training Readiness Review**
- 5.1.2.9.1** The Contractor acknowledges that the objective of the Training Readiness Review (TNGRR) is to confirm that all Training elements are in place and functional to enable Training to proceed effectively.
- 5.1.2.9.2** After delivery and, if applicable, installation of all Training Supplies, and prior to the conduct of any Training, the Contractor shall hold a Mandated System Review, the TNGRR.
- 5.1.2.9.3** The Contractor's entry criteria, exit criteria, and objectives for the TNGRR shall include those defined in DMO-CHECKLIST-TNGRR.
- 5.1.2.10 Facilities Readiness Review**
- 5.1.2.10.1** The Contractor acknowledges that the objective of the Facilities Readiness Review (FACRR) is to confirm that the new or modified Facilities, including fixed plant, furniture, and fittings, are ready for hand-over to the Commonwealth.
- 5.1.2.10.2** After completing the implementation of all Facilities requirements identified for delivery to the Commonwealth, the Contractor shall hold a Mandated System Review, the FACRR.
- 5.1.2.10.3** The Contractor's entry criteria, exit criteria, and objectives for the FACRR shall include those defined in DMO-CHECKLIST-FACRR.

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**5.2 Logistics Support Analysis (LSA) Program (Core)****5.2.1 LSA Program Management**

**5.2.1.1** The Contractor shall conduct the LSA program in accordance with the Approved ISP.

**5.2.2 Support System Definition****5.2.2.1 Support System Requirements Validation****Notes to drafters:**

**a.** *This clause 5.2.2.1 assumes that the Logistic Support Concept (LSC) and Use Study have been incorporated into the OCD. If not, then the clause will require amendment.*

**b.** *The following clause will also require amendment if a support contract does not exist.*

**5.2.2.1.1** The Contractor shall develop and validate a set of requirements for the Support System based on:

- a. the initial Commonwealth requirements as defined by the Function and Performance Specification (FPS);
- b. an analysis of the OCD, this SOW, and the Contract (Support) to extract Commonwealth end-user needs and objectives to:
  - (i) confirm that all of the functional and performance requirements and constraints for the Support System have been captured; and
  - (ii) ensure that the Mission System and Support System are able to be operated and supported in accordance with the OCD;
- c. the requirements of government regulatory organisations;
- d. other Defence stakeholder requirements, as facilitated by the Commonwealth Representative; and
- e. the Contractor's domain experience.

**5.2.2.1.2** The Contractor shall develop, deliver and update the validated set of requirements for the Support System as the Support System Specification (SSSPEC) in accordance with CDRL Line Number ILS-200.

**Note to drafters:** *The following clause may require amendment to reflect the specific requirements of a project and current strategic guidance with respect to the types of operations expected to be undertaken.*

**5.2.2.1.3** The SSSPEC shall address the Support System requirements relating to the states of normal peacetime operations, deployed operations, and contingency operations, as described in the OCD.

**Note to drafters:** *Following the completion of the System Definition Review, the SSSPEC is intended to be the basis for the remaining Support System design-and-development effort under the Contract.*

**5.2.2.1.4** The Contractor shall submit a CCP to establish the SSSPEC as the Functional Baseline for the Support System and hence the basis for development and Verification of the Support System.

**5.2.2.1.5** Prior to each Mandated System Review, the Contractor shall propose changes to the OCD that would address any inconsistencies between the OCD and the SSSPEC.

**5.2.2.1.6** Where the Contractor proposes to change the OCD in accordance with clause 5.2.2.1.5 the Contractor shall submit a CCP to incorporate the proposed change into the Contract.

**5.2.2.2 Support System Logical Solution Representations**

**5.2.2.2.1** The Contractor shall define a validated set of Logical Solution Representations for the Support System that conforms with the Support System requirements.

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**5.2.2.2.2** The Contractor shall document the defined, validated set of Logical Solution Representations for the Support System.

**5.2.2.3 Support System Analysis**

**Note to tenderers: The potential Support System alternatives and the recommendation for the preferred alternative are expected to be subjects at the SRR, SDR and subsequent Mandated System Reviews.**

**5.2.2.3.1** The Contractor shall analyse the design of the Support System to identify potential Support System alternatives that satisfy the Support System Functional Baseline.

**5.2.2.3.2** The Contractor shall analyse the life cycle benefits, costs and risks associated with each potential Support System alternative to select the alternative that meets the Support System requirements, while minimising LCC under clause 3.11 of the SOW (Life Cycle Cost (LCC)).

**Note to drafters: The ISP will be asking the Contractor to describe how they conduct trade studies, technological opportunities analysis, analysis of system alternatives, etc and where this information will be recorded.**

**5.2.2.3.3** The Contractor shall develop, deliver and update a Support System Description (SSDESC), in accordance with CDRL Line Number ILS-210, to document the preferred Support System alternative resulting from the analyses conducted under clauses 5.2.2.3.1 and 5.2.2.3.2.

**5.2.3 Operating Support Design**

**5.2.3.1 Operating Tasks**

**Note to drafters: The following clause assumes that the operator is considered to be a part of the Mission System for the purposes of the design and development of the Mission System and its associated support.**

**5.2.3.1.1** The Contractor shall identify the tasks required to operate the Mission System, which enable the Mission System Functional Baseline to be satisfied.

**5.2.3.1.2** The Contractor shall develop, deliver and update a Task Inventory Report, in accordance with CDRL Line Number ILS-300, which identifies the tasks required to operate the Mission System.

**Option: For use if an LSAR is being developed under the Contract.**

**5.2.3.1.3** The Contractor shall update the LSAR to reflect the identified tasks required to operate the Mission System.

**5.2.3.2 Resource Requirements for Operating the Mission System**

**5.2.3.2.1** The Contractor shall identify the Support Resources required to operate the Mission System, which enable the Mission System Functional Baseline to be satisfied.

**5.2.3.2.2** The Contractor shall develop, deliver and update a Task Resources Report, in accordance with CDRL Line Number ILS-310, which identifies the Support Resources required to operate the Mission System.

**Option: For use if an LSAR is being developed under the Contract.**

**5.2.3.2.3** The Contractor shall update the LSAR to reflect the identified Support Resources required to operate the Mission System.

**5.2.3.3 Procedures for Operating the Mission System**

**5.2.3.3.1** The Contractor shall define the procedures for conducting the tasks required to operate the Mission System.

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- 5.2.3.3.2** The Contractor shall develop, deliver and update a Task Procedures Report, in accordance with CDRL Line Number ILS-320, which defines the procedures for conducting the tasks required to operate the Mission System.

**Option: For use if an LSAR is being developed under the Contract.**

- 5.2.3.3.3** The Contractor shall update the LSAR to reflect the defined procedures required to operate the Mission System.

**5.2.3.4 Personnel Competency Requirements for Operating the Mission System**

**Note to drafters: The Personnel Competency requirements identified in this clause of the SOW will be used as an input to the Training Needs Analysis.**

- 5.2.3.4.1** The Contractor shall define the Personnel Competency requirements for conducting the tasks required to operate the Mission System.

- 5.2.3.4.2** The Contractor shall develop, deliver and update a Task Personnel Competency Report, in accordance with CDRL Line Number ILS-330, which defines the Personnel Competency requirements for conducting the tasks required to operate the Mission System.

**Option: For use if an LSAR is being developed under the Contract.**

- 5.2.3.4.3** The Contractor shall update the LSAR to reflect the defined Personnel Competency requirements for conducting the tasks required to operate the Mission System.

**5.2.4 Engineering Support Design**

**5.2.4.1 Engineering Support Tasks**

- 5.2.4.1.1** The Contractor shall identify the tasks required to provide Engineering Support for both the Mission System and Support System Components, which enable the Support System Functional Baseline to be satisfied.

- 5.2.4.1.2** The Contractor shall develop, deliver and update a Task Inventory Report, in accordance with CDRL Line Number ILS-400, which identifies the tasks required to provide Engineering Support for both the Mission System and Support System Components.

**5.2.4.2 Resource Requirements for Engineering Support**

- 5.2.4.2.1** The Contractor shall identify the Support Resources required to provide Engineering Support for both the Mission System and Support System Components, which enable the Support System Functional Baseline to be satisfied.

- 5.2.4.2.2** The Contractor shall develop, deliver and update a Task Resources Report, in accordance with CDRL Line Number ILS-410, which identifies the Support Resources required to provide Engineering Support for both the Mission System and Support System Components.

**5.2.4.3 Procedures for Engineering Support**

- 5.2.4.3.1** The Contractor shall define the procedures for conducting the tasks required to provide Engineering Support for both the Mission System and Support System Components.

- 5.2.4.3.2** The Contractor shall develop, deliver and update a Task Procedures Report, in accordance with CDRL Line Number ILS-420, which defines the procedures for conducting the tasks required to provide Engineering Support for both the Mission System and Support System Components.

**5.2.4.4 Personnel Competency Requirements for Engineering Support**

**Note to drafters: The Personnel Competency requirements identified in this clause of the SOW will be used as an input to the Training Needs Analysis.**

- 5.2.4.4.1** The Contractor shall define the Personnel Competency requirements for conducting the tasks required to provide Engineering Support for both the Mission System and Support System Components.

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**5.2.4.4.2** The Contractor shall develop, deliver and update a Task Personnel Competency Report, in accordance with CDRL Line Number ILS-430, which defines the Personnel Competency requirements for conducting the tasks required to provide Engineering Support for both the Mission System and Support System Components.

**5.2.4.5 Software Support**

**5.2.4.5.1** The Contractor shall develop, deliver and update a Software Support Plan (SWSP) in accordance with CDRL Line No ILS-1300.

**5.2.5 Maintenance Support Design**

**5.2.5.1 Corrective Maintenance Tasks**

**5.2.5.1.1** The Contractor shall identify the Corrective Maintenance tasks to be conducted at each level of maintenance for both the Mission System and Support System Components, which enable the Support System Functional Baseline to be satisfied.

**5.2.5.1.2** Unless otherwise agreed by the Commonwealth Representative, the scope of task identification undertaken under clause 5.2.5.1.1 shall include those Corrective Maintenance tasks undertaken by the Commonwealth and any Contractors (Support) and Subcontractors (Support).

**5.2.5.1.3** The Contractor shall develop, deliver and update a Task Inventory Report, in accordance with CDRL Line Number ILS-500, which identifies the Corrective Maintenance tasks to be conducted at each level of maintenance for both the Mission System and Support System Components.

***Option: For use if an LSAR is being developed under the Contract.***

**5.2.5.1.4** The Contractor shall update the LSAR to reflect the identified Corrective Maintenance tasks to be conducted at each level of maintenance for both the Mission System and Support System Components.

**5.2.5.1.5** The Contractor shall develop, deliver and update a Failure Mode, Effects and Criticality Analysis (FMECA) Report, in accordance with CDRL Line Number ILS-540, which describes the analyses underpinning, and the identified causes for, Corrective Maintenance tasks to be conducted for both the Mission System and Support System Components.

**5.2.5.2 Preventive Maintenance Tasks**

**5.2.5.2.1** The Contractor shall identify the Preventive Maintenance tasks to be conducted at each level of maintenance for both the Mission System and Support System Components, which enable the Support System Functional Baseline to be satisfied.

**5.2.5.2.2** Unless otherwise agreed by the Commonwealth Representative, the scope of task identification undertaken under clause 5.2.5.2.1 shall include those Preventive Maintenance tasks undertaken by the Commonwealth and any Contractors (Support) and Subcontractors (Support).

**5.2.5.2.3** The Contractor shall develop, deliver and update a Task Inventory Report, in accordance with CDRL Line Number ILS-500, which identifies the Preventive Maintenance tasks to be conducted at each level of maintenance for both the Mission System and Support System Components.

***Option: For use if an LSAR is being developed under the Contract.***

**5.2.5.2.4** The Contractor shall update the LSAR to reflect the identified Preventive Maintenance tasks to be conducted at each level of maintenance for both the Mission System and Support System Components.

***Note to drafters: The RCM logic model may need to be specified in the SOW because this model will be dictated by regulatory certification requirements (eg, the RCM logic model used for aircraft may come from MIL-STD-2173, MSG-2 or MSG-3 and will need a decision by the appropriate regulatory authorities and certification agencies). Ensure that the appropriate***

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***regulatory agency is consulted before proceeding. If this is the case, insert a new clause specifying the required RCM logic model.***

**5.2.5.2.5** The Contractor shall develop, deliver and update a Reliability Centred Maintenance (RCM) Analysis Report, in accordance with CDRL Line Number ILS-550, which describes the analyses underpinning, and the identified causes for, Preventive Maintenance tasks to be conducted for both the Mission System and Support System Components.

**5.2.5.3 Maintenance Levels and Repair Policies for Maintenance Tasks**

**5.2.5.3.1** The Contractor shall identify:

- a. the maintenance levels, at which Corrective Maintenance tasks and Preventive Maintenance tasks are to be performed for both the Mission System and the Support System Components; and
- b. the repair policies for each of the Mission System Spares and the Support System Components at each level of maintenance (eg, repair, discard, etc),

which satisfy the Support System Functional Baseline.

**5.2.5.3.2** The Contractor shall develop, deliver and update a Level Of Repair Analysis (LORA) Report, in accordance with CDRL Line Number ILS-560, which identifies the maintenance levels at which Corrective Maintenance tasks and Preventive Maintenance tasks are to be performed and the repair policies for both the Mission System and the Support System Components that satisfy the Support System Functional Baseline.

***Option: For use if an LSAR is being developed under the Contract.***

**5.2.5.3.3** The Contractor shall update the LSAR to reflect the identified maintenance levels at which Corrective Maintenance tasks and Preventive Maintenance tasks are to be performed and the repair policies for both the Mission System and the Support System Components.

**5.2.5.4 Maintenance Resource Requirements**

**5.2.5.4.1** The Contractor shall identify the Support Resources required for conducting the identified Corrective Maintenance tasks and Preventive Maintenance tasks at each level of maintenance for both the Mission System and the Support System Components, which enable the Support System Functional Baseline to be satisfied.

**5.2.5.4.2** The Contractor shall develop, deliver and update a Task Resources Report, in accordance with CDRL Line Number ILS-510, which identifies the Support Resources required for conducting the identified Corrective Maintenance tasks and Preventive Maintenance tasks at each level of maintenance for both the Mission System and the Support System Components.

***Option: For use if an LSAR is being developed under the Contract.***

**5.2.5.4.3** The Contractor shall update the LSAR to reflect the identified Support Resources required for conducting the identified Corrective Maintenance tasks and Preventive Maintenance tasks at each level of maintenance for both the Mission System and the Support System Components.

**5.2.5.5 Maintenance Procedures**

**5.2.5.5.1** The Contractor shall define the procedures for conducting all identified maintenance tasks for both the Mission System and the Support System Components.

**5.2.5.5.2** The Contractor shall develop, deliver and update a Task Procedures Report, in accordance with CDRL Line Number ILS-520, which defines the procedures for conducting the tasks required to provide Maintenance-Support for both the Mission System and the Support System Components.

***Option: For use if an LSAR is being developed under the Contract.***

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**5.2.5.5.3** The Contractor shall update the LSAR to reflect the defined procedures for conducting the tasks required to provide Maintenance Support for both the Mission System and the Support System Components.

**5.2.5.6 Maintenance Support Personnel Competency Requirements**

**Note to drafters: The Personnel Competency requirements identified in this clause of the SOW will be used as an input to the Training Needs Analysis.**

**5.2.5.6.1** The Contractor shall define the Personnel Competency requirements for conducting the tasks required to provide Maintenance-Support for both the Mission System and the Support System Components.

**5.2.5.6.2** The Contractor shall develop, deliver and update a Task Personnel Competency Report, in accordance with CDRL Line Number ILS-530, which defines the Personnel Competency requirements for conducting the tasks required to provide Maintenance-Support for both the Mission System and the Support System Components.

**Option: For use if an LSAR is being developed under the Contract.**

**5.2.5.6.3** The Contractor shall update the LSAR to reflect the defined Personnel Competency requirements for conducting the tasks required to provide Maintenance Support for both the Mission System and the Support System Components.

**5.2.6 Supply Support Design****5.2.6.1 Supply Support Tasks**

**5.2.6.1.1** The Contractor shall identify the tasks required to provide Supply Support at, and between, each level of maintenance for both the Mission System and Support System Components, which enable the Support System Functional Baseline to be satisfied.

**5.2.6.1.2** Unless otherwise agreed by the Commonwealth Representative, the scope of task identification undertaken under clause 5.2.6.1.1 shall include those Supply-Support tasks undertaken by the Commonwealth and any Contractors (Support) and Subcontractors (Support).

**5.2.6.1.3** The Contractor shall develop, deliver and update a Task Inventory Report, in accordance with CDRL Line Number ILS-600, which identifies the task required to provide Supply Support at, and between, each level of maintenance for both the Mission System and the Support System Components.

**Option: For use if an LSAR is being developed under the Contract.**

**5.2.6.1.4** The Contractor shall update the LSAR to reflect the identified tasks required to provide Supply Support at, and between, each level of maintenance for both the Mission System and the Support System Components.

**5.2.6.2 Supply Support Resource Requirements**

**5.2.6.2.1** The Contractor shall identify the Support Resources required to provide Supply Support at, and between, each level of maintenance for both the Mission System and the Support System Components, which enable the Support System Functional Baseline to be satisfied.

**5.2.6.2.2** The Contractor shall develop, deliver and update a Task Resources Report, in accordance with CDRL Line Number ILS-610, which identifies the Support Resources required to provide Supply Support tasks at, and between, each level of maintenance for both the Mission System and the Support System Components.

**Option: For use if an LSAR is being developed under the Contract.**

**5.2.6.2.3** The Contractor shall update the LSAR to reflect the identified Support Resources required to provide Supply Support at, and between, each level of maintenance for both the Mission System and the Support System Components.

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**5.2.6.3.1** The Contractor shall define the procedures for conducting the tasks required to provide Supply Support for both the Mission System and the Support System Components.

**5.2.6.3.2** The Contractor shall develop, deliver and update a Task Procedures Report, in accordance with CDRL Line Number ILS-620, which defines the procedures for conducting the tasks required to provide Supply Support for both the Mission System and the Support System Components.

**Option: For use if an LSAR is being developed under the Contract.**

**5.2.6.3.3** The Contractor shall update the LSAR to reflect the defined procedures for conducting the tasks required to provide Supply Support for both the Mission System and the Support System Components.

**5.2.6.4 Supply Support Personnel Competency Requirements**

**Note to drafters: The Personnel Competency requirements identified in this clause of the SOW will be used as an input to the Training Needs Analysis.**

**5.2.6.4.1** The Contractor shall define the Personnel Competency requirements for conducting the tasks required to provide Supply Support for both the Mission System and the Support System Components.

**5.2.6.4.2** The Contractor shall develop, deliver and update a Task Personnel Competency Report, in accordance with CDRL Line Number ILS-630, which defines the Personnel Competency requirements for conducting the tasks required to provide Supply Support for both the Mission System and the Support System Components.

**Option: For use if an LSAR is being developed under the Contract.**

**5.2.6.4.3** The Contractor shall update the LSAR to reflect the defined Personnel Competency requirements for conducting the tasks required to provide Supply Support for both the Mission System and the Support System Components.

**5.2.6.5 Disposal Requirements**

**5.2.6.5.1** The Contractor shall develop, deliver and update a Disposal Plan (DISP) in accordance with CDRL Line Number ILS-640 to define the disposal requirements for items delivered under the Contract.

**5.2.7 Training Support Design****5.2.7.1 Training Needs Analysis**

**5.2.7.1.1** The Contractor shall define, in accordance with the Approved ISP and the Approved Training Support Plan (TSP), the Training needs necessary for the development of Competency-related skill requirements for all identified tasks relating to the Support System Constituent Capabilities, which enables the Mission System and Support System Functional Baseline to be satisfied.

**Note to drafters: The following clause (and the associated definitions) may need to be modified to reflect the specific requirements of the project.**

**5.2.7.1.2** As part of identifying the Training needs under clause 5.2.7.1.1, the Contractor shall include requirements for:

- a. Introduction into Service Training;
- b. Sustainment Training;
- c. Conversion Training;
- d. Continuation Training; and
- e. Train-the-trainer Training.

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**5.2.7.1.3** The Contractor shall develop, deliver and update a Training Needs Analysis Report (TNAR) in accordance with CDRL Line Number ILS-700, which documents the Training needs defined under clauses 5.2.7.1.1 and 5.2.7.1.2.

**5.2.7.2 Training Support Tasks**

**5.2.7.2.1** The Contractor shall identify the tasks required to provide Training Support and to implement the training needs identified in the Approved TNAR, which enables the Mission System and Support System Functional Baselines to be satisfied.

**5.2.7.2.2** The Contractor shall develop, deliver and update a Task Inventory Report, in accordance with CDRL Line Number ILS-710, which identifies the tasks required to provide Training Support and to implement the Training needs identified in the Approved TNAR.

**5.2.7.3 Training Support Resource Requirements**

**5.2.7.3.1** The Contractor shall identify the Support Resources required to provide Training Support and to implement the Training needs identified in the Approved TNAR, which enable the Mission System and Support System Functional Baseline to be satisfied.

**5.2.7.3.2** The Contractor shall develop, deliver and update a Task Resources Report, in accordance with CDRL Line Number ILS-720, which identifies the Support Resources required to provide Training Support and to implement the Training needs identified in the Approved TNAR.

**5.2.7.4 Training Support Procedures**

**5.2.7.4.1** The Contractor shall define the procedures for conducting the tasks required to provide Training Support and to implement the Training needs identified in the Approved TNAR.

**5.2.7.4.2** The Contractor shall develop, deliver and update a Task Procedures Report, in accordance with CDRL Line Number ILS-730, which defines the procedures for conducting the tasks required to provide Training Support and to implement the Training needs identified in the Approved TNAR.

**5.2.7.5 Training Support Personnel Competency Requirements**

**5.2.7.5.1** The Contractor shall define the Personnel Competency requirements for conducting the tasks required to provide Training Support and to implement the Training needs identified in the Approved TNAR.

**5.2.7.5.2** The Contractor shall develop, deliver and update a Task Personnel Competency Report, in accordance with CDRL Line Number ILS-740, which defines the Personnel Competency requirements for conducting the tasks required to provide Training Support and to implement the Training needs identified in the Approved TNAR.

**5.2.8 Support System Synthesis****5.2.8.1 General**

**5.2.8.1.1** For the purposes of this clause 5.2.8, the Commonwealth will consider that the elements of Spares, Packaging, Training, Technical Data, S&TE, Facilities, and Personnel have been optimised when the Contractor has demonstrated that its solution for the combined Mission System and Support System:

- a. minimises LCC, in accordance with the Approved LCCMP and the respective plans for the Support Resources; and
- b. meets the other requirements of the Contract,

when both the Mission System and the Support System are operated and supported in accordance with the Operational Concept Document (OCD).

**5.2.8.2 Spares**

**5.2.8.2.1** The Contractor shall conduct, in accordance with the Approved SSDP, an analysis of the range and quantity of Spares identified for each of the Support System Constituent Capabilities to define the optimal range and quantity of Spares required to meet the Support System Functional Baseline.

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**Note to drafters: In the following two clauses, OPUS10 has been specified as the Commonwealth's preferred Spares-optimisation software package. If the Contractor proposes an alternative software package in its tender response, the project team should assess this alternative and discuss the issue with the preferred tenderer during contract negotiations. Depending upon the outcomes of those discussions, the following clause may need to be amended to accord with the agreed outcomes.**

- 5.2.8.2.2** The Contractor shall, in conducting the analysis under clause 5.2.8.2.1, use the Spares-optimisation software package, OPUS10 (or an alternative Approved by the Commonwealth Representative) to develop a Spares-optimisation model of the Mission System and the Support System in accordance with the Approved SSDP.
- 5.2.8.2.3** If the Contractor produces a Spares-optimisation model (or part thereof) using software packages other than the package specified in clause 5.2.8.2.2, the Contractor shall provide all necessary programs, licenses, and Training to enable the Commonwealth to efficiently access and manipulate the Spares-optimisation model as required.
- 5.2.8.2.4** The Contractor shall develop and deliver, in accordance with CDRL Line Number ILS-810, a Recommended Spares Provisioning List (RSPL), which defines the optimised range and quantity of Spares.
- 5.2.8.2.5** The Contractor shall submit a CCP to incorporate into the Contract the Spares identified in the Approved RSPL that are required by the Commonwealth.
- 5.2.8.2.6** Subject to clause 5.3.2.1.4, the maximum price for all Spares purchased by the Commonwealth shall be no greater than the NTE price for Spares identified in Annex G to Attachment B.
- 5.2.8.3 Packaging**
- 5.2.8.3.1** The Contractor shall conduct, in accordance with the Approved SSDP, an analysis of the complete range and quantity of Packaging identified for each of the Support System Constituent Capabilities to define the optimal range and quantity of Packaging required to meet the Support System Functional Baseline.
- 5.2.8.3.2** To avoid doubt, the range and quantity of Packaging identified under clause 5.2.8.3.1 shall include any Packaging for initial delivery under clause 2.2 of the SOW, if this Packaging will subsequently be required to enable the Support System Functional Baseline to be met (eg, for the purposes of deployment or storage on a platform).
- 5.2.8.3.3** The Contractor shall develop and deliver, in accordance with CDRL Line Number ILS-820, a Packaging Provisioning List (PACKPL), which defines the optimised range and quantity of Packaging.
- 5.2.8.4 Training**

**Note to drafters: The [TBD] in the following clause needs to be amended to incorporate the standards for training design and development (eg, AAP 2002.001 (Air Force), Manual of Land Warfare 3.4.2 (Army), RAN Training System Manual Volume 1 (Navy), and [TBD] (Joint)).**

**Note to tenderers: Although the Approved Training Materials and Training Equipment List (TEML) will address the full scope of Training Materials and Training Equipment to be delivered under clause 5.3.4 of the SOW, the price of Training Materials is included in the Contract Price while the price of Training Equipment is subject to confirmation against the NTE price set out in Attachment B.**

- 5.2.8.4.1** The Contractor shall conduct the Training development program in accordance with the Approved TNAR and [...TBD...], in addition to the Approved TSP.
- 5.2.8.4.2** The Contractor shall conduct, in accordance with the Approved TSP, an analysis of the types and quantities of Training, Training Equipment and Training Materials, which have been identified for each of the Support System Constituent Capabilities, to define the optimal range and quantity of Training, Training Equipment and Training Materials required to meet the Support System Functional Baseline.
- 5.2.8.4.3** The Contractor shall document the optimised types and quantities of Training in an update to the TNAR in accordance with CDRL Line Item ILS-700.

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- 5.2.8.4.4** The Contractor shall develop, deliver and update a Training Equipment and Materials List (TEML), in accordance with CDRL Line Number ILS-910, which defines the optimised types and quantities of Training Equipment and Training Materials.
- 5.2.8.4.5** The Contractor shall submit a CCP to incorporate into the Contract the Training Equipment identified in the Approved TEML that is required by the Commonwealth.
- 5.2.8.4.6** The maximum price for all Training Equipment purchased by the Commonwealth shall be no greater than the NTE price for Training Equipment identified in Annex G to Attachment B.
- 5.2.8.5 Technical Data**
- 5.2.8.5.1** The Contractor shall conduct, in accordance with the Approved TDP, an analysis of the types and quantities of Technical Data identified for each of the Support System Constituent Capabilities to define the optimal range and quantity of Technical Data required to meet the Support System Functional Baseline.
- 5.2.8.5.2** The Contractor shall develop, deliver and update a Technical Data List (TDL), in accordance with CDRL Line Number ILS-1010, which defines the optimised types and quantities of Technical Data.
- 5.2.8.6 Support and Test Equipment**
- 5.2.8.6.1** The Contractor shall conduct, in accordance with the Approved S&TEP, an analysis of the range and quantity of S&TE identified for each of the Support System Constituent Capabilities to define the optimal range and quantity of S&TE required to meet the Support System Functional Baseline.
- 5.2.8.6.2** The Contractor shall develop and deliver, in accordance with CDRL Line Number ILS-1110, a S&TE Provisioning List (S&TEPL), which defines the optimised range and quantity of S&TE.
- 5.2.8.6.3** The Contractor shall submit a CCP to incorporate into the Contract the S&TE identified in the Approved S&TEPL that is required by the Commonwealth.
- 5.2.8.6.4** Subject to clause 5.3.5.5, the maximum price for all S&TE purchased by the Commonwealth shall be no greater than the NTE price for S&TE identified in Annex G to Attachment B.
- 5.2.8.7 Facilities (Optional)**
- 5.2.8.7.1** The parties acknowledge that the scope of the Facilities Plan (FACP) and Facilities Requirements Analysis Report (FRAR) will be dependent upon the requirement for Facilities under the Contract, including:
- a. new or modified Facilities to be provided to the Commonwealth by the Contractor as Supplies under the Contract;
  - b. new or modified Facilities to be provided by the Commonwealth in accordance with the requirements identified in the FRAR; and
  - c. new or modified Facilities required to be implemented by the Contractor or Subcontractors as part of the Mission System (eg, as part of a distributed capability) or the Support System (eg, to enable them to undertake in-Service support), but which do not constitute Supplies under the Contract.
- Note to drafters: *The Commonwealth's requirement for visibility into Facilities that fall into the last category in the preceding clause will be dependent upon the criticality of, and risk associated with, those Facilities in meeting the requirements of a project.***
- 5.2.8.7.2** The Contractor shall conduct, in accordance with the Approved FACP, an analysis of the types and quantities of Facilities identified for each of the Support System Constituent Capabilities to define the optimal range and quantity of Facilities required to meet the Support System Functional Baseline.
- 5.2.8.7.3** The Contractor shall develop, deliver and update a FRAR, in accordance with CDRL Line Number ILS-1210, which defines the optimised types and quantities of Facilities.

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**5.2.8.8.1** The Contractor shall conduct an analysis of the types and quantities of Personnel identified for each of the Support System Constituent Capabilities to define the optimal types and quantities of Personnel required to meet the Support System Functional Baseline.

**5.2.8.8.2** The Contractor shall develop and deliver a Personnel Resource Requirements List (PRRL), in accordance with CDRL Line Number ILS-1400, which defines the optimised types and quantities of Personnel.

**5.3 Support System Implementation (Core)**

**Note to drafters: The outcome of the LSA program clause of the SOW is the identification of all of the logistics resources (Commonwealth, Contractor, Subcontractors, Contractor (Support) and Subcontractors (Support)) that will be required to implement the requisite Support System. This clause of the SOW concentrates on a subset of the identified logistics resources, namely:**

- a. those Support Resources that will be delivered to the Commonwealth as Supplies under the Contract, including Training;**
- b. all of the Technical Data associated with the Contract; and**
- c. those major Support Resources that will be implemented by the Contractor (or Subcontractors) but not delivered to the Commonwealth as Supplies under the Contract; however, the Support Resources are considered to be of such significance to the Commonwealth that visibility into their development and implementation is required.**

**5.3.1 General**

**5.3.1.1** The Contractor acknowledges that Support Resources and Training to Personnel need to be provided to the Commonwealth in sufficient time to enable the Commonwealth to undertake integration of Support Resources into the existing Commonwealth infrastructure before Support System Validation may be undertaken.

**Note to drafters: The following clause will need to be either amended or deleted depending upon the support arrangements planned under the project (e.g. whether or not there will be interim support arrangements or a separate Contract (Support)).**

**5.3.1.2** The Contractor also acknowledges that the implementation of that part of the Support System that will be provided by the Contractor (Support) and the Subcontractors (Support) will need to be undertaken in sufficient time to enable Support System Validation to occur.

**5.3.2 Implementation of Spares and Packaging Requirements****5.3.2.1 Spares**

**5.3.2.1.1** In accordance with the Approved SSDP, the Contractor shall design and develop or acquire, as applicable, the Spares identified for delivery to the Commonwealth in the Approved Recommended Spares Provisioning List (RSPL).

**5.3.2.1.2** The Contractor shall deliver the Spares to the locations detailed in the Approved RSPL.

**Note to drafters: The following clause is only required if the Contractor for the acquisition phase will also be the contractor for the support phase (ie, Contractor (Support)).**

**5.3.2.1.3** The Contractor acknowledges that selected Spares, which would otherwise be Contractor-furnished Spares to enable the Contractor (Support) to meet its obligations under the Contract (Support), may be considered by the Commonwealth Representative to be cost-effective for the Commonwealth to own. Such Spares will be procured from the Contractor by the Commonwealth and, in turn, provided to the Contractor (Support) as Government Titled Items (GTI).

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**5.3.2.1.4** At any time prior to Final Acceptance, the Commonwealth Representative may identify additional Spares requirements. The Contractor shall deliver the additional Spares at a price not greater than that set out in the Approved RSPL.

**5.3.2.1.5** The Contractor shall submit a CCP to incorporate the additional Spares into the Contract.

**5.3.2.2 Packaging**

**5.3.2.2.1** In accordance with the Approved SSDP, the Contractor shall design and develop or acquire, as applicable, the Packaging identified for delivery to the Commonwealth in the Approved Packaging Provisioning List (PACKPL).

**5.3.2.2.2** Unless otherwise agreed, in writing, by the Commonwealth Representative, all Packaging delivered to the Commonwealth as Supplies shall comply with DEF(AUST) 1000C.

**5.3.2.2.3** The Contractor shall deliver items of Packaging to the locations detailed in the Approved PACKPL.

**5.3.3 Implementation of Technical Data Requirements**

**Note to drafters: As highlighted in the Note to drafters under clause 5.3, this clause 5.3.3 covers all of the Technical Data associated with the Contract, including internal Contractor Technical Data that is not identified for delivery in either the CDRL or the Approved Technical Data List (TDL). In this context, "delivery" means any one or all of the following:**

- a. to the Commonwealth (e.g. in accordance with the CDRL);**
- b. into escrow, for those items identified in the Approved TDL for lodgement into escrow (noting that delivery into escrow is considered to be included under delivery to the Commonwealth, but is separately identified here for clarity); and**
- c. to the organisations that will be involved in the provision of support to the Mission System and the Support System Components (e.g. Contractors (Support) and Subcontractors (Support), including to Contractor and Subcontractors when these entities will have support responsibilities.**

**5.3.3.1 General**

**5.3.3.1.1** In accordance with clause 5 of the conditions of contract and the Approved TDP, the Contractor shall design and develop or acquire, as applicable, the Technical Data (TD) identified for delivery to the Commonwealth in the Approved Technical Data List (TDL).

**5.3.3.1.2** The Contractor shall deliver items of TD, which are not identified in the CDRL but which are identified for delivery to the Commonwealth in the Approved TDL, to the locations detailed in the Approved TDL. If a delivery location is not specified in either the Contract or the Approved TDL, and is not otherwise agreed in writing between the parties, the delivery location for TD shall be the Commonwealth Representative.

**5.3.3.2 Data Accession List (Optional)**

**5.3.3.2.1** The Contractor shall develop, deliver and update a Data Accession List (DAL), in accordance with CDRL Line Number ILS-1020, which identifies TD to be generated in the performance of the Contract but not identified in either the CDRL or the Approved TDL for delivery to the Commonwealth.

**5.3.3.2.2** When the Commonwealth Representative requests, in writing, items of TD identified in the DAL, the Contractor shall provide the Commonwealth the requested TD subject to the Commonwealth's IP rights under the Contract.

**5.3.3.2.3** The Commonwealth shall reimburse the Contractor for the reasonable costs of providing the items requested in clause 5.3.3.2.2.

**5.3.3.2.4** Following agreement by the Commonwealth Representative to the costs of providing the requested items of TD under clause 5.3.3.2.3, the Contractor shall submit a CCP to incorporate the requirement into the Contract.

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## 5.3.3.3 Publications

**Note to drafters: The Approved Publications Tree specified in the next clause was developed by the Contractor as one of the outcomes of the Contractor undertaking a Technical Data requirements analysis in accordance with the LSA clause of the SOW (and the Approved TDP).**

- 5.3.3.3.1 The Contractor shall develop, deliver and update a Publications Tree, in accordance with CDRL Line Number ILS-1030, which identifies all of the publications or parts thereof relating to the Mission System and Support System, including:
- a. new publications that are to be developed;
  - b. existing Contractor, Subcontractor or third party publications that are to be amended; and
  - c. existing Commonwealth publications that are to be amended.

**Note to drafters: The project team should consider, as part of its considerations under Intellectual Property, whether or not certain publications (eg, deeper maintenance publications) should be placed into escrow if these publications are not being delivered to the Commonwealth.**

- 5.3.3.3.2 In accordance with CDRL Line Number ILS-1040, the Contractor shall develop and deliver the publications and the amendments to the existing Commonwealth publications, which are identified in the Approved Publications Tree as either being delivered to the Commonwealth or being placed into escrow.
- 5.3.3.3.3 The Contractor shall Verify and Validate that all publications are accurate, grammatically correct, technically correct, and suitable for use.
- 5.3.3.4 **Interactive Electronic Technical Manuals (IETMs) / Interactive Electronic Technical Publications (IETPs) (Optional)**

**Note to drafters: In general, the following clauses would be inserted into the SOW in response to a tendered offer for IETMs.**

- 5.3.3.4.1 The Contractor shall, in accordance with CDRL Line Number ILS-1070, design, develop, or acquire the Interactive Electronic Technical Manuals (IETMs) / Interactive Electronic Technical Publications (IETPs) identified in the Approved TDL.
- 5.3.3.4.2 The Contractor shall, in accordance with CDRL Line Number ILS-1070, deliver IETMs / IETPs to the locations detailed in the Approved TDL.
- 5.3.3.5 **Codification Data (Optional)**

**Note to drafters: The following clauses comply with the requirements of DI(G) LOG 08-16 Item Identification and Recording of Defence Assets and, accordingly, with Appendix 1 to NATO Standardisation Agreement (STANAG) 4177. If included in the SOW, they should not be changed without the agreement of the National Codification Bureau within the DMO. While the codification clauses may be optional in some instances, they are mandatory for any Item of Supply that meets the criteria specified in DI(G) LOG 08-16. Under the Chief Executive Instructions (CEIs), these items need to be registered on the Military Integrated Logistics Information System (MILIS) for asset management and financial reporting purposes.**

- 5.3.3.5.1 Unless otherwise agreed, in writing, by the Commonwealth Representative, the Contractor shall deliver Codification Data, in accordance with CDRL Line Number ILS-1050, for all items of Supplies that are not data, services, or Intellectual Property (IP).
- 5.3.3.5.2 The Contractor shall provide or arrange to have provided updating information regarding agreed modifications, design or drawing changes to all Supplies that are not data, services, or IP.
- 5.3.3.5.3 The Contractor shall include the terms of this clause in any Subcontract(s) to ensure the availability of Codification Data to the Commonwealth.

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**5.3.3.5.4** The Commonwealth will utilise the Codification Data provided under this clause 5.3.3.5 to establish codification by the Commonwealth of the essential characteristics that give any item of Supplies its unique character and differentiate it from any other item.

**5.3.3.5.5** When information which reveals manufacturing processes is requested under this clause 5.3.3.5, it may be endorsed by the Contractor as follows: "This document is supplied only to enable codification in the Defence Codification System of the items referred to therein, and for no other purpose. When codification action is completed, this document is to be retained by the Commonwealth."

**5.3.3.6 Logistics Support Analysis Record (LSAR) (Optional)**

**Note to drafters: Select, and modify if necessary, one of the following three clauses depending on the use of a compliant LSAR or the use of an alternative Commonwealth-approved system. Option A is compliant, Option B provides for the exchange of data from a non-compliant Contractor system to a compliant Commonwealth system, while Option C provides for the collection of logistics and configuration data in an alternative format approved for project team and In-Service use.**

**Option A: For use if the Contractor utilises a compliant LSAR.**

**5.3.3.6.1** The Contractor shall develop, deliver and update a Logistics Support Analysis Record (LSAR), which is compliant with the data-capture, reporting, and data-transfer requirements of DEF(AUST) 5692 [for Aerospace, AAP 5102.003].

**Option B: For use if the Contractor utilises a non-compliant LSAR, but exchange of data to a Commonwealth-compliant LSAR is required.**

**5.3.3.6.2** The Contractor shall develop, deliver and update an information system that provides for the transfer of Logistics Support Analysis (LSA) data in an exchange format compliant with the table relationships and data transfer requirements of DEF(AUST) 5692 [for Aerospace, AAP 5102.003].

**Option C: For use if the Contractor utilises a custom LSA data depository, which is not required to comply with, or transfer data to, a Commonwealth-compliant LSAR.**

**5.3.3.6.3** The Contractor shall develop, deliver and update an information system that provides for the transfer of Logistics Support Analysis (LSA) data to the Commonwealth in accordance with [...SPECIFY APPROVED FORMAT...].

**5.3.3.6.4** The Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access the LSAR for the duration of the Contract.

**Note to drafters: The CDRL highlights that the following CDRL Line Number has multiple deliveries, including progressively for review by the Commonwealth and at the end of the Contract, even if the Contractor has provided on-line access to the Resident Team.**

**Option A: For use if the Contractor utilises a compliant LSAR or a non-compliant LSAR for which exchange of data to a Commonwealth-compliant LSAR is required.**

**5.3.3.6.5** The Contractor shall deliver compliant LSAR data transfer files to the Commonwealth in accordance with CDRL Line Number ILS-1060.

**Option B: For use if the Contractor utilises a custom LSA data depository, which is not required to comply with, or transfer data to, a Commonwealth-compliant LSAR.**

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**5.3.3.6.6** The Contractor shall deliver data transfer files in the approved format, under clause 5.3.3.6.1, to the Commonwealth in accordance with CDRL Line Number ILS-1060.

**5.3.3.6.7** If the Contractor utilises a custom LSA data depository, which is not required to comply with, or transfer data to, a Commonwealth-compliant LSAR, the Contractor shall provide all necessary programs, licenses, and training to enable the Commonwealth to efficiently access and manipulate the LSA data depository as required.

**5.3.3.6.8** The Contractor shall ensure that the LSAR is populated with up-to-date data, consistent with the developmental status of both the Mission System and Support System.

**5.3.3.7 Escrow (Optional)**

**Note to drafters: When items are required to be placed into escrow, the Commonwealth Representative together with the Contractor should undertake an analysis to ascertain the precise Technical Data required. This analysis should prevent any unnecessary data being placed into escrow.**

**5.3.3.7.1** In order to provide effective escrow arrangements, the Contractor shall:

- a. make contractual arrangements with all relevant Subcontractors, the Commonwealth, and an Australian-based escrow agent Approved by the Commonwealth Representative, on terms that are substantially in accordance with the deed at Annex C to Attachment I [...INSERT RELEVANT MILESTONE-BASED EVENT eg within 120 days of the Effective Date of the Contract...];
- b. ensure that the contractual arrangements established under clause 5.3.3.7.1a are maintained and updated to include the Approved TDL following Approval of any updates to the TDL;
- c. develop and implement management functions, systems and procedures for the placement and maintenance of material in the escrow account;
- d. lodge and maintain all items of TD that have been specified for lodgement in escrow under the Approved TDL;
- e. arrange for the lodgement and maintenance by relevant Subcontractors of all items of TD that have been specified for lodgement in escrow under the Approved TDL; and
- f. ensure that the configuration of material in the escrow account is maintained consistently with the most current configuration of the Supplies.

**5.3.3.7.2** If that the Contractor cannot establish effective escrow arrangements within the period specified in clause 5.3.3.7.1a:

- a. the Commonwealth Representative may instead require the Contractor to arrange for the delivery of all relevant items to the Commonwealth's nominated escrow agent under the terms of the deed at Annex C to Attachment I; and
- b. all other provisions of clause 5.3.3.7.1 shall remain in force.

**Note to drafters: Subclause d in the following clause should be deleted if there is no accompanying Contract (Support).**

**5.3.3.7.3** Under the escrow arrangements established in accordance with clause 5.3.3.7, the Contractor acknowledges that the escrow agent shall, at the written request of the Commonwealth Representative, immediately release to the Commonwealth any part or all of the material held in the escrow account. The Commonwealth shall be entitled to request the release of any part or all of the material held in escrow if:

- a. the owner of the material subject to the release request is unable or unwilling to support the material;
- b. the owner of material subject to the release request disperses or closes its facility for the production of items to which the material is relevant;
- c. the Contract is terminated for default;

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- d. the Contract (Support) is terminated for default; (Optional) or
- e. the owner of material subject to the release request and the Commonwealth agree to the release of that material.

**5.3.3.7.4** Unless otherwise set out in the IP Plan:

- a. when material in escrow is released to the Commonwealth in accordance with clause 5.3.3.7.3, a Licence enabling the Commonwealth to exercise the IP for Defence Purposes shall also be transferred to the Commonwealth; and
- b. the Contractor shall ensure that items of material are maintained in escrow for LOT of the Supplies.

**5.3.4 Implementation of Training and Training Support Requirements**

**Note to drafters: If the project requires a significant end-item of training equipment, such as a Mission Simulator, this end-item should be treated as another deliverable system alongside the Mission System and the Support System (and not covered under these Training clauses).**

**Note to drafters: The following clauses need to incorporate the standards for training design and development (eg, AAP 2002.001 (Air Force), MLW 3.4.2 (Army), RAN Training System Manual Volume 1 (Navy), and [...INSERT JOINT SERVICE STANDARD IF APPLICABLE...] (Joint)).**

- 5.3.4.1** In accordance with [...INSERT TRAINING DESIGN STANDARD...] and the Approved TSP, the Contractor shall develop all courseware necessary to meet the Commonwealth's Training requirements identified in the Approved TNAR.
- 5.3.4.2** In accordance with the Approved TSP, the Contractor shall design and develop or acquire, as applicable, the Training Equipment and Training Materials identified for delivery to the Commonwealth in the Approved Training Equipment and Materials List (TEML).

**Note to tenderers: Verification and Validation of Training Equipment and Materials is addressed in the V&V clause of the SOW.**

- 5.3.4.3** The Contractor shall deliver Training Equipment and Training Materials to the locations detailed in the Approved TEML.
- 5.3.4.4** The Contractor shall install and commission, in accordance with the Approved TSP, any Training Equipment that needs to be installed into Commonwealth Facilities, as detailed in the Approved TEML.

**Note to drafters: The locations for the conduct of Contractor-provided training, as specified in the following clause, need to be determined based on a cost-effectiveness assessment.**

- 5.3.4.5** The Contractor shall conduct all Contractor-provided Training at the following locations:
  - a. [...INSERT LOCATION...]; and
  - b. [...INSERT LOCATION...].

**5.3.5 Implementation of Support and Test Equipment (S&TE) Requirements**

- 5.3.5.1** The Contractor shall design and develop or acquire, as applicable, the S&TE identified for delivery to the Commonwealth in the Approved S&TE Provisioning List (S&TEPL).

**Note to tenderers: Verification and Validation of S&TE is addressed in the V&V clause of the SOW.**

- 5.3.5.2** The Contractor shall deliver S&TE to the locations detailed in the Approved S&TEPL.
- 5.3.5.3** The Contractor shall install, in accordance with the Approved S&TEP, any S&TE that needs to be installed in Commonwealth Facilities, as detailed in the Approved S&TEPL.

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**Note to drafters: The following clause is only required if the Contractor for the acquisition phase will also be the contractor for the support phase (ie, Contractor (Support)).**

- 5.3.5.4** The Contractor acknowledges that selected items of S&TE, which would otherwise be Contractor-furnished S&TE to enable the Contractor (Support) to meet its obligations under the Contract (Support), may be considered by the Commonwealth Representative to be cost-effective for the Commonwealth to own. Such S&TE will be procured from the Contractor by the Commonwealth and will be provided to the Contractor (Support) as Government Titled Items (GTI).
- 5.3.5.5** At any time prior to Final Acceptance, the Commonwealth Representative may identify additional S&TE requirements. The Contractor shall deliver the additional S&TE at a price not greater than that set out in the Approved S&TEPL.
- 5.3.5.6** The Contractor shall submit a CCP to incorporate the additional S&TE requirements into the Contract.
- 5.3.6 Implementation of Facilities Requirements (Optional)**

**Note to drafters: Refer to clause 5.2.8.7.1 and associated note to drafters.**

**The Commonwealth normally contracts separately for the design and construction of any proposed extension to, or modification or conversion of, existing Commonwealth Facilities and any new Commonwealth Facilities required by the project. Such activities will be based on the Facilities requirements detailed in the FRAR. Nevertheless, it is acknowledged that, for reasons of cost and project-management efficiency, the Contractor may conduct this activity more effectively. Accordingly, it is recommended that the project office, as part of the RFT, seek an option for the tenderers to accept responsibility for the development and delivery of all Facilities requirements. If this approach is not adopted, the following clauses will require either amendment or deletion.**

**Note to tenderers: Verification and Validation of Facilities is addressed in the V&V clause of the SOW.**

- 5.3.6.1** In accordance with the Approved FACP and the Approved Facilities Requirements Analysis Report (FRAR), the Contractor shall design, develop, construct, fit-out, and commission those Facilities identified for delivery to the Commonwealth by the Contractor in the Approved FACP.
- 5.3.6.2** The Contractor shall support the Commonwealth's development of those Facilities identified as Commonwealth responsibilities in the Approved FACP.

**Option: To be included if visibility is required into the development of the Contractor's and Subcontractors' Facilities that are not Supplies.**

- 5.3.6.3** In accordance with the Approved FACP and the Approved FRAR, the Contractor shall design, develop, construct, fit-out, and commission those Facilities required by the Contractor and Subcontractors, which do not form Supplies under the Contract.

**5.3.7 Implementation of Software Support**

**Note to drafters:**

- a. The following clause is only required if a Software Support Facility (SSF) is required to be provided under the Contract (eg, for Australian Industry Capability (AIC) reasons).**
- b. The following list of activities will need to be enhanced to meet the specific requirements of the project.**

- 5.3.7.1** The Contractor shall provide a Software Support Facility (SSF) in Australia to undertake the following activities:
- a. software problem investigations;
  - b. software changes;

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- c. software enhancements; and
- d. software Verification and Validation.

## 6. CONFIGURATION MANAGEMENT

### 6.1 Configuration Management Planning (Core)

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**Note to drafters: The Contractor is expected to identify the standard(s) that will be used to define the CM practices for the Contract. These standards will be reflected in the final contract. The Commonwealth would consider MIL-STD-973 as an acceptable standard or, for contracts subject to the Technical Regulation of Army Materiel Manual (TRAMM), EIA-649 tailored with guidance from the TRAMM. Consideration should be given to aligning the choice of these standards with the Contractor's work practices.**

- 6.1.1 The Contractor shall develop, deliver and update a Configuration Management Plan (CMP) in accordance with CDRL Line Number CM-100.
- 6.1.2 The Contractor shall manage and coordinate all Contractor and Subcontractor Configuration Management (CM) activities.
- 6.1.3 The Contractor shall conduct all CM activities for the Contract in accordance with the Approved CMP.
- 6.1.4 The Contractor shall ensure that all Subcontractors comply with the requirements of the CMP and are integrated into the Contractor's CM activities.

### 6.2 Master Record Index (Optional)

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- 6.2.1 The Contractor shall develop, deliver and update a Master Record Index (MRI) in accordance with CDRL Line Number CM-120.

### 6.3 Configuration Identification (Core)

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- 6.3.1 The Contractor shall identify all Configuration Items (CIs) that constitute the Mission System and Support System.
- 6.3.2 The Contractor shall uniquely identify all documents that disclose the performance, functional and physical attributes of the Mission System and Support System, so that they may be accurately associated with the Configuration Baselines for these systems.

### 6.4 Configuration Baselines (Core)

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- 6.4.1 The Contractor shall develop and maintain at least each of the following configuration baselines for each Mission System and the Support System during the Contract:
  - a. Functional Baseline;
  - b. Allocated Baseline; and
  - c. Product Baseline.

### 6.5 Configuration Control (Core)

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- 6.5.1 The Contractor shall manage configuration changes and Deviations, including their:
  - a. identification;
  - b. request and documentation;
  - c. for configuration changes only, classification as Major Changes or Minor Changes;
  - d. evaluation and coordination; and
  - e. implementation and Verification of the changes.
- 6.5.2 The Contractor shall submit CCPs supplemented by ECPs in accordance with the Approved CMP to implement changes to Approved Functional and Product Baselines.
- 6.5.3 All changes to a Functional Baseline shall be classified as a Major Change.
- 6.5.4 The Contractor shall classify changes to a Product Baseline as either a Major Change or a Minor Change.

- 6.5.5** The Contractor shall submit all proposed Major Changes to the Product Baseline to the Commonwealth for Approval as CCPs supplemented by ECPs.
- 6.5.6** The Contractor shall submit all proposed Minor Changes to the Product Baseline to the Commonwealth Representative for review.
- 6.5.7** At the request of the Commonwealth, the Contractor shall resubmit a proposed Minor Change to the Product Baseline as a proposed Major Change to that Product Baseline in accordance with clause 6.5.5.
- 6.5.8** The Contractor shall, for any proposed change to a Configuration Baseline, ensure that all Configuration Baselines will be mutually consistent and compatible.
- 6.6 Configuration Status Accounting (Core)**
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**Note to drafters: Depending on the logistics support concept, the configuration status accounting system may need to be considered as a deliverable. The drafter should consider the applicability of standards for interchange of CM data such as MIL-STD-2549 and the developing commercial standard EIA-836.**

- 6.6.1** The Contractor shall establish and maintain, in accordance with the Approved CMP, a Configuration Status Accounting (CSA) system that correlates, stores, maintains and provides readily available views of all configuration information relating to the Mission System, Support System and Support System Components and their respective Configuration Baselines.
- 6.6.2** The Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access the Contractor's CSA system for the duration of the Contract.
- 6.6.3** The Contractor shall deliver reports to the Commonwealth from the Contractor's CSA system in accordance with CDRL Line Number CM-110.

**6.7 Configuration Audits (Core)**

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- 6.7.1** The Contractor shall conduct a Mandated System Review, the Functional Configuration Audit (FCA), on each delivered Mission System product and Support System Component.
- 6.7.2** The Contractor's entry criteria, exit criteria and objectives for FCA shall include those defined in DMO-CHECKLIST-FCA.
- 6.7.3** The Contractor shall conduct a Mandated System Review, the Physical Configuration Audit (PCA), on each delivered Mission System product and Support System Component.
- 6.7.4** The Contractor's entry criteria, exit criteria and objectives for PCA shall include those defined in DMO-CHECKLIST-PCA.
- 6.7.5** The Contractor shall invite the Commonwealth to witness all Materiel System FCAs and PCAs.
- 6.7.6** Unless otherwise notified in writing by the Commonwealth Representative, the Commonwealth Representative or appointed representative(s) shall witness configuration audits that are conducted for the purposes of Acceptance.
- 6.7.7** Unless the Commonwealth Representative has notified that it will not witness a configuration audit in accordance with clause 6.7.6, the Contractor shall not conduct that configuration audit in the absence of Commonwealth witnesses.

**6.8 Interface Control (Optional)**

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**Note to drafters: This clause should be considered for Contracts that have complex interfaces to single systems or significant complexity due to the number of interfaces with other systems. The ICWGs may involve various Commonwealth agencies and third party Contractors. Corresponding consideration needs to be given to the related IP clauses of the Contract.**

**This clause may need significant tailoring for each project, depending on factors such as maturity, complexity and numbers of external interfaces.**

**Note to tenderers: The Commonwealth expects to manage the <other product> interface design process through the ICWG forum. Wherever possible, the Contractor is encouraged to liaise directly with third party Contractors and use the ICWG forum for final agreement or dispute resolution.**

- 6.8.1** The Contractor shall participate in Commonwealth-sponsored Interface Control Working Groups (ICWGs) that are conducted to establish and refine the Materiel System external interfaces.
- 6.8.2** The Contractor shall provide sufficient design information to the ICWG, including provision to third parties, to enable the interface details to be established.
- 6.8.3** The Contractor shall participate in ICWG meetings to assist with the development of [...SPECIFY PROJECT SPECIFIC INTERFACES...].
- 6.8.4** ICWGs shall be held at venues to be determined by the Commonwealth.

**Note to tenderers: It is the Commonwealth's intention that ICWGs be held in Australia.**

- 6.8.5** The expected level of effort required by the Contractor is:
- a. attendance at approximately [...INSERT NUMBER OF...] ICWG meetings;
  - b. for each ICWG meeting, no more than [...INSERT NUMBER OF...] representatives of the Contractor will be required to attend; and
  - c. the maximum duration of each ICWG is expected to be no more than [...INSERT NUMBER OF...] days with [...INSERT NUMBER OF...] days duration typical.

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## 7. VERIFICATION AND VALIDATION (V&amp;V)

## 7.1 V&amp;V Management (Core)

**Note to drafters: This clause should be tailored to match the specifics of the program and acquisition strategy. For systems subject to Test, Evaluation and Acceptance into Naval Service, refer to the Naval Operational Test and Evaluation Manual (NOTEMAN), ABR 6205.**

## 7.1.1 General

7.1.1.1 The Contractor acknowledges that the objectives of the Verification and Validation (V&V) program are to:

- a. integrate the V&V of the Mission System, the Support System and their components through all phases of development; and
- b. establish and maintain a strategy of progressive Verification of Mission System and Support System elements throughout the development, integration and delivery process.

## 7.1.2 Verification and Validation Plan

7.1.2.1 The Contractor shall develop, deliver and update a Verification and Validation Plan (V&VP) in accordance with CDRL Line Number V&V-100.

7.1.2.2 The Contractor shall conduct all V&V activities for the Contract in accordance with the Approved V&VP.

## 7.1.3 Verification Cross Reference Matrix (VCRM)

7.1.3.1 The Contractor shall develop, deliver and update a Verification Cross Reference Matrix (VCRM) in accordance with CDRL Line Number V&V-200, which captures the detail of the Verification criteria and status of the Verification activities for each requirement in:

- a. the Mission System Functional Baseline; and
- b. the Support System Functional Baseline.

7.1.3.2 The Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access the Contractor's VCRM for the Mission System and Support System.

## 7.1.4 Test Readiness Reviews

**Note to drafters: A TRR should precede all Commonwealth formal Verification and Validation activities. Each stage of the Commonwealth formal Verification and Validation should have associated test documentation.**

7.1.4.1 Prior to the commencement of each Acceptance V&V (AV&V) activity, the Contractor shall complete a Mandated System Review, a Test Readiness Review (TRR), which:

- a. confirms the completeness of test procedures;
- b. assures that the relevant Mission System or Support System element is ready for testing;
- c. assures that any Commonwealth resources required are prepared for formal testing; and
- d. assures that the Contractor is prepared for formal testing.

7.1.4.2 The Contractor's entry criteria, exit criteria and objectives for each TRR shall include those defined in DMO-CHECKLIST-TRR.

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## 7.1.5 Commonwealth Involvement in AV&amp;V

**Note to drafters: When acceptance tests may potentially be carried out overseas, the notification time may be insufficient for the Commonwealth to arrange travel. This may need to be tailored for testing in overseas or remote locations.**

**7.1.5.1** The Contractor shall invite the Commonwealth Representative or representatives appointed by the Commonwealth Representative to witness all Mission System and Support System AV&V activities.

**7.1.5.2** Unless otherwise notified in writing by the Commonwealth Representative, the Commonwealth Representative or appointed representative(s) shall witness Mission System and Support System AV&V activities.

**7.1.5.3** Unless the Commonwealth Representative has notified that it will not witness a Mission System or Support System AV&V activity in accordance with clause 7.1.5.2, the Contractor shall not conduct that Mission System and Support System AV&V activity in the absence of Commonwealth witnesses.

**7.1.5.4** Unless otherwise agreed in writing by the Commonwealth Representative, the Contractor shall provide the Commonwealth with at least 20 Working Days advance notice of the start date and time of all Mission System and Support System AV&V activities.

### 7.1.6 Failure Reporting and Analysis

**7.1.6.1** During AV&V of the Mission System and Support System elements, the Contractor shall establish, maintain and update a Problem Resolution System that:

- a. collects Failure data;
- b. classifies the Failure Severity in accordance with the following table;

Failure Severity	Applies if a problem could:
1	<ol style="list-style-type: none"> <li>a. Prevent the accomplishment of an operational or mission essential capability</li> <li>b. Jeopardize safety, security, or other requirement designated "critical"</li> </ol>
2	<ol style="list-style-type: none"> <li>a. Adversely affect the accomplishment of an operational or mission essential capability and no work-around solution is known</li> <li>b. Adversely affect technical, cost, or schedule risks to the Contract or to life-cycle support of the system, and no work-around solution is known</li> </ol>
3	<ol style="list-style-type: none"> <li>a. Adversely affect the accomplishment of an operational or mission essential capability but a work-around solution is known</li> <li>b. Adversely affect technical, cost, or schedule risks to the contract or to life-cycle support of the system, but a work-around solution is known</li> </ol>
4	<ol style="list-style-type: none"> <li>a. Result in user/operator inconvenience or annoyance but does not affect a required operational or mission essential capability</li> <li>b. Result in inconvenience or annoyance for development or support personnel, but does not prevent the accomplishment of those responsibilities</li> </ol>
5	Any other effect

- c. documents the Failures and associated Failure modes;
- d. defines corrective actions; and

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- e. identifies the scope of additional V&V activities required to confirm that the Failure has been remedied.

**7.1.6.2** The Contractor shall provide all facilities and assistance reasonably required by the Commonwealth in order for the Commonwealth to access the Problem Resolution System for the duration of the Contract.

**7.1.6.3** Prior to the finalisation of each AV&V phase, the Contractor shall submit the Failure Severity classification assigned to all open Failures for Commonwealth Approval in accordance with the Approved V&VP.

**7.1.6.4** The Contractor shall submit for Commonwealth Approval all corrective actions to address safety-related Failures that occur during AV&V.

### **7.1.7 Regression Testing**

**7.1.7.1** If changes are made to the Mission System or Support System configuration after starting AV&V, the Contractor shall repeat those tests whose results are shown by regression analysis to have been potentially affected by the configuration changes.

## **7.2 Acceptance Verification and Validation (AV&V) (Core)**

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**Note to drafters: This clause needs to define test phases and types of test programs (eg. specialty) mandated by the Commonwealth and consistent with the DMO Test and Evaluation Master Plan and Test Concepts Document. The Verification testing elements may include testing of maintainability, reliability, electromagnetic compatibility, environmental and particular regulatory requirements of the program.**

### **7.2.1 General**

**7.2.1.1** The Contractor shall conduct AV&V on equipment that is of the same hardware and software configuration as that which will be offered for Acceptance unless otherwise agreed by the Commonwealth Representative.

**Note to drafters: The following clause may need enhancement to allow for the case where the Commonwealth needs early access to assets used for acceptance testing. It may be necessary to allow the Commonwealth sufficient time to validate or accept the Contractor's Validation of test equipment, e.g. for a case when a Defence specialist such as DSTO may need to assess the adequacy of environmental models used in Verification.**

**7.2.1.2** The Contractor shall Validate the test environment and all test equipment used for Mission System and Support System AV&V in accordance with the Approved ATP.

### **7.2.2 AV&V Phases**

**Note to drafters: Amend the following clause to incorporate the AV&V phases and associated descriptions required by the project.**

**7.2.2.1** The Contractor shall conduct, as a minimum, the following phases of AV&V:

- a. Mission System First Article Factory Verification, at which Verification of the first article is conducted in the factory to ensure that the first article is suitable for delivery and installation, and for entry into the subsequent AV&V phases;
- b. Mission System First Article Site Verification, at which Verification of the first article is conducted after installation to ensure that the first article is compliant with the Mission System Functional Baseline, and that the first article is suitable for entry into the subsequent AV&V phases;
- c. Mission System First Article Validation, at which Validation of the first article is conducted to confirm that the first article is compliant with the Mission System Functional Baseline when operated in accordance with the OCD attached to the Contract;
- d. Mission System Production Verification, at which each production version of the Mission System is Verified;

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- e. Initial Support System Verification, at which the Support System and Support System Components are Verified, and that the Support System is suitable for entry into the subsequent AV&V phases; and
- f. Initial Support System Validation, at which the Support System is Validated through conducting the series of demonstrations specified in clauses 7.2.4.2 to 7.2.4.6.

**7.2.2.2** The Contractor may combine Mission System AV&V activities with Support System AV&V activities if this will result in efficiencies in the AV&V program and the Commonwealth considers that it is reasonably able to support the combined AV&V activities.

**7.2.3 Acceptance Verification**

**Note to drafters: This clause should consider appropriate Verification phases such as Factory Acceptance Test (FAT) and Site Acceptance Testing (SAT).**

**7.2.3.1** The Contractor shall Verify that the delivered Mission System complies with the Mission System Functional Baseline.

**7.2.3.2** The Contractor shall Verify that the delivered Support System complies with the Support System Functional Baseline.

**7.2.3.3** The Contractor shall Verify that the delivered Support System Components comply with their respective specifications.

**7.2.3.4** The Contractor shall develop, deliver and update Mission System and Support System Acceptance Test Plans (ATPs), in accordance with CDRL Line Number V&V-300, which are necessary for conduct of Mission System and Support System Verification consistent with the Approved V&VP, for each of the Acceptance Verification phases identified at clause 7.2.2.

**7.2.3.5** The Contractor shall develop, deliver and update Mission System and Support System Acceptance Test Procedures (ATProcs), in accordance with CDRL Line Number V&V-310, which are necessary for conduct of Mission System and Support System Verification consistent with the Approved ATPs.

**7.2.3.6** The Contractor shall develop, deliver and update Mission System and Support System Acceptance Test Reports (ATRs), in accordance with CDRL Line Number V&V-320, which are necessary for conduct of Mission System and Support System Verification consistent with the Approved ATProcs.

**7.2.4 Acceptance Validation**

**Note to drafters: This clause needs to be tailored to meet the project requirements, matching the test concepts defined in the DMO TEMP. The scope of this operational testing, ie both breadth and depth may vary significantly but in all cases should be based on the scenarios defined by the OCD. As part of the V&V program, the Contractor should Validate the Mission System and Support System in its operational environment or a Commonwealth Representative-Approved representation of the operational environment. The acceptance validation clause needs to address the elements of the Validation Plan (or OT&E Plan, which is usually developed in consultation with a T&E agency) to whom the contractor is responsible.**

**7.2.4.1 Mission System Validation**

**Note to drafters: These clauses need to be tailored to meet the project requirements. This should cover the elements of Mission System Validation that the Contractor is expected to be responsible for, as described in the DMO TEMP and the Validation Plan (OT&E Plan). This may include contractor responsibilities with respect to the conduct of an operational evaluation.**

**7.2.4.2 Engineering Support Effectiveness Demonstration**

**7.2.4.2.1** The Contractor shall, as part of the Support System AV&V program, demonstrate to the Commonwealth the effectiveness of the Engineering Support Constituent Capability developed as part of the Support System.

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- 7.2.4.2.2** The Contractor shall, in demonstrating to the Commonwealth the effectiveness of the Engineering Support Constituent Capability developed as part of the Support System, Validate the:
- a. tasks and procedures for Engineering Support;
  - b. Technical Data for Engineering Support;
  - c. Support and Test equipment for Engineering Support;
  - d. Personnel Training requirements for Engineering Support;
  - e. Personnel resource requirements for Engineering Support; and
  - f. Facilities requirements for Engineering Support.
- 7.2.4.2.3** The Contractor shall develop and deliver, in accordance with CDRL Line Number V&V-300, an ATP for demonstrating to the Commonwealth the effectiveness of the Engineering Support Constituent Capability developed as part of the Support System.
- 7.2.4.2.4** The Contractor shall develop and deliver, in accordance with CDRL Line Number V&V-310, ATProcs for demonstrating to the Commonwealth the effectiveness of the Engineering Support Constituent Capability developed as part of the Support System.
- 7.2.4.2.5** The Contractor shall record, in accordance with CDRL Line Number V&V-320, the results of effectiveness demonstration for the Engineering Support Constituent Capability developed as part of the Support System.
- 7.2.4.3 Maintenance Support Effectiveness Demonstration**
- 7.2.4.3.1** The Contractor shall, as part of the Support System AV&V program, demonstrate to the Commonwealth the effectiveness of the Maintenance Support Constituent Capability developed as part of the Support System.
- 7.2.4.3.2** The Contractor shall, in demonstrating to the Commonwealth the effectiveness of the Maintenance Support Constituent Capability developed as part of the Support System, Validate the:
- a. tasks and procedures for Maintenance Support;
  - b. Technical Data for Maintenance Support;
  - c. Support and Test Equipment for Maintenance Support;
  - d. Personnel Training requirements for Maintenance Support;
  - e. Personnel resource requirements for Maintenance Support;
  - f. Facilities requirements for Maintenance Support;
  - g. Spares requirements for Maintenance Support; and
  - h. the complete maintenance pipeline, including those portions involving the Contractor and any Subcontractor to be involved in providing Maintenance Support.
- 7.2.4.3.3** The Contractor shall develop and deliver, in accordance with CDRL Line Number V&V-300, an ATP for demonstrating to the Commonwealth the effectiveness of the Maintenance Support Constituent Capability developed as part of the Support System.
- 7.2.4.3.4** The Contractor shall develop and deliver, in accordance with CDRL Line Number V&V-310, ATProcs for demonstrating to the Commonwealth the effectiveness of the Maintenance Support Constituent Capability developed as part of the Support System.
- 7.2.4.3.5** The Contractor shall record, in accordance with CDRL Line Number V&V-320, the results of effectiveness demonstration for the Maintenance Support Infrastructure developed as part of the Support System.

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**7.2.4.4.1** The Contractor shall, as part of the Support System AV&V program, demonstrate to the Commonwealth the effectiveness of the Supply Support Constituent Capability developed as part of the Support System.

**7.2.4.4.2** The Contractor shall, in demonstrating to the Commonwealth the effectiveness of the Supply Support Constituent Capability developed as part of the Support System, Validate the:

- a. tasks and procedures for Supply Support;
- b. Technical Data for Supply Support;
- c. Support and Test Equipment for Supply Support;
- d. Personnel Training requirements for Supply Support;
- e. Personnel resource requirements for Supply Support;
- f. Facilities requirements for Supply Support;
- g. Spares requirements for Supply Support; and
- h. the complete supply pipeline, including those portions involving the Contractor and any Subcontractor to be involved in providing Supply Support.

**7.2.4.4.3** The Contractor shall develop and deliver in accordance with CDRL Line Number V&V-300, an ATP for demonstrating to the Commonwealth the effectiveness of the Supply Support Constituent Capability developed as part of the Support System.

**7.2.4.4.4** The Contractor shall develop and deliver in accordance with CDRL Line Number V&V-310, ATProcs for demonstrating to the Commonwealth the effectiveness of the Supply Support Constituent Capability developed as part of the Support System.

**7.2.4.4.5** The Contractor shall record in accordance with CDRL Line Number V&V-320, the results of effectiveness demonstration for the Supply Support Constituent Capability developed as part of the Support System.

**7.2.4.5 Training Support Effectiveness Demonstration**

**7.2.4.5.1** The Contractor shall, as part of the Support System AV&V program, demonstrate to the Commonwealth the effectiveness of the Training Support Constituent Capability developed as part of the Support System.

**7.2.4.5.2** The Contractor shall, in demonstrating to the Commonwealth the effectiveness of the Training Support Constituent Capability developed as part of the Support System, Validate the:

- a. identified training requirements;
- b. tasks and procedures for Training Support;
- c. Technical Data for Training Support;
- d. Support and Test Equipment for Training Support;
- e. Personnel Training requirements for Training Support;
- f. Personnel resource requirements for Training Support;
- g. Facilities requirements for Training Support; and
- h. Spares requirements for Training Support.

**7.2.4.5.3** The Contractor shall develop and deliver in accordance with CDRL Line Number V&V-300, an ATP for demonstrating to the Commonwealth the effectiveness of the Training Support Constituent Capability developed as part of the Support System.

**7.2.4.5.4** The Contractor shall develop and deliver in accordance with CDRL Line Number V&V-310, ATProcs for demonstrating to the Commonwealth the effectiveness of the Training Support Constituent Capability developed as part of the Support System.

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**7.2.4.5.5** The Contractor shall record in accordance with CDRL Line Number V&V-320, the results of effectiveness demonstration for the Training Support Constituent Capability developed as part of the Support System.

**7.2.4.6 Support System Endurance Demonstration**

**Note to drafters: This demonstration is not intended to be finalised prior to the final payment under the Contract, but is expected to be linked to a performance guarantee.**

**7.2.4.6.1** The Contractor shall, as part of the Support System AV&V program, demonstrate to the Commonwealth the effectiveness of the Support System over 12 months following [...INSERT CONTRACT-SPECIFIC MILESTONE SUCH AS THE COMMENCEMENT DATE FOR THE ASSOCIATED CONTRACT (SUPPORT)...].

**7.2.4.6.2** The Contractor shall develop and deliver in accordance with CDRL Line Number V&V-300, an ATP for conducting this demonstration.

**7.2.4.6.3** The Contractor shall develop and deliver in accordance with CDRL Line Number V&V-310, ATProcs for conducting this demonstration.

**7.2.4.6.4** The Contractor shall record the results of this demonstration in accordance with CDRL Line Number V&V-320.

**DRAFT****8. QUALITY MANAGEMENT****8.1 Contractor Quality Responsibilities (Core)**

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- 8.1.1** The Contractor shall have a Quality Management System (QMS) Certified to AS/NZS ISO 9001:2000 "Quality Management Systems- Requirements" at the Effective Date.
- 8.1.2** The Contractor shall maintain and apply the QMS in clause 8.1.1 to the production, including design and development, as applicable, of the Supplies and shall notify the Commonwealth Representative of any changes to the Certification status of the Contractor.
- 8.1.3** During progress of work under the Contract, the Commonwealth may at its discretion perform Audit and Surveillance activities in relation to the work performed, including any of the following:
- a. System Audit;
  - b. Process Audit; or
  - c. Product Audit.
- 8.1.4** The Contractor shall ensure that all Approved Subcontractors have quality management systems which are appropriate to the work required under the Subcontract.
- 8.1.5** The Contractor shall ensure that all work performed under a Subcontract meets the requirements of the QMS to be applied by the Contractor under clause 8.1.
- 8.1.6** For clause 8 of the SOW, "Certification" means certification by an organisation accredited by the Joint Accreditation System for Australia and New Zealand (JAS-ANZ), or equivalent international or national certification body acceptable to the Commonwealth (the "Certification Body").
- 8.1.7** The Contractor shall maintain records pertaining to the planning and Verification of the quality of the Supplies for a minimum period of seven years after Final Acceptance.

**8.2 Quality Management Planning (Core)**

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- 8.2.1** The Contractor shall develop, deliver and update a Quality Plan in accordance with CDRL Line Number MGT-140.
- 8.2.2** The Contractor shall:
- a. ensure that quality plans are developed for all Approved Subcontractors; and
  - b. incorporate the quality plans for all Approved Subcontractors into the Quality Plan.
- 8.2.3** The Contractor shall manage the quality program for the Contract in accordance with the Approved Quality Plan.

**8.3 Quality Systems, Process and Product Non-Conformances (Core)**

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- 8.3.1** If at any time the Commonwealth Representative determines by Audit and Surveillance in accordance with clause 8.1.3 or otherwise that, in relation to the production of the Supplies:
- a. the quality system being applied no longer conforms to the Certified QMS;
  - b. the quality procedures and processes do not conform to the Approved Quality Plan; or
  - c. the products produced do not conform to agreed product specifications,
- then the Commonwealth Representative may notify the Contractor in writing of the details of the non-conformance and require the Contractor to correct the non-conformance within the period specified in the notice.
- 8.3.2** The Contractor shall take whatever action is necessary to correct a legitimate quality system/process/product non-conformance within the period specified in the notice issued under clause 8.3.1 or within any period agreed in writing by the Commonwealth

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Representative and shall notify the Commonwealth Representative immediately upon taking corrective action. The Commonwealth may perform an Audit to verify that the non-conformance has been corrected.

***Option: For use if a Contract contains significant technical risk.***

**8.3.3** The Commonwealth Representative may direct the Contractor, in a notice issued under clause 8.3.1, to cease work on any specified aspect of the Contract, which the Commonwealth determines may be affected by the non-conformance of a quality system/process/product to the specified standard. The Contractor shall comply with any such direction, and shall not recommence work on the specified aspect of the Contract until directed to do so by notice in writing from the Commonwealth Representative. Delay caused by cessation of work under this clause shall not be a ground for extension of time under clause 6.2 of the conditions of contract.

**8.4 Commonwealth Representative Approval of Non-Conforming Supplies (Core)**

**8.4.1** If the Contractor seeks to use non-conforming materials or work in the Supplies, it shall submit an Application for Deviation Form SG2, together with all supporting documentation for Commonwealth Representative Approval.

**8.4.2** Any Approval given by the Commonwealth Representative for the use of non-conforming materials or work shall not release the Contractor from due performance of any of its obligations under the Contract, except to the extent specifically set out in the Application for Deviation Form SG2.

**8.5 System Acceptance Audit (SAA) (Core)**

**8.5.1** Prior to submitting a Mission System for Acceptance, the Contractor shall hold a Mandated System Review, the System Acceptance Audit (SAA).

**8.5.2** The Contractor's entry criteria, exit criteria and objectives for SAA shall include those defined in DMO-CHECKLIST-SAA.