

National Defence

National Defence Headquarters Ottawa, Ontario K1A 0K2

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Quartier général de la Défense nationale Ottawa (Ontario) K1A 0K2

SOLICITATION AMENDMENT MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

RETURN BIDS TO: RETOURNER LES SOUMISSIONS À :

By e-mail to: - Par courriel au: DLP53BidsReceiving.DAAT53Receptiondessoumissions@forces.gc.ca

Attention: - Attention: Wo il Lee DLP 5-3-5

Title - Sujet

Solicitation No. N° de l'invitation

Défense nationale

ISO Container Lifting Systems (ICLS) - Systèmes

de levage de conteneurs ISO (SLCI)

05

Amendment No. - N° modif.

Date of Amendment Date de modification

W8476-226568/A December 22, 2022 - 22 décembre 2022

Address enquiries to: - Adresser toute demande de renseignements à :

Wo il Lee

Telephone No. - N° de telephone343-572-4779 **E-Mail Address - Courriel**Woil.lee@forces.gc.ca

Destination

See herein - Voir aux présentes

Instructions: Municipal taxes are not applicable. Unless otherwise specified herein all prices quoted must include all applicable Canadian customs duties, GST/HST, excise taxes and are to be delivered Delivery Duty Paid including all delivery charges to destination(s) as indicated. The amount of the Goods and Services Tax/Harmonized Sales Tax is to be shown as a separate item.

Instructions: Les taxes municipales ne s'appliquent pas. Sauf indication contraire, les prix indiqués doivent comprendre les droits de douane canadiens, la TPS/TVH et la taxe d'accise. Les biens doivent être livrés « rendu droits acquittés », tous frais de livraison compris, à la ou aux destinations indiquées. Le montant de la taxe sur les produits et services/taxe de vente harmonisée doit être indiqué séparément.

Delivery required Livraison exigée

See herein - Voir aux présentes

Delivery offered Livraison proposée

Vendor/Firm Name and Address

Raison sociale et adresse du fournisseur/de l'entrepreneur

Solicitation Closes - L'invitation prend fin

At - à: 2:00 PM - 14:00

On - le:

January 10, 2023 - 10 janvier 2023

Time Zone - Fuseau Horaire : Eastern Standard Time (EST) Heure normale de l'Est (HNE) Person authorized to sign on behalf of Vendor/Firm (type or print): | La personne autorisée à signer au nom du fournisseur/de l'entrepreneur (taper ou écrire en caractères d'imprimerie) :

Name - Nom Title - Titre

Signature Date



THIS SOLICITATION AMENDMENT IS RAISED TO:

- 1. Provide clarification and answers to questions from potential suppliers; and
- 2. Amend the solicitation to clarify and reflect the questions received.

QUESTIONS AND ANSWERS:

| Question 17 | Annex A, paragraph 3.2.1 indicates that an accredited professional engineer must be used to stamp any designs or certifications, however the term accredited professional engineer is not defined in the RFP. Can Canada please confirm that the term "accredited professional engineer" must be interpreted in line with the Canadian legal definition for a "professional engineer", specifically that the accredited professional engineer must be an individual who possesses a Professional Engineering (P. Eng.) licence from the Canadian province or territory in which they practice? |
|-------------|--|
| Answer 17 | The answer is yes, it can be interpreted as per in line with Canada's legal definition which is as per provincial/territorial jurisdiction as mentioned. Similarly for jurisdictions outside Canada such as the USA or elsewhere as per their own government engineering professional accreditation regulations. |
| Question 18 | Paragraph A1.1.4.2 of Appendix A1 to Annex A indicates that compliance to certain items can be proven via "certification". Please confirm that all "certifications" (compliance statements) used to prove compliance must be stamped by an accredited professional engineer. |
| Answer 18 | There are up to six (6) requirements requiring certifications (C or C3). Where the nature of the requirement is where it may cause risk or injury to human life, we are asking that they be certified by a professional engineer. Certification can be a compliance statement from the company and may involve a stamp from an accredited professional Engineer. Similarly, C3 Certification can be an authorized independent 3rd party certification that may involve a stamp from an accredited professional Engineer. |
| Question 19 | Paragraph A1.1.4.6 of Appendix A1 to Annex A indicates that, unless otherwise indicated, all testing is to occur as part of FAT. Appendix A1 also indicates which technical requirements must be proven through a "test". Please confirm that, for all items listed in the Verification Matrix in Appendix A1 with a verification method of "T", that test data from previous tests would not be sufficient to prove compliance and that these tests must be performed after contract award as part of the FAT. |
| Answer 19 | Yes, all requirements with verification method indicated as "T" must be performed after contract award during FAT. |
| Question 20 | Appendix A1, paragraph A1.10.1 indicates that the ICLS must be constructed of materials resistant to "corrosive agents" among other items. |
| | a. Can Canada please clarify what is meant by "corrosive agents" (i.e. must the ICLS be protected against contact with acids or other aggressive chemicals)? |
| | b. As part of the FAT, what would Canada consider to be acceptable documentation to prove compliance to this requirement? I.e. is a description of the paint system (if used), supported by technical performance data sheets from the paint supplier sufficient or is Canada expecting to receive a salt spray test report for the coating used by the Contractor (and if so, to what standard and for what duration)? |
| | c. Given that the ICLS will be comprised of a number of different components (fabricated metal components, hardware items, decals, lifting mechanism components, etc.) is Canada expecting to receive separate documents for each unique item used in the ICLS as part of FAT to prove compliance to this requirement, or is OEM technical literature for the ICLS as an assembly sufficient? |

| Answer 20 | a. A1.10.1: Replace "corrosive agents" with "moisture". | |
|-------------|---|--|
| | b. Technical performance data sheets indicating corrosion resistance from paint supplier would be sufficient. Similarly for other treatments or coatings. | |
| | c. Canada will not require documentation on different components/parts unless they are treated and protected by a different type of coating. | |
| Question 21 | Paragraph A1.1.2 of Appendix A1 to Annex A indicates that the Verification Matrix defines the means of compliance that must be followed and met by the Contractor however paragraphs A1.1.4.1 and A1.1.4.4 also indicate that Documentation and Analysis are subject to TA approval and, if those items are considered inadequate (presumably by the TA), the TA reserves the right to invoke further means of compliance at the Contractor's expense. The verbiage in paragraphs A1.1.4.1 and A1.1.4.4 represents a risk to Bidders as the criteria that the TA will use to determine the adequacy of the documents/analyses is undefined (and could be highly subjective) and the standards for the means of compliance (including testing) which could be invoked at the Contractor's cost are also undefined. | |
| | a. What standards will the TA use to determine if the documents/analyses provided by the Contractor are adequate to prove compliance? | |
| | b. To reduce risk to Bidders (which should result in a reduced ICLS price) would Canada willing to change the verbiage in paragraphs A1.1.4.1 and A1.1.4.4 as follows? | |
| | i. A1.1.4.1: The Documentation data must be subject to Technical Authority Approval, with the approval, which will not be unreasonably withheld, based upon reasonable engineering analysis of the data provided. If the Documentation data is still considered inadequate, the TA reserves the right to invoke Certification or Analysis at the Contractor's expense. A request to invoke proving compliance by Test would be subject to a contract change. | |
| | ii. A1.1.4.4: The Analysis data must be subject to Technical Authority Approval, with the approval, which will not be unreasonably withheld, based upon reasonable engineering analysis of the data provided. If the Analysis data is still considered inadequate, the TA reserves the right to invoke Documentation or Certification at the Contractor's expense. A request to invoke proving compliance by Test would be subject to a contract change. | |
| Answer 21 | No change. | |
| Question 22 | We have an additional question with regard to the above solicitation: | |
| | With reference to technical specification A1.6.6, would Canada accept the drop test being performed on a concrete surface, such as warehouse flooring, rather than a steel plate as otherwise required by MIL-STD 810H, 516.8? | |
| | We note this alternative ground surface is acceptable for the purposes of the ICAMMS RFP. | |
| Answer 22 | In this case, we will accept the test done on a concrete surface (such as warehouse flooring). | |
| | • | |

THIS SOLICITATION IS HEREBY AMENDED AS FOLLOWS:

2.1 DELETE: "STATEMENT OF WORK FOR THE ISO CONTAINER LIFTING SYSTEM (ICLS) dated 15 November 2022" in its entirety.

INSERT: "STATEMENT OF WORK FOR THE ISO CONTAINER LIFTING SYSTEM (ICLS) dated 19 December 2022" See attached.

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

STATEMENT OF WORK

FOR THE

SYSTEM (ICLS)



NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods. Disclosure notices and handling instructions originally received with the document must continue to apply.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées. Les avis de divulgation et les instructions de manutention reçues originalement doivent continuer de s'appliquer.

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1.0 SCOPE

1.1 Objective

1.1.1 The Department of National Defense has a requirement to procure 58 ISO Container Lifting Systems (ICLS). The purpose of this Statement of Work (SOW) is to define the requirements for the ICLS to be delivered IAW this SOW.

1.2 Background

- 1.2.1 The Canadian Armed Forces (CAF) uses a shelter system constructed from ISO containers. These containers range from 10 ft. in length to 20 ft. in length, and weigh up to 10,000 kg, in addition to a variety of ISO containers of various other configurations and sizes, up 40 ft. in length.
- 1.2.2 Currently, these shelter systems are loaded and unloaded from their transport vehicles using the vehicle's built-in loading system, forklifts, or other heavy equipment. However, in remote locations or isolated units, this equipment may not be available. Consequently, the CAF is looking to procure a manual ISO container lifting system to allow for the loading and unloading of these shelters in remote locations and in a variety of climates.

1.3 Intended Use

- 1.3.1 The ICLS will be capable of lifting and lowering ISO containers of up to 10,000 kg up to 1750 mm above grade, in austere locations, without additional support equipment.
- 1.3.2 The ICLS will be subjected to repeated periods of sustained, rugged military usage, extended inactivity, storage and/or transport.
- 1.3.3 The ICLS will be deployed to varied locations, both domestically and overseas, from bases and garrisons, airfield tarmac, and gravel compounds in Forward Operating Bases.
- 1.3.4 The ICLS will support loading and offloading from a variety of wheeled platforms as well as other container lifting tasks for units without specialized heavy Material Handling Equipment.
- 1.3.5 The envisioned concept of operation for ICLS is as follows:
 - 1.3.5.1 Two or more operators will deploy the ICLS from a stowed configuration to its carrying configuration (or final lifting configuration, depending on the Contractor's operating procedures).
 - 1.3.5.2 The operators will bring the ICLS to the container to be lifted.
 - 1.3.5.3 The operators will install the ICLS on the ISO container.
 - 1.3.5.4 Off-loading: The ISO container will be raised off a vehicle deck and allow the truck or trailer to be driven away, before lowering the ISO container to the ground. The operators will then disconnect the ICLS, and return it to a carrying configuration.
 - 1.3.5.5 Loading: The ISO container will be raised from the ground high enough to allow the truck or trailer to be driven under safely and then lowered on the deck of a

vehicle, the operators will then disconnect the ICLS, and return it to a carrying configuration.

1.3.5.6 The operators will carry the ICLS back to its storage location, and place the

system in its stowed configuration.

1.3.5.7 The total duration of the task (off-loading or loading) must not exceed two (2)

hours.

1.4 Acronyms and Abbreviations

ACA (Calendar days) After Contract Award

CA Contracting Authority

CAF Canadian Armed Forces

CDRL Contract Data Requirements List

CFB Canadian Forces Base

CSA Canadian Standards Association

DID Data Item Description

DND Department of National Defence

EEA Equipment Environmental Assessment

FAT First Article Test

FATP First Article Test Plan
FATR First Article Test Report

IAW In Accordance With

ICLS ISO Container Lifting System

ICT Initial Cadre Training

ILS Integrated Logistics Support

ISO International Organization for Standardization

KO Kick Off

LCC Loose Components Checklist

MCBF Mean Cycles Between Failures

NATO North Atlantic Treaty Organization

NCAGE NATO Commercial and Government Entity

NSN NATO Stockf Number

OEM Original Equipment Manufacturer
OQRC Operator Quick Reference Card

PA Procurement Authority

PCB Polychlorinated Biphenyls

PPB Provisioning Parts Breakdown

RVM Requirements Verification Matrix

| SDS | Safety Data Sheet |
|-------|--|
| SE | Systems Engineering |
| SMP | Standard Military Pattern |
| SOW | Statement of Work |
| SPTD | Supplementary Provisioning Technical Documentation |
| TA | Technical Authority |
| TEU | Twenty Foot Equivalent Unit |
| UID | Unique Identifier |
| UII | Unique Item Identifier |
| WHIMS | Workplace Hazardous Materials Information System |

2.0 APPLICABLE DOCUMENTS

2.1 References

2.1.1 Whereas mentioned, the following Standards must be used for the preparation of deliverables to the extent specified in this SOW.

GOVERNMENT FURNISHED INFORMATION

| REFERENCE NUMBER | PROMULGATION DATE | REFERENCE TITLE |
|---------------------|-------------------|--|
| A-LM-505-702/JS-001 | 2020-05-30 | UNIQUE IDENTIFICATION AND STANDARDIZED MARKING OF SERIALLY MANAGED MATERIEL |
| C-01-100-100/AG-005 | 2019-06-30 | POLICY/MANAGEMENT PROCEDURES AND GUIDELINES ACCEPTANCE OF COMMERCIAL AND FOREIGN GOVERNMENT PUBLICATIONS AS ADOPTED PUBLICATIONS |
| C-01-100-100/AG-006 | 2018-08-31 | POLICY/MANAGEMENT PROCEDURES AND GUIDELINES WRITING FORMAT, AND PRODUCTION OF TECHNICAL PUBLICATIONS |
| C-01-100-100/AG-008 | 2018-08-01 | POLICY/MANAGEMENT PROCEDURES AND GUIDELINES SPECIFICATION WRITER'S GUIDE FOR TECHNICAL DOCUMENTATION |
| D-01-100-204/SF-000 | 2018-08-31 | PREPARATION OF PREVENTIVE MAINTENANCE INSTRUCTIONS |
| D-01-100-205/SF-000 | 2000-10-31 | SPECIFICATION – PREPARATION OF CORRECTIVE MAINTENANCE INSTRUCTION |
| D-01-100-207/SF-002 | 1996-07-12 | SPECIFICATION – PREPARATION OF INTERIM ILLUSTRATED PARTS MANUALS FOR LAND EQUIPMENTS |
| D-01-100-214/SF-000 | 2020-09-30 | CANADIAN FORCES SPECIFICATIONS – PREPARATION OF PROVISIONING DOCUMENTATION FOR CANADIAN ARMED FORCES EQUIPMENT |

| D-02-002-001/SG-001 | 2021-06-30 | CANADIAN FORCES STANDARD – IDENTIFICATION MARKING OF DEPARTMENT OF NATIONAL DEFENCE MATERIEL |
|---------------------|------------|---|
| D-LM-008-001/SF-001 | 1986-06-30 | METHODS OF PACKAGING |
| D-LM-008-002/SF-001 | 1991-08-01 | SPECIFICATION FOR MARKING FOR STORAGE AND SHIPMENT |
| D-LM-008-011/SF-001 | 1988-11-10 | PREPARATION AND USE OF PACKAGING REQUIREMENTS CODES |
| D-LM-008-036/SF-000 | 2020-09-30 | CANADIAN FORCES SPECIFICATIONS – DEPARTMENT OF NATIONAL DEFENCE MINIMUM REQUIREMENTS FOR COMMERCIAL PACKAGING |

COMMERCIALLY AVAILABLE

| REFERENCE NUMBER | PROMULGATION DATE | REFERENCE TITLE |
|------------------|-------------------|---|
| AMS-STD-595 | LATEST EDITION | COLORS USED IN GOVERNMENT PROCUREMENT |
| BS EN 1494 | LATEST EDITION | MOBILE OR MOVABLE JACKS AND ASSOCIATED LIFTING EQUIPMENT |
| ISO 3874 | LATEST EDITION | SERIES 1 FREIGHT CONTAINERS – HANDLING AND SECURING |
| ISO 668 | LATEST EDITION | SERIES 1 FREIGHT CONTAINERS – CLASSIFICATION, DIMENSIONS AND RATINGS |
| MIL-STD-810H | LATEST EDITION | ENVIRONMENTAL ENGINEERING CONSIDERATIONS AND LABORATORY TESTS |
| MIL-STD-1472 | LATEST EDITION | HUMAN ENGINEERING |
| SOR/2008-273 | LATEST EDITION | PCB REGULATIONS |
| SOR/2012-285 | LATEST EDITION | PROHIBITION OF CERTAIN TOXIC SUBSTANCES REGULATIONS |
| SOR/2014-254 | LATEST EDITION | PRODUCTS CONTAINING MERCURY REGULATIONS |
| SOR/2018-196 | LATEST EDITION | PROHIBITION OF ASBESTOS AND PRODUCTS CONTAINING ASBESTOS REGULATIONS |

2.2 Order of Precedence

- 2.2.1 In the event of conflict between the content in this SOW and the referenced documents, the content of this SOW will take precedence.
- 2.2.2 Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3.0 PROJECT MANAGEMENT

3.1 **Project Management Capability**

- 3.1.1 The Contractor must establish, provide and maintain a project management capability to plan, execute and control all Work IAW cost, schedule and performance requirements of the ICLS Contract to:
 - 3.1.1.1 Co-ordinate with Canada; and
 - 3.1.1.2 Plan and control the work of subcontractors.
- 3.1.2 The Contractor's Project Manager must be the primary point of contact with the Technical Authority and Contract Authority for all issues related to the Work and Contract.
- 3.1.3 The Contractor's Project Manager must be present at the Kick-off Meeting, and at other meetings when requested by Canada. If the Project Manager does not have final approval authority for decision making and changes, then the person that has that final approval authority must also be present.

3.2 System Engineering Management Capability

3.2.1 The Contractor must make use of an accredited professional engineer to approve and stamp any designs or certifications.

3.3 **Project Meetings**

- 3.3.1 Kick-off Meeting
 - 3.3.1.1 The Contractor must organize and chair a kick-off meeting no later than within 28 days following the contract award, and secure a common understanding of the following:
 - 3.3.1.1.1 The requirements of the Contract;
 - 3.3.1.1.2 The requirements of the SOW;
 - 3.3.1.1.3 General overview of the project, risks, schedule and communication channels to follow, and
 - 3.3.1.1.4 Other contractual and programmatic issues associated with the project as agreed between the TA, CA and the Contractor.
 - 3.3.1.2 This meeting may take place via videoconference.
 - 3.3.1.3 Other Meetings
 - 3.3.1.4 The Contractor and the TA may schedule informal reviews, such as in-person meetings, teleconferences, video conferences, briefings and technical interchange meetings, to help achieve the requirements of the Contract.
 - 3.3.1.5 Refer to Meeting Documentation requirements found at ANNEX A para.3.3.2.
- 3.3.2 Meeting Documentation

- 3.3.2.1 The Contractor must provide the Meeting Agenda(s) IAW CDRL ICLS-PM-001 at Appendix A2.2 to ANNEX A and its associated DID ICLS-PM-001 at Appendix A3.3 to ANNEX A.
- 3.3.2.2 The Contractor must record, prepare, and provide the Meeting Minutes of each meeting IAW CDRL ICLS-PM-002 at Appendix A2.2 to ANNEX A and its associated DID ICLS-PM-002 at Appendix A3.4 to ANNEX A.
- 3.3.2.3 No change in the interpretation of the SOW, Technical Specification, cost, and schedule, as defined in the Contract, may be authorized by the minutes of a meeting. Such changes will require formal contract amendment by the CA.

4.0 Technical Requirements

4.1 Standard Design

- 4.1.1 Industry Acceptability The ICLS design must have demonstrated industry acceptability by having been manufactured and sold commercially for at least 2 years, or be manufactured by a company that has at least 5 years' experience in design and manufacturing of a comparable type of equipment of equivalent or greater complexity.
- 4.1.2 Measurements Values for labels and indicators provided with equipment must be presented in metric units, or must have both imperial and metric units with metric dominant.

4.2 System Description

- 4.2.1 The ICLS must be portable, structurally self-supporting above ground and fully operable on level ground.
- 4.2.2 The ICLS must be able to achieve its task 99% of times, without essential function failure / unscheduled corrective maintenance, and with manufacturer's recommended preventive maintenance performed.
- 4.2.3 The ICLS must share at least 90% of its parts with a currently in-service and commercially available ISO container lifting device.
- 4.2.4 The ICLS must conform to the detailed technical requirements listed in Appendix A1.

4.3 Requirements Verification Matrix (RVM)

- 4.3.1 The Contractor must provide an RVM IAW CDRL ICLS-SE-101 at Appendix A2.2 to ANNEX A and its associated DID ICLS-SE-101 at Appendix A3.6 to ANNEX A.
- 4.3.2 The Contractor must utilize the Technical Specification(s) at Appendix A1.0 to ANNEX A, to develop the RVM and demonstrate compliance to the Technical Specification.

4.4 First Article Unit

- 4.4.1 First Article Fabrication
 - 4.4.1.1 The Contractor must reserve the first article for First Article Testing (FAT).

- 4.4.1.2 The first article must consist of a complete ICLS as specified in this SOW and associated Appendices.
- 4.4.1.3 The first article must be manufactured using the established procedures, processes, personnel, materials, and facilities of a full production unit.

4.4.2 First Article Test Plan (FATP)

- 4.4.2.1 The Contractor must provide an FATP IAW CDRL ICLS-SE-102 at Appendix A2.2 to ANNEX A and its associated DID ICLS-SE-102 at Appendix A3.7 to ANNEX A.
- 4.4.2.2 The FAT must not commence until notification is received from the TA that the FATP has been approved.

4.4.3 First Article Test

- 4.4.3.1 The Contractor must subject the first article to all requirements IAW the approved FATP.
- 4.4.3.2 The Contractor must complete First Article Test at Contractor's facility.
- 4.4.3.3 The Contractor must provide one (1) 1C or 1CC configuration container loaded to a minimum gross weight of 10,000 kg, up to a maximum gross weight up to the weight rating of the ICLS, for all applicable FAT tests.
- 4.4.3.4 The Contractor must coordinate access to First Article Test for DND witnesses, including but not limited to the Technical Authority and Contracting Authority.

4.4.4 First Article Test Report (FATR)

- 4.4.4.1 The Contractor must provide an FATR IAW CDRL ICLS-SE-103 at Appendix A2.2 to ANNEX A and its associated DID ICLS-SE-103 at Appendix A3.8 to ANNEX A.
- 4.4.4.2 A written notice of approval or rejection of the FATR will be provided to the Contractor by the TA.
- 4.4.4.3 If the FAT is rejected, the Contractor must resolve deficiencies with the equipment and, if requested by the TA, repeat any or all FATP requirements.
- 4.4.4.4 All costs related to First Article re-work or re-tests must be borne by the Contractor.

4.4.5 Delivery of the First Article

- 4.4.5.1 Upon acceptance of the FATR, the Contractor must re-work and re-condition the First Article to the newly manufactured condition (up to and including paint touch ups).
- 4.4.5.2 The reconditioned first article must be delivered to Canada as part of the final End Item Deliverables.

4.5 **Delivery of ICLS Equipment**

- 4.5.1 Upon acceptance of the FATR, the Contractor must deliver ICLS systems IAW the quantities and delivery destinations in the end item deliverables list.
- 4.5.2 The Contractor must deliver ICLS equipment with an initial allotment of Preventive Maintenance Spare Parts.
- 4.5.3 The Contractor must include, in the initial allotment of Preventive Maintenance Spare Parts, those components necessary for known preventive maintenance cycles for the first 24 months of service (less fluids).

4.5.4 End Item Deliverable Contents List

| Item | Deliverable | Quantity | Reference |
|------|--|--------------|-----------|
| 1 | ICLS SYSTEM including (per system): | 58 | 4.2 |
| 1.1 | ICLS corner lifting devices | 4/system | A1.0 |
| 1.2 | ICLS Transport Container | 1/system | A1.6.1 |
| 1.3 | Loose Components Check List (hard copy) | 1/system | 5.2.1.3 |
| 1.4 | Quick Reference Card (hard copy) | 1/system | 5.2.1.2 |
| 1.5 | Technical Manual (hard Copy) | 1/system | 5.2.1.1 |
| 1.6 | Initial Allotment of Preventive Maintenance Spare Parts | 1 kit/system | 4.5.3 |

5.0 INTEGRATED LOGISTICS SUPPORT (ILS)

5.1 **Provisioning Data**

- 5.1.1 The Contractor must provide an PPB IAW CDRL ICLS-ILS-204 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-204 at Appendix A3.13 to ANNEX A.
- 5.1.2 The Contractor must provide SPTD IAW CDRL ICLS-ILS-205 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-205 at Appendix A3.14 to ANNEX A. SPTD, as prepared by the actual manufacturer of the item, is required for the codification and cataloguing of all items listed as recommended for procurement in the PPB.

5.2 Publications and Technical Data

- 5.2.1 The following publications and technical data must be provided:
 - 5.2.1.1 Technical Manual The Contractor must provide a Technical Manual IAW CDRL ICLS-ILS-206 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-206 at Appendix A3.15 to ANNEX A. The Technical Manual will include operating instructions, preventive and corrective maintenance instructions, storage and preservation instructions (if required) and Illustrated Parts List.
 - 5.2.1.2 Operator's Quick Reference Card (OQRC) The Contractor must provide a Quick Reference Card IAW CDRL ICLS-ILS-207 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-207 at Appendix A3.16 to ANNEX A. The OQRC will provide essential instructions for the safe set-up and operation of the equipment.

5.2.1.3 Loose Components Checklist (LCC) The Contractor must provide a Loose Components Checklist IAW CDRL ICLS-ILS-208 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-208 at Appendix A3.17 to ANNEX A. The LCC will provide a visual listing of components in the ICLS kit, to allow operators to quickly verify the completeness and condition of the equipment.

5.2.2 Manual Delivery with Equipment

5.2.2.1 One (1) complete set of manuals (ICLS Technical Manual, LCC, OQRC) must accompany each Equipment, shipped to each location.

5.3 Training

5.3.1 Master Lesson Plans

- 5.3.1.1 The Contractor must provide a Master Lesson Plan(s) IAW CDRL ICLS-ILS-209 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-209 at Appendix A3.18 to ANNEX A. The Master Lesson Plan(s) must form the basis of training to be performed during Initial Cadre Training.
- 5.3.1.2 The Contractor must develop the Master Lesson plans such that no additional certifications, qualifications or courses are required to safely operate the ICLS system.

5.3.2 Training Videos

5.3.2.1 The Contractor must provide a Video Training Package, IAW CDRL ICLS-ILS-210 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-210 at Appendix A3.19 to ANNEX A. The Video Training Package must provide discrete videos on the equipment description, unpacking, set-up and storage procedures, operating instructions, and preventive maintenance procedures.

5.3.3 Initial Cadre Training (ICT)

- 5.3.3.1 The Contractor must provide ICT for CAF personnel who will operate and maintain the ICLS. The DND Technical Authority will coordinate with the Contractor the scheduling of the training sessions.
- 5.3.3.2 The Contractor must prepare and present ICT training courses at five (5) different DND locations in Canada to a maximum of 50 CAF personnel (mixture of users and maintainers) for each course. In addition, up to an extra four (4) personnel from the National Defence Headquarters (NDHQ), who will be involved in managing the ICLS, may also attend
- 5.3.3.3 The Contractor must provide ICT at the locations below:

| ICT Serial | Location |
|---------------|----------------|
| 1 | CFB Petawawa |
| 2 | CFB Valcartier |
| 3 | CFB Gagetown |

| 4 | CFB Borden (DND will be responsible for shipping equipment to CFB Borden). |
|---|--|
| 5 | CFB Edmonton |

- 5.3.3.4 The ICT sessions must not be more than three (3) days in duration.
- 5.3.3.5 The ICTs must be conducted in English or French. It is expected that 4 of 5 ICT sessions will be in English, and 1 of 5 will be in French
- 5.3.3.6 The ICTs must make use of the actual ICLS delivered to DND.
- 5.3.4 The Contractor must provide two (2) instructors for each training session.
- 5.3.5 At least one (1) instructor must have the ability to provide the training session and answer any relevant questions in French.
- 5.3.6 DND will provide the facilities, ISO Containers and common tools required to perform the training.

5.4 Instruments, Decals, Data Plates and Warnings

- 5.4.1 Item Identification Marking and Labelling
 - 5.4.1.1 As it is subject to serial management, the ICLS must have a Unique Item Identifier or Recognized UII-Equivalents marked on the item IAW A-LM-505-702/JS-001.
 - 5.4.1.1.1 The Contractor must provide a UID Marking Specifications IAW CDRL ICLS-ILS-201 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-201 at Appendix A3.10 to ANNEX A.
 - 5.4.1.1.2 The Contractor must provide a UID Data Submission IAW CDRL ICLS-ILS-202 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-202 at Appendix A3.11 to ANNEX A.
 - 5.4.1.1.3 The Contractor must provide a UID Data Verification and Validation Report IAW CDRL ICLS-ILS-203 at Appendix A2.2 to ANNEX A and its associated DID ICLS-ILS-203 at Appendix A3.12 to ANNEX A.

6.0 ENVIRONMENTAL MANAGEMENT AND ASSESSMENT

6.1 **General**

- 6.1.1 Prohibition of Certain Toxic Substances
 - 6.1.1.1 The Contractor must not incorporate, in any part of the equipment substances listed under the regulation Prohibition of Certain Toxic Substances Regulations (SOR/2012-285).
- 6.1.2 The Contractor must minimize the use of mercury in the equipment, IAW the Products Containing Mercury Regulations (SOR/2014-254).

- 6.1.2.1 If mercury is present in any part of the equipment, the mercury content limit must comply with the regulation (SOR/2014-254).
- 6.1.3 The Contractor should not incorporate, in any part of the equipment, Polychlorinated Biphenyls (PCBs) IAW Polychlorinated Biphenyls (PCBs) Regulations (SOR/2008-273).
 - 6.1.3.1 If PCBs are present in any part of the equipment, they must comply with the regulation (SOR/2008-273).
 - 6.1.3.2 If such substances must be used, the Contractor must certify that there is no technically or economically feasible PCB-free alternative, as part of the Equipment Environmental Assessment.
- 6.1.4 The Contractor must offer asbestos-free equipment, IAW the Prohibition of Asbestos and Products containing Asbestos Regulations (PAPCAR): SOR/2018-196.

6.2 Equipment Environmental Assessment

6.2.1 The Contractor must provide an Equipment Environmental Assessment (EEA) IAW CDRL ICLS-SE-104 at Appendix A2.2 to ANNEX A and its associated DID ICLS-SE-104 at Appendix A3.9 to ANNEX A. The EEA evaluates the potential risks to the environment during the operation, maintenance and disposal of the equipment.

6.3 Environmental Management System

6.3.1 The Contractor must implement and maintain an Environmental Management System (EMS) appropriate to the scope of work to be performed. It is recommended that the quality system be based on ISO 14001:2015 – Environmental Management Systems.

ISO CONTAINER LIFTING SYSTEMS (ICLS)

REQUIREMENT VERIFICATION MATRIX (RVM)

APPENDIX A1

A1.0 APPENDIX: ICLS TECHNICAL SPECIFICATION

A1.1 **GENERAL**

- A1.1.1 The matrix below shows the Requirement Verification Matrix populated for each requirement of the ICLS and with mandatory Means of Compliance.
- A1.1.2 The Verification Matrix defines the Means of Compliance that must be followed and met by the Contractor to verify compliance with each requirement for the First Article Test (FAT) after Contract Award.
- A1.1.3 All Means of Compliance must be executed by the Contractor, witnessed and approved by DND accordingly.
- A1.1.4 **Means of Compliance Required:** The technique being used to prove compliance with the requirement specification including Documentation, Certification, Analysis, Inspection, and Test.
 - A1.1.4.1 **Documentation (D):** A background record that demonstrates the ICLS meets the specified standards and requirements. Compliance documentation includes, but is not limited to, previous data, previous test reports (including test procedures and test results), previous equivalence reports, and Original Equipment Manufacturer Technical Literature. Documentation data must be subject to Technical Authority Approval. If Documentation data is considered inadequate, the Technical Authority reserves the right to invoke Certification, Analysis or Test, at Contractor's expense. Documentation can either be provided by the Contractor or a 3rd party (e.g. Catalog pages or data sheets for commercially available components)
 - A1.1.4.2 **Certification (C):** Conformance certification from the Contractor (i.e. Compliance Statement).
 - A1.1.4.3 **Certification (C3)**: Conformance certification from an authorized independent 3rd party (e.g. CSA Certification).
 - A1.1.4.4 Analysis (A): Verification through technical evaluations of calculations, computations, drawings, models, simulations, and analytical solutions, reduced data and representative data to determine if the item conforms to the specified requirements of this Contract. Analysis must not be limited to raw data but must contain justification as to how the data verifies that the requirement will be met. Analysis data must be subject to Technical Authority Approval. If Analysis data is considered inadequate, the Technical Authority reserves the right to invoke further Documentation, Certification or Test, at Contractor's expense.
 - A1.1.4.5 **Inspection (I):** Examination using the physical senses (i.e. visual inspection including basic measurements) to determine compliance with requirements. This will be completed on the First Article Unit

A1.1.4.6 **Test (T):** An action that the operability, supportability, or performance capability of an item is verified when subjected to controlled conditions that are real or simulated. Unless otherwise specified, this testing is to occur as part of FAT. Some tests may use special test equipment, instrumentation or procedures. DND may conduct their own independent testing to verify requirements.

| TECHNIC | CAL SPECIFICATIONS | VERIFICATION METHOD (see RVM) |
|---------|---|-------------------------------------|
| A1.2 | General Technical Requirements | |
| A1.2.1 | The ICLS must be operated by any combination of two operators ranging from 5th percentile female to 100th percentile male, as defined in MIL-STD-1472G. Technical documentation will be assessed to ensure this is achievable, and the system will be tested during acceptance testing. | A, T |
| A1.2.2 | The ICLS must not require the use of any internal or external power sources i.e. the ICLS must only be operated through the operators' muscular force. | D, T |
| A1.2.3 | The ICLS must be operated by operators wearing cold weather clothing (parkas, winter boots, and gloves). | А |
| A1.2.4 | The ICLS system, when broken down in components, must be manipulated and moved by 2 personnel or less. Each component must not weigh more than 40 kg. | Т |
| A1.2.5 | The ICLS must complete a lifting or lowering task, with two trained operators, within two hours. Task time includes set-up from storage, lifting (or lowering) to the maximum height of 1750 mm, and teardown for storage. | Т |
| A1.3 | Load Capability | |
| A1.3.1 | The ICLS must have a minimum lifting capacity of 10,000kg. | Т |
| A1.3.2 | The ICLS should have a minimum lifting capacity of 16,500kg. | Т |
| A1.3.3 | The ICLS must be designed in accordance with document BS EN 1494. Proof load test to be conducted in accordance with (IAW) document BS EN 1494 practical test as defined in Appendix B1.1 of that document. | T, C |
| A1.3.4 | The ICLS primary load bearing point of attachment to the ISO containers must be to each of the four (4) lower ISO corner apertures. | |

| A1.3.5 The ICLS must attach and to the four (4) lower ISO corner apertures whilst the container is laid directly on smooth, paved surfaces or raised on blocks up to and including 8 inch by 8 inch blocking. | | | | | | | |
|--|---------|---|--------------|--|--|--|--|
| A1.3.6 The ICLS must contain a securing mechanism when fastened to the ISO corner apertures using a quarter turn locking handle or equivalent ISO corner lock. | | | | | | | |
| A1.3.7 | | LS ISO corner lock securing mechanism must feature a secondary latch or locking pin to prevent ntal release of the ISO corner lock. | Т | | | | |
| A1.3.8 | The IC | LS must lift a variety of ISO container sizes, specifically the following container designations as defined 668: | | | | | |
| A1.3 | 3.8.1 | 1A, 1AA, and 1AAA | | | | | |
| A1.3 | 3.8.2 | 1B, and 1BB | | | | | |
| A1.3.8.3 | | 3 1CX, 1C, and 1CC | | | | | |
| A1.3 | 3.8.4 | 1DX and 1D | | | | | |
| A1.3 | 3.8.5 | 1E "Tricon" (1968 mm long x 2438 mm high x 2438 mm wide) | | | | | |
| A1.3 | 3.8.6 | 1F "Quadcon" (1460 mm long x 2438 mm high x 2438 mm wide) | | | | | |
| A1.3.9 | | LS must lift any combination of 1D, "Tricon" and "Quadcon" containers joined to form 1 TEU, up to the um lift rating of the ICLS. | А | | | | |
| A1.3.10 | (delete | d) The ICLS should lift 20ft flat racks equipped with ISO 1161 corner blocks. | I | | | | |
| A1.3.11 The ICLS must raise any compatible ISO container from grade-level to a minimum height of 1750 mm above grade, as measured from the bottom surface of the container and allow sufficient lateral side clearance to allow safe passage from the platform of the exiting truck. | | | | | | | |
| A1.3.12 The ICLS must incorporate a positive lock or self-braking mechanism such that unintentional descent of the load must be prevented as per document BS EN 1494 paragraph 5.1. | | | | | | | |

| A1.4.1 | The ICLS must lift ISO Containers on a variety of surface and soil conditions, including but not limited to the following: | | | | | | |
|-----------------|---|--------|--|--|--|--|--|
| A1. | 4.1.1 Hard terrain, either wet or dry (such as asphalt, concrete, compacted earth, etc.); | T, A | | | | | |
| A1. | 4.1.2 Loose gravel; and | | | | | | |
| A1. | 4.1.3 Snow or loose sand, no deeper than 5 cm over hard surfaces. | | | | | | |
| A1.4.2 | The ICLS must safely lift ISO containers on a minimum grade of 6 degrees. Compliance can be shown in accordance with document BS EN 1494 Annex B.1.3 c. | T, C | | | | | |
| A1.5 E ı | nvironmental Conditions | | | | | | |
| A1.5.1 | A1.5.1 The ICLS must operate in all climatic conditions with ambient temperatures ranging from -30°C through +50°C inclusive. Compliance with high temperature operation requirements must be proven by MIL-STD 810H Method 501.7 Procedure II and compliance with low temperature operational requirements must be proven by MIL-STD 810H Method 502.7 Procedure II. | | | | | | |
| A1.5.2 | The ICLS should operate, without malfunction, in all climatic conditions with the ambient temperature from - 46°C through +50°C inclusive. | | | | | | |
| A1.5.3 | The ICLS, in storage configuration, must be weather resistant such that when stored outdoors, it will not suffer deterioration, at ambient temperatures between –46°C / –51°F and +50°C / +122°F. | C or A | | | | | |
| A1.5.4 | The ICLS must operate in heavy rain, as described by MIL-STD-810H Method 506.6 2.3.3 Procedure I | D | | | | | |
| A1.5.5 | The ICLS must be resistant to sand and dust, IAW MIL-STD-810G, method 510.5, Procedures I & II; no certification required. | | | | | | |
| A1.5.6 | A1.5.6 The ICLS must not permit water accumulation in pockets, creases, fissures or depressions that could cause damage or inoperability upon freezing. | | | | | | |
| A1.6 T r | ansportability | | | | | | |
| | | | | | | | |

| A1.6.2 | The Transport Container must be sufficiently robust and durable to be re-used throughout the life of the equipment (20-25 years) and ensure the security of the components during transportation. The use of internal compartments or secondary containers within the larger Transport Container, in order to package and protect hardware and other components, is acceptable. | D, A, I |
|-------------------------|--|---------|
| A1.6.3 | The ICLS in its Transport Container must be transportable by a 6000 lb forklift as a single assembly, with integral forklift pockets or other suitable lifting points. | Т |
| A1.6.4 | The ICLS must be able to transition from storage to its operational configuration without the use of lifting devices or special tools, with a maximum of two personnel. | Т |
| A1.6.5 | The ICLS, in its Transport Container, must be transportable by land, sea, or air, either within an ISO container or as bulk cargo on an open deck. | А |
| A1.6.6 | The ICLS, in Transportation/Storage configuration, must resist transit drop, IAW MIL-STD 810H, Procedure 516.8 Procedure IV (Transit Drop). Drop conditions must be IAW requirements of Table 516.8-IX | Т |
| A4.0.7 | The ICLS Transport Container must provide ID 44 level protection IAW standard IEC 60520 to the ICLS | |
| A1.6.7 | The ICLS Transport Container must provide IP 44 level protection, IAW standard IEC 60529, to the ICLS assemblies stored within. | Т |
| | | T |
| | assemblies stored within. | A |
| 41.7 R | eliability and Maintainability The ICLS must have a Mean Cycles Between Failures (MCBF) of 50, with all manufacturer's recommended preventive maintenance performed. One cycle is defined as installation on an ISO Container (loaded to 10,000kg), lifting the container to the maximum lift height, lowering onto a flatbed 1.5m high, and then performing the inverse operation to remove the ISO container from the flatbed, and lower the ISO container to | |
| A1.7 R A1.7.1 | eliability and Maintainability The ICLS must have a Mean Cycles Between Failures (MCBF) of 50, with all manufacturer's recommended preventive maintenance performed. One cycle is defined as installation on an ISO Container (loaded to 10,000kg), lifting the container to the maximum lift height, lowering onto a flatbed 1.5m high, and then performing the inverse operation to remove the ISO container from the flatbed, and lower the ISO container to the ground followed by removal of the ICLS from the container. The ICLS must be designed with safety in mind, so that no critical error occurs during operation. Reference BS | Α |
| A1.7 R A1.7.1 | assemblies stored within. eliability and Maintainability The ICLS must have a Mean Cycles Between Failures (MCBF) of 50, with all manufacturer's recommended preventive maintenance performed. One cycle is defined as installation on an ISO Container (loaded to 10,000kg), lifting the container to the maximum lift height, lowering onto a flatbed 1.5m high, and then performing the inverse operation to remove the ISO container from the flatbed, and lower the ISO container to the ground followed by removal of the ICLS from the container. The ICLS must be designed with safety in mind, so that no critical error occurs during operation. Reference BS EN 1494 for design standards. | A |

| A1.8.1 | The ICLS must have danger and caution signs, labels and markings on it for warning of specific hazards such as voltage, current, thermal or physical hazards IAW Canadian Centre for Occupation Health. | 1 |
|------------------|---|------|
| A1.8.2 | All signs, labels and markings must be provided in both English and French. | I |
| A1.9 C c | onstruction | |
| A1.9.1 | The ICLS must be made using new materials and components only. | D |
| A1.10 Pr | otection Against Corrosion and Chemical Agents | |
| A1.10.1 | The ICLS must be constructed of materials resistant to or life term protected against corrosion and deterioration caused by atmospheric conditions, corrosive agents, moisture, ground moisture, and salt. | D |
| A1.10.2 | The ICLS exterior color must be safety yellow, #13591 IAW AMS-STD-595C. Canada would accept galvanized (zinc electroplated) steel as long as it meets the requirements of A1.10.1. If to meet this requirement painting is required then the color shall be Safety Yellow #13591, IAAMS-STD-595C. | I |
| A1.10.3 | Coatings must level out to an adherent, continuous and uniform film without runs, wrinkles, streaks, or areas of no film. | I |
| A1.10.4 | Any coating damaged during inspection or examination must be touched up. There must be no areas where rust can accrue. | I |
| A1.10.5 | Finish must be free of blistering, peeling and chips. | I |
| A1.11 P r | eservation and Winterization | |
| A1.11.1 | The system must be designed to be preserved for periods exceeding one (1) year, with minimal maintenance required during storage. | I, D |

| A1.12.1 | _ | ting capacity must be certified using tests stated in document BS EN 1494 Appendix B1.1 and, if applicable, pendix B1.2. | | | | | |
|---|--|---|---|--|--|--|--|
| A1.13 Id | entificat | tion and Marking | | | | | |
| A1.13.1 In addition to the general marking and identification requirements of D-02-002-001/SG-01, the following requirements apply: | | | | | | | |
| A1.13.2 | A1.13.2 The ICLS Storage Container must include a serialized data plate and UID tag, prepared IAW A-LM-505-702/JS-001. | | | | | | |
| A1.13.3 | | nechanical jack assembly of the ICLS must have forged, cast, die stamped, etched, or fixed label gs by the manufacturer to show the following as per document BS EN 1494 paragraph 7.2: | | | | | |
| A1.13.3.1 | | The business name and full address of the manufacturer and, where applicable, his authorized representative; | | | | | |
| A1.13.3.2 | | Rated load; | 1 | | | | |
| A1.13.3.3 | | Serial number or batch code, and | | | | | |
| A1.13.3.4 | | Contract Number | | | | | |

ISO CONTAINER LIFTING SYSTEMS (ICLS)

CONTRACT DATA REQUIREMENTS LIST (CDRL)

APPENDIX A2

A2.0 APPENDIX: CONTRACT DATA REQUIREMENTS LIST

A2.1 Management and Explanation of the CDRL

A2.1.1 Explanation of the CDRL

- A2.1.1.1 **CDRL Line Number** This field provides the unique sequential number that identifies each data item within different functional groups (eg, PM-001, SE-101, & ILS-201).
- A2.1.1.2 **CDRL Title** This field identifies the title of the data item.
- A2.1.1.3 **SOW Para Ref** This field shows the paragraph in the SOW where the data item is stipulated. There may be multiple references to the data item in the SOW, but generally only the first (or one) reference is shown in the CDRL.
- A2.1.1.4 **Version** This field identifies the particular delivery of a data item during its lifecycle (ie, draft, final).
- A2.1.1.5 **Delivery Schedule** This field specifies the date(s) and/or events by which the data item is required to be delivered. The date of delivery applies to all delivery locations and quantities unless otherwise specified. Following are some of the abbreviations and symbols used with this column:
- A2.1.1.5.1 "ACA" means After Contract Award;
- A2.1.1.5.2 'KO' means the Kick-Off Meeting date;
- A2.1.1.5.3 Numerals indicate the number of Calendar Days, unless specified otherwise:
- A2.1.1.5.4 '+' means after the specified date or event; and
- A2.1.1.5.5 '-' means before the specified date or event.
- A2.1.1.5.6 If a data item is required to be delivered before an event having a duration of greater than one day, delivery date must be calculated from the first day of that event. If a data item is required to be delivered after an event having a duration of greater than one day, the delivery date must be calculated from the last day of that event.
- A2.1.1.6 Quantity This field specifies the total number of data items to be delivered to the associated delivery location(s), including the number of hard (H) and soft (S) copies. When both hard and soft copies are requested, the action copy will be indicated in the notes column.
- A2.1.1.7 Addressee This field shows the short title of the DND representative to whom the hard and soft copies of the data items must be delivered. The action hard copy of the data item must be delivered to the first nominated location in this field.
- A2.1.1.8 **Data Item Description Reference** This field provides the identification of the DID with which the data item must comply.

A2.1.1.9 DND Action Period – This field defines the number of Calendar Days available to the DND to action the data item and respond to the Contractor, if that action requires a response.
 A2.1.1.9.1 The period begins upon the date the action copy of the data item is received at the first nominated addressee.
 A2.1.1.10 DND Action Required – This field indicates the purpose for which the data item is being submitted to the DND, which will either be for Review, Approval or Acceptance.
 A2.1.1.11 Notes: Where necessary, additional explanatory information relating to a CDRL data item is provided in this column.

A2.2 CDRL Item List

| CDRL# | CDRL Title | SOW Para | Version | Delivery Schedule | Qty | Addressee | DID # and Ref | DND Action | DND Action | Notes |
|-------------|-------------------------------------|---------------------|------------------|----------------------|-----|------------|---------------|---------------|-------------------------|--------------------------------------|
| | | Ref | | Schedule | | | | Period | Required | |
| ICLS-PM-001 | Meeting Agenda | Para. 3.3.3.1 | Draft | Meeting Date -5 | 1S | CA, TA, PA | ICLS-PM-001 | 3 | Review | |
| | | | Revised | Meeting Date - 1 | 1S | CA, TA, PA | App. A3.3 | | | |
| | | | Final | Meeting Date | 1H | CA, TA, PA | | 7 | Review or Acceptance | |
| ICLS-PM-002 | Meeting Minutes | Para. 3.3.3.2 | Draft | Meeting Date + 7 | 1S | CA, TA, PA | ICLS-PM-002 | 7 | Review | |
| | | | Revised or Final | DND Comments + 7 | 1S | CA, TA, PA | App. A3.4 | 7 | Review or Acceptance | |
| ICLS-PM-003 | Standard Report | DID ICLS-SE- | | | | | ICLS-PM-003 | | | |
| | Format | DID ICLS-SE- 103 | | | | | App. A3.5 | | | |
| ICLS-SE-101 | Requirements Verification Matrix | Para 4.3 | Draft | ACA +28 | 1S | TA | ICLS-SE-101 | 14 | Review | To be presented at Kick Off meeting. |
| | | | Revised | FAT -30 | 1S | TA | App. A3.6 | 7 | Review | Revised RVM in support of FATP |
| | | | Revised | FAT + 60 | 1S | TA | | 7 | Review | Revised RVM in support of FATR |
| | | | Revised or Final | DND comments + 7 | 1S | TA | | 7 | Review or Acceptance | |
| ICLS-SE-102 | First Article Test Plan | Para.4.4.2 | Draft | 90 ACA | 1S | TA | ICLS-SE-102 | 14 | Review | |
| | | | Revised | DND Comments +30 | 1S | TA | Арр. А3.7 | 7 | Review | |
| | | | Revised or Final | DND Comments + 10 | 1S | TA | | 7 | Review or Acceptance | |
| ICLS-SE-103 | First Article Test Report | Para.4.4.4 | Draft | FAT +30 | 1S | TA | ICLS-SE-103 | 14 | Review | |
| | | | Revised or Final | DND Comments + 30 | 1S | TA | App. A3.8 | 7 | Review or Acceptance | |

| CDRL# | CDRL Title | SOW Para Ref | Version | Delivery Schedule | Qty | Addressee | DID # and Ref | DND Action Period | DND Action Required | Notes |
|--------------|---|-----------------|--------------------------------|----------------------------|-------|-----------|---------------|-------------------------|---------------------------|-------------------------------------|
| ICLS-SE-104 | Equipment Environmental Assessment | Para. 6.2 | Draft | ACA +180 | 1S | ТА | ICLS-SE-104 | 14 | Review | |
| | | | Revised or Final | DND Comments + 30 | 1S | TA | Арр. АЗ.9 | 7 | Review or Acceptance | |
| ICLS-ILS-201 | UID Marking Specifications | Para.5.4 | Draft | ACA +90 | 1S | TA | ICLS-ILS-201 | 14 | Review | |
| | | | Revised or Final | DND Comments + 30 | 1S | TA | App. A3.10 | 7 | Review or Acceptance | |
| ICLS-ILS-202 | UID Data Submission | Para. 5.4 | Draft | ACA +150 | 1S | TA | ICLS-ILS-202 | 14 | Review | |
| | | | Revised or Final | DND Comments + 30 | 1S | TA | App. A3.11 | 14 | Review or Acceptance | |
| ICLS-ILS-203 | UID Verification and Validation Report | Para.5.4 | Draft | UID Data Submission +60 | 1S | TA | ICLS-ILS-203 | 14 | Review | |
| | | | Revised or Final | DND Comments + 30 | 1S | TA | App. A3.12 | 14 | Review or Acceptance | |
| ICLS-ILS-204 | Provisioning Parts Breakdown | Para.5.1 | Draft | FAT +30 | 1S | TA | ICLS-ILS-204 | 14 | Review | |
| | | | Revised or Final | DND Comments + 30 | 1S | TA | App. A3.13 | 14 | Review or Acceptance | |
| ICLS-ILS-205 | Supplemental Provisioning Technical Documentation | Para. 5.1 | Draft | FAT +30 | 1S | TA | ICLS-ILS-205 | 14 | Review | In conjunction with PPB submission. |
| | | | Revised or Final | DND Comments + 30 | 1S | TA | App. A3.14 | 14 | Review or Acceptance | |
| ICLS-ILS-206 | Technical Manual | Para.5.2 | Draft English | FAT | 1H/1S | TA | ICLS-ILS-206 | 30 | Review | |
| | | | Revised English | DND Comments + 60 | 1S | TA | Арр. А3.15 | 14 | Review or Acceptance | |
| | | | Revised or Final English | DND Comments + 30 | 1S | ТА | | 7 | Review or Acceptance | |

| CDRL# | CDRL Title | SOW Para Ref | Version | Delivery Schedule | Qty | Addressee | DID # and Ref | DND Action Period | DND Action Required | Notes |
|--------------|------------------------------------|-----------------|--|----------------------|---------------|-----------|---------------|-------------------------|---------------------------|-------|
| | | | Bilingual / French Draft | DND Comments +60 | 1S | ТА | | 30 | Review | |
| | | | Revised or Final Bilingual / French | DND comments +30 | 1S | ТА | | | | |
| | | | Final Bilingual | With End Items | 1H/ system | | | 7 | Review or Acceptance | |
| ICLS-ILS-207 | Operator's Quick Reference Card | Para.5.2 | Draft English | FAT | 1H/1S | TA | ICLS-ILS-207 | 30 | Review | |
| | | | Revised English | DND Comments +60 | 1S | TA | App. A3.16 | 14 | Review or Acceptance | |
| | | | Revised or Final English | DND Comments + 30 | 1S | ТА | | 7 | Review or Acceptance | |
| | | | Bilingual / French Draft | DND Comments +60 | 1S | ТА | | 30 | Review | |
| | | | Revised or Final Bilingual / French | DND comments +30 | 1S | ТА | | | | |
| | | | Final Bilingual | With End Items | 1H/ system | | | 7 | Review or Acceptance | |
| ICLS-ILS-208 | Loose Component Checklist | Para.5.2 | Draft English | FAT | 1H/1S | TA | ICLS-ILS-208 | 30 | Review | |
| | | | Revised English | DND Comments +60 | 1S | TA | App. A3.17 | 14 | Review or Acceptance | |
| | | | Revised or Final English | DND Comments + 30 | 1S | ТА | | 7 | Review or Acceptance | |
| | | | Bilingual / French Draft | DND Comments +60 | 1S | ТА | | | | |

| CDRL# | CDRL Title | SOW Para Ref | Version | Delivery Schedule | Qty | Addressee | DID # and Ref | DND Action Period | DND Action Required | Notes |
|--------------|--------------------------------|-----------------|--|--|---------------|-----------|---------------|-------------------------|---------------------------|-------|
| | | | Revised or Final Bilingual / French | DND comments +30 | 1S | ТА | | 30 | Review | |
| | | | Final Bilingual | With End Items | 1H/ system | | | 7 | Review or Acceptance | |
| ICLS-ILS-209 | Training Master Lesson Plan | Para. 5.3 | Draft English | Final English Technical Manual +90 | 1H/1S | ТА | ICLS-ILS-209 | 30 | Review | |
| | | | Revised or Final English | DND Comments + 30 | 1S | ТА | App. A3.18 | 7 | Review or Acceptance | |
| | | | Bilingual / French Draft | DND Comments +60 | 1S | ТА | | 14 | Review | |
| | | | Revised or Final Bilingual / French | DND comments +30 | 1S | ТА | | 7 | Review or Acceptance | |
| ICLS-ILS-210 | Video Training Package | Para.5.3 | Draft English | Final English TMLP + 90 | 1H/1S | ТА | ICLS-ILS-210 | 14 | Review | |
| | | | Revised or Final English | DND Comments + 30 | 1S | ТА | App. A3.19 | 7 | Review or Acceptance | |
| | | | Bilingual / French Draft | DND Comments +60 | 1S | ТА | | 14 | Review | |
| | | | Revised or Final Bilingual / French | DND comments +30 | 1S | TA | | 7 | Review or Acceptance | |

ISO CONTAINER LIFTING SYSTEMS (ICLS)

DATA ITEM DESCRIPTION

APPENDIX A3

A3.0 APPENDIX: DATA ITEM DESCRIPTION

A3.1 Data Deliverable Format

- A3.1.1 Unless otherwise specified as a specific requirement, the Contractor must deliver all of the soft copies of data deliverables, in formats compatible with the office software currently in use by the DND as listed:
 - A3.1.1.1 Microsoft (MS) Windows 10 Enterprise Operating System (OS);
 - A3.1.1.2 MS Edge 2019;
 - A3.1.1.3 MS Office Professional Plus 2013 (Word, Excel, Access, PowerPoint and Outlook); and
 - A3.1.1.4 Foxit PhantomPDF version 10;

A3.2 **DID Table Definitions**

- A3.2.1 The following section defines the various blocks of information found on the Data Item Description (DID) forms:
 - A3.2.1.1 **BLOCK 1 TITLE:** The title of the data item for the DID.
 - A3.2.1.2 **BLOCK 2 IDENTIFICATION NUMBER** The Data Item Description (DID) number, consisting of a sequential three-digit number and prefixed with an abbreviation code, to uniquely identify the DID. Note that the 001-099 series is reserved to Project Management (PM) DIDs, the 101-199 series is reserved to Systems Engineering (SE) DIDs and the 201-299 series is reserved to Integrated Logistics Support (ILS) DIDs. The abbreviation codes used for the prefix are:
 - A3.2.1.2.1 "PM" for Project Management
 - A3.2.1.2.2 "SE" for Systems Engineering
 - A3.2.1.2.3 "ILS" for Integrated Logistics Support
 - A3.2.1.3 **BLOCK 3 DESCRIPTION:** Provides a general description of the data content requirements.
 - A3.2.1.4 **BLOCK 4 RELATED DOCUMENT(S):** Provides a listing of the related documents and specifications associated with and required to produce this DID.
 - A3.2.1.5 **BLOCK 5 CONTRACT REFERENCE:** The specific paragraph numbers from the Contract Statement of Work and CDRL to assist in identifying the work effort associated with the data item.
 - A3.2.1.6 **BLOCK 6 PREPARATION INSTRUCTIONS:** Provides the preparation instructions for the content and format requirements for the DID.

A3.3 DID - Meeting Agenda

| DATA ITEM DESCRIPTION | | | | | | | |
|--|-----------------------|--|--|--|--|--|--|
| 1. TITLE 2. IDENTIFICATION NUMBER | | | | | | | |
| Meeting Agenda | DID ICLS-PM-001 | | | | | | |
| 3. DESCRIPTION | | | | | | | |
| The Meeting Agenda contains the venue information and identifies the discussion items to be covered at meetings. | | | | | | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | | | | | | |
| | SOW: Para. 3.3.3.1 | | | | | | |
| | CDRL: App. A2.2 | | | | | | |

6. PREPARATION INSTRUCTIONS

6.1. **CONTENT**

- 6.1.1. The Meeting Agenda must set forth the venue, identify all requirements and list the discussion items to be covered at the meeting.
- 6.1.2. Venue. The Meeting Agenda must address the venue as follows:
 - 6.1.2.1. Meeting Identification Number;
 - 6.1.2.2. Purpose;
 - 6.1.2.3. Date, time and location; and
 - 6.1.2.4. Attendees.
- 6.1.3. Discussion items. The Meeting Agenda must address the discussion items through the following sections:
 - 6.1.3.1. Agenda Review;
 - 6.1.3.2. Review of Previous Minutes;
 - 6.1.3.3. Opened Discussion Items;
 - 6.1.3.4. New Discussion Items;
 - 6.1.3.5. Review of Action Items;
 - 6.1.3.6. Closing Remarks.

6.2. HARD COPY FORMAT

6.2.1. The Meeting Agenda must be printed on 8.5"X11" Letter format paper.

6.3. **SOFT COPY FORMAT**

- 6.3.1. The Meeting Agenda must be submitted as a MS Word file type.
- 6.3.2. The Meeting Agenda MS Word document must be submitted via email (submission size not to exceed 7MB) as follows:
 - 6.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.3.2.2. Subject Field: ICLS-PM-001 Meeting Agenda [Rev #] [Date of Issue]

A3.4 DID – Meeting Minutes

| DATA ITEM DESCRIPTION | | | | | | | | |
|--|-----------------------|--|--|--|--|--|--|--|
| 1. TITLE 2. IDENTIFICATION NUMBER | | | | | | | | |
| Meeting Minutes | DID ICLS-PM-002 | | | | | | | |
| 3. DESCRIPTION | | | | | | | | |
| The Meeting Minutes contains the detailed records of proceedings, discussions, decisions and action items from meetings. | | | | | | | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | | | | | | | |
| | SOW: Para. 3.3.3.2 | | | | | | | |
| | CDRL: App. A2.2 | | | | | | | |

6. PREPARATION INSTRUCTIONS

6.1. CONTENT

- 6.1.1. The Meeting Minutes must contain the detailed records of proceedings, discussions, decisions and action items from the meeting and be presented through the following sections:
 - 6.1.1.1. General consisting of meeting identification number, purpose, date, time and location;
 - 6.1.1.2. Attendees, consisting of the organization each person represents, and the identification of the Chairperson(s);
 - 6.1.1.3. Opening Remarks;
 - 6.1.1.4. **Action Item Report** used to monitor issues, assign responsibility, direct action and track status, history, and progress, and must consisting of:
 - 6.1.1.4.1. Item #; date initiated; required action; assigned actionee; target completion date; cross-reference to all related action items.
 - 6.1.1.4.2. Action Item Report must be **updated** with each meeting and must consisting of:
 - 6.1.1.4.2.1. Action Item current status and the actual date completed;
 - 6.1.1.5. Next Venue;
 - 6.1.1.6. Closing Remarks;

6.2. **SOFT COPY FORMAT**

- 6.2.1. The Meeting Minutes must be submitted as a PDF file type.
- 6.2.2. The Meeting Minutes PDF must be submitted via email (submission size not to exceed 7MB) as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-PM-002 Meeting Minutes [Rev #] [Date of Issue]

A3.5 **DID – Standard Report Format**

| DATA ITEM DESCRIPTION | | | | |
|--|--------------------------|--|--|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | | | |
| Standard Report Format | DID ICLS-PM-003 | | | |
| 3. DESCRIPTION | | | | |
| The Standard Report Format describes the structure for formal reports that are prepared by the Contractor. | | | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | | | |
| DID ICLS-SE-102 | | | | |
| DID ICLS-SE-103 | | | | |

PREPARATION INSTRUCTIONS

6.1. **GENERAL FORMAT**

6.1.1. The Contractor must use a standard format for reports prepared for the Crown.

6.2. **CONTENT**

- 6.2.1. The Contractor's report must consist of the following:
 - 6.2.1.1. <u>Title Page.</u> The title page must contain the following information:
 - 6.2.1.1.1. Title: list name of report
 - 6.2.1.1.2. Contract No: state the contract number
 - 6.2.1.1.3. CDRL No: identify the CDRL
 - 6.2.1.1.4. Prepared For: state the name of the Project Management Office
 - 6.2.1.1.5. Prepared By: state the Contractor's name and address
 - 6.2.1.1.6. Approved by: provide a signature block for the Project Management Office
 - 6.2.1.1.7. Authenticated By: provide a signature block for Contractor approval signature(s)
 - 6.2.1.2. <u>Table of Contents.</u> The Table of Contents must list the title and page number of each titled paragraph and subparagraph, figure, table and appendix.
 - 6.2.1.3. <u>Document Control Log.</u> The Document Control Log must contain three columns: Revision, Date and Reason for the Change.
 - 6.2.1.4. Revision Record. The Revision Record must contain a listing of pages and their revision status.
 - 6.2.1.5. <u>Subject Matter.</u> This part contains the subject matter of the report.
 - 6.2.1.5.1. This part should contain any general information that aids in the understanding of the document such as background information and glossary.
 - 6.2.1.5.2. This part should include an alphabetical listing of all acronyms, abbreviations and their meanings as used in the report.

6.2.1.6. Appendices.

- 6.2.1.6.1. Each appendix must be referenced in the main body of the report where the data would normally have been provided.
- 6.2.1.6.2. Appendices may be used to provide information published separately for convenience in document maintenance such as charts and classified data.
- 6.2.1.6.3. Appendices may be bound as separate documents for ease of handling.

A3.6 DID – Requirements Verification Matrix

| DATA ITEM DESCRIPTION | | | | |
|--|--------------------------|--|--|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | | | |
| Requirements Verification Matrix (RVM) | DID ICLS-SE-101 | | | |
| 3. DESCRIPTION | | | | |

The RVM provides bidirectional traceability from high-level system performance requirements, to the lowest-level requirements. The RVM shows the traceability and allocation of the requirements contained in the specification tree (i.e. performance specification, detailed specification, subsystem specification, software requirements specification, interface specification and design documentation). The RVM is also used to verify how each requirement is verified.

| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE |
|---|-----------------------|
| Technical Specification at Appendix A1.0 to ANNEX A | SOW: Para. 4.3 |
| | CDRL: App. A2.2 |

6. PREPARATION INSTRUCTIONS

6.1. **CONTENT**

- 6.1.1. The RVM must provide backwards and forward traceability through multiple levels of design hierarchy (i.e. the RVM must document each requirement from its source through analysis, design, testing, and acceptance), to assess the impact of potential specification changes.
- 6.1.2. The RVM must include the verification criteria for each requirement for testing purposes.
- 6.1.3. The RVM must contain the following:
 - 6.1.3.1. **Architecture Description Page**: Include a detailed description of the RVM, show relationships and define all the terms, acronyms used in the RVM fields.
 - 6.1.3.2. Requirement Source & Reference: The paragraph number and requirement statement;
 - 6.1.3.3. **Verification Method**: For each requirement, enter the verification method. Verification methods are specified and defined in Appendix A1.0:
 - 6.1.3.4. **Verification Document**: Enter the document number, title, and date of the verification document that contains the verification method.
 - 6.1.3.5. **Verification Document Paragraph**: Enter the verification document paragraph number that provides the verification method.
 - 6.1.3.6. **Verification Procedure**: Enter the verification procedure section, and verification procedure step(s) that provides the verification method for each requirement.
 - 6.1.3.7. **Other Tests**: Enter the names of other tests conducted, prior to verification of the requirement, where the requirement is being tested.
 - 6.1.3.8. **Verification Results**: Enter the results of the verification for each requirement. Did system under test or inspection conform to the requirement? (Yes, No). Are the Certifications, Analysis and/or Documentation sufficient to prove conformance to the requirement?
 - 6.1.3.9. Corrective Actions: Enter all corrective actions taken and the results of the corrective actions.
 - 6.1.3.10. **Comments**: Enter explanatory notes as required.

6.2. **SOFT COPY FORMAT**

6.2.1. The RVM must be in an Excel Spreadsheet (MS Office Professional Plus 2013) / electronic relational database (DOORS 9.6 or Access Database (MS Office Professional Plus 2013)) format that can be manipulated to show bidirectional requirements traceability and track the verification of each requirement.

- 6.2.2. **Soft Copy format submission size below 7MB** The RVM may be submitted via email as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-SE-101 RVM [Rev #] [Date of Issue]
- **6.2.3. Soft Copy format submission size at or above 7MB** The RVM must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. RVM;
 - 6.2.3.3. ICLS-SE-101;
 - 6.2.3.4. The Revision number, and
 - 6.2.3.5. The date of issue.

A3.7 DID - First Article Test Plan

| DATA ITEM DESCRIPTION | | |
|--------------------------------|--------------------------|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | |
| First Article Test Plan (FATP) | DID ICLS-SE-102 | |

3. DESCRIPTION

The FATP documents the plan to demonstrate the proper operation of the equipment, IAW with the Requirements Verification Matrix (RVM). The FATP describes the general procedures, terms and conditions governing the planning, preparation and completion of acceptance testing covering the system submitted for acceptance.

4. RELATED DOCUMENTS

DID ICLS-SE-101

DID ICLS-SE-103

DID ICLS-PM-003 Standard Report Format

5. CONTRACT REFERENCE

SOW: Para. 4.4.2

CDRL: App. A2.2

6. PREPARATION INSTRUCTIONS

- 6.1.1. The FATP must describe the process of demonstrating the complete integration and proper operation of the system to qualify the first article unit for acceptance.
- 6.1.2. The FATP must include all Inspection and Test requirements necessary to complete the RVM and whether any requirement is to be proven by Certification, Analysis or Documentation.
- 6.1.3. The FATP must establish the approach, procedures, methods and techniques governing and planning, preparation and completion of acceptance testing for the system submitted for acceptance.
- 6.1.4. The Contractor must structure the FATP IAW the format specified by the Standard Report Format DID ICLS-PM-003.
- 6.1.5. The Contractor must include the following sections under the Subject Matter part of the FATP:
 - 6.1.5.1. Section I Scope.
 - 6.1.5.1.1. Section I must state the scope and purpose of the FATP.
 - 6.1.5.1.2. Section I must describe the ICLS equipment under test or inspection.
 - 6.1.5.2. Section II Related Documents.
 - 6.1.5.2.1. Section II must list the reference documents and any related documents.
 - 6.1.5.3. Section III Acceptance Testing or Inspection Program Management.
 - 6.1.5.3.1. Section III must be divided into the following to describe the planning associated with acceptance testing or inspection activities:
 - 6.1.5.3.1.1. Approach and procedures;
 - 6.1.5.3.1.2. Resource estimation and allocation to the test plan;
 - 6.1.5.3.1.3. Schedule of test or Inspection activities.
 - 6.1.5.4. Section IV Test or Inspection Objectives and Expected Results.
 - 6.1.5.4.1. Section IV must establish a unified set of objectives for the entire acceptance test program.
 - 6.1.5.4.1.1. The objectives must satisfy the system specifications.
 - 6.1.5.4.1.2. The objectives must state the expected test results.

- 6.1.5.5. Section V Acceptance Test or Inspection Approach and Activities.
 - 6.1.5.5.1. Section V must describe the overall plan for testing or Inspection.
 - 6.1.5.5.2. Section V must describe the method for each test or inspection.
 - 6.1.5.5.3. Section V must reference the RVM entries that detail which requirements are being tested, or inspected, and whether Verification of a requirement will be established by the test
 - 6.1.5.5.4. Section V must include the following:
 - 6.1.5.5.4.1. Test management assurance activities to:
 - 6.1.5.5.4.2. Verify the establishment and adherence to test standards;
 - 6.1.5.5.4.3. Satisfy the test requirements; and
 - 6.1.5.5.4.4. Record the test or inspection results.
 - 6.1.5.5.4.5. Process to be followed in the event of failure.
 - 6.1.5.5.4.6. Process to be followed in the event of re-testing.
- 6.1.5.6. Section VI Test or Inspection Methods and Techniques.
 - 6.1.5.6.1. Section VI must describe the methods and techniques to be used for acceptance testing or inspection activities.
 - 6.1.5.6.2. Section VI must describe the following:
 - 6.1.5.6.2.1. Coordination of testing or inspection activities.
 - 6.1.5.6.2.2. Test equipment and test software (if applicable).
 - 6.1.5.6.2.3. Personnel support requirements.
 - 6.1.5.6.2.4. Overview of basic test or inspection methods planned to implement objectives.
 - 6.1.5.6.2.5. Identification of constraints.
 - 6.1.5.6.2.6. The test or inspection procedures.
 - 6.1.5.6.2.7. Analysis and evaluation techniques.
 - 6.1.5.6.2.8. Presentation of results.
- 6.1.5.7. Section VII Acceptance Test Products.
 - 6.1.5.7.1. Section VII must describe the products of the testing or inspection activities undertaken, including their format and structure of products produced, as well as any data to be collected and analyzed.

- 6.2.1. The FATP must be submitted as a .pdf file type.
- 6.2.2. **Soft Copy format submission size below 7MB** The FATP may be submitted via email as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-SE-102 FATP [Rev #] [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** The FATP must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. FATP;
 - 6.2.3.3. ICLS-SE-102;
 - 6.2.3.4. The Revision number, and

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| 6.2.3.5. The date of issue. |
|-----------------------------|
| |
| |
| |
| |

A3.8 DID - First Article Test Report

| DATA ITEM DESCRIPTION | | | |
|---|--------------------------|--|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | | |
| First Article Test Report (FATR) | DID ICLS-SE-103 | | |
| 3. DESCRIPTION | | | |
| The FATR provides confirmation that the first article unit of ICLS meets the technical requirements as specified in the contract. | | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | | |
| DID ICLS-SE-101 | SOW: Para. 4.4.4 | | |
| DID ICLS-SE-102 | CDRL: App. A2.2 | | |
| DID ICLS-PM-003 Standard Report Format | | | |

PREPARATION INSTRUCTIONS

6.1. CONTENT

- 6.1.1. The Contractor must structure the FATR IAW the format specified by the Standard Report Format DID ICLS-PM-003.
- 6.1.2. The FATR must include the information required for the Technical Authority to approve the FAT.
- 6.1.3. The FATR subject matter section must contain, as a minimum, the following information:
 - 6.1.3.1. the system, subsystem or major assembly covered by the FATR and reference to the test plan;
 - 6.1.3.2. Purpose of each test performed.
 - 6.1.3.3. Records of calibration of the test equipment.
 - 6.1.3.4. Details of the test procedure for each test, including pass/fail criteria.
 - 6.1.3.5. References to relevant FATP test plan/procedure and details of any differences between the FATP and the 'as run' test procedure;
 - 6.1.3.6. Statement of the test results for each test.
 - 6.1.3.6.1. Relevant verification results, with applicable raw results / measurement data, calculations, to be included as attachments;
 - 6.1.3.7. Analysis of each test result, with statement of pass/fail judgment.
 - 6.1.3.8. Summary of the results and conclusions from the verification activities;
 - 6.1.3.9. Discussion of any limitation or implications resulting from the verification activities;
 - 6.1.3.10. Summary of any actions taken as a result of non-compliance (e.g., change proposal, waiver or deviation);
 - 6.1.3.11. Recommendation for the acceptance of the system, subsystem or major assembly as applicable; and
 - 6.1.3.12. Conclusions.
- 6.1.4. The FATR must include, as an Appendix, the RVM requirements, certifications, analysis and documentation to support RVM Means of Compliance.

- 6.2.1. The FATR must be submitted as a PDF file type.
- 6.2.2. Soft Copy format submission size below 7MB The FATR may be submitted via email as follows:

- 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
- 6.2.2.2. Subject Field: ICLS-SE-103 FATR [Rev #] [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** The FATR must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. FATR;
 - 6.2.3.3. ICLS-SE-103;
 - 6.2.3.4. The Revision number, and
 - 6.2.3.5. The date of issue.

A3.9 DID -Equipment Environmental Assessment

| DATA ITEM DESCRIPTION | | | |
|--|-----------------|--|--|
| 1. TITLE 2. IDENTIFICATION NUMBER | | | |
| Equipment Environmental Assessment (EEA) | DID ICLS-SE-104 | | |
| 3. DESCRIPTION | | | |
| The acquisition EEA identifies and documents potential environmental impacts of the equipment and the associated mitigation measures required to reduce or eliminate them. | | | |
| 4. RELATED DOCUMENTS 5. CONTRACT REFERENCE | | | |
| | SOW: Para. 6.2 | | |
| | CDRL: App. A2.2 | | |

6. PREPARATION INSTRUCTIONS

6.1. FORMAT

6.1.1. The EEA must be in the Contractor's format.

- 6.2.1. The EEA must contain the following sections and information, as a minimum:
 - 6.2.1.1. Title Page
 - 6.2.1.1.1. Equipment Name and NSN (if available)
 - 6.2.1.1.2. Assessment Contact: Name, title and company name of the author of the EEA
 - 6.2.1.2. Executive Summary
 - 6.2.1.2.1. Provide a brief summary of potential environmental impacts and recommended mitigation measures for life-cycle phases such as operation and maintenance and demilitarization and disposal.
 - 6.2.1.3. Equipment Description
 - 6.2.1.3.1. Provide an overview of the equipment and identify each major sub-system as per the Equipment Breakdown Structure.
 - 6.2.1.4. For each major sub-system, identify the following:
 - 6.2.1.4.1. Table 1 list the integrated hazardous substances and chemical products that must be identified, if they are incorporated in the equipment design. The hazardous chemical products must have safety data sheets (SDS) which conform to WHMIS 2015, to be provided in Annex A of the EEA.
 - 6.2.1.4.2. **Table 2** list the ionizing and non-ionizing radiation sources and batteries.
 - 6.2.1.5. Environmental Assessment
 - 6.2.1.5.1. For each lifecycle phase (operation and maintenance and disposal) discuss the following:
 - 6.2.1.5.1.1. Lifecycle activities: Describe anticipated activities and identify if any of these activities have the potential to: release a polluting substance to air, water or land (e.g. exhaust emissions, hazardous waste, spills, etc.); impact human health; noise or vibration; and/or alter landscape features.
 - 6.2.1.5.1.2. Environmental impacts: Describe the potential positive and negative environmental impacts of the listed lifecycle activities.
 - 6.2.1.5.1.3. For any positive environmental impacts identified, provide details (e.g. reduction of fuel consumption, emissions)

- 6.2.1.5.1.4. Mitigation Measures: Describe mitigation measures to eliminate or reduce identified potential negative environmental impacts, including those that are part of the design, any warning devices, emission control equipment, spill response, safe handling and disposal procedures, training, labels on equipment, cautions and warnings in the Technical Documentation, monitoring or inspections, etc.
- 6.2.1.6. Conclusions and Recommendations
 - 6.2.1.6.1. Summarize the main environmental impacts and recommended mitigation measures.
- 6.2.1.7. References
 - 6.2.1.7.1. List references consulted in the completion of the EEA (such as Canadian legislation, product technical documentation, etc.)

Table 1 - Identification of Hazardous Substances and Hazardous Chemical Products

| Integrated Hazardous Substances | NSN | Original OEM | Item Descriptio | Location | Additional Details |
|--|-----|-----------------------------------|--------------------|--|---|
| | | Part Number | n | | |
| Arsenic, Cadmium, Chromium VI, Cobalt, Lead, Radioactive metals | | | | | |
| Halocarbons – refrigerant and air-conditioning systems | | | | | Type and weight (kg). Global Warm Potential of Hydrofluorocarbons use for refrigerant applications. |
| Mercury and its compounds | | | | | Form of mercury (e.g. liquid, vapou and weight (mg) |
| Polychlorinated Biphenyl (PCBs) | | | | | Form (liquid or solid), quantity (kg), volume (L) and concentration in pp |
| Hazardous Chemical Products (SDS Required) | NSN | Original OEM Part Number | Ingredient | Chemic al Abstract Service Number (CAS#) | Controls* |
| Halocarbons – Fire extinguishing systems | | | | | |
| Halocarbons – In aerosol Products | | | | | |
| Paints and related commodities (CARC and non-CARC) | | | | | |
| Fire-fighting Foams Cleaner and | | | | | |
| Degreasers | | | | | |
| POLs (Petroleum, Oils, Lubricants) | | | | | |
| Adhesives | | | | | |
| Anti-seize Corrosion Inhibitor | | | | | |
| Decontaminant | | | | | |
| Detector Kit Chemical substances | | | | | |

*Controls: Identify if the substance is regulated under the *Canadian Environmental Protection Act, 1999*; targeted in Schedule 1, Toxic Substance List under CEPA and/or subject to the reporting requirements under the National Pollutant Release Inventory (NPRI).

Table 2 - Identification of radiation sources and batteries

| Categories | NSN | Original OEM | Item | Locatio | Additional Details |
|------------------------|-----|--------------|-------------|---------|-------------------------|
| | | Part Number | Description | n* | |
| Non-ionizing radiation | | | | | Type of electromagnetic |
| | | | | | energy (laser, |
| | | | | | microwave, radio |
| | | | | | frequency) and strength |
| lonizing radiation | | | | | Type and quantity or |
| | | | | | activity level |
| Batteries | | | | | Type |

^{*} Identify the system/sub-system where these items are located.

6.2.1.8. Annex A – Material Safety Data Sheets (SDS)

6.2.1.8.1. IAW WHMIS 2015, attach SDS for the hazardous chemical products identified in Table 1

- 6.3.1. The EEA must be submitted as a PDF file type.
- 6.3.2. **Soft Copy format submission size below 7MB** The EEA may be submitted via email as follows:
 - 6.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.3.2.2. Subject Field: ICLS-SE-104 EEA [Rev #] [Date of Issue]
- 6.3.3. **Soft Copy format submission size at or above 7MB** The EEA must be submitted on CD or DVD media and be labelled as follows:
 - 6.3.3.1. ISO Container Lifting System
 - 6.3.3.2. EEA;
 - 6.3.3.3. ICLS-SE-104;
 - 6.3.3.4. The Revision number, and
 - 6.3.3.5. The date of issue.

A3.10 DID - UID Marking Specifications

| DATA ITEM DESCRIPTION | | | |
|---|-----------------------|--|--|
| 1. TITLE 2. IDENTIFICATION NUMBER | | | |
| UID Marking Specifications | DID ICLS-ILS-201 | | |
| 3. DESCRIPTION | | | |
| To describe the UII Mark design and specifications for the ICLS system that is subject to UID Marking under the contract. | | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | | |
| CDRL/DID ICLS-ILS-202 | SOW: Para. 5.4 | | |
| CDRL/DID ICLS-ILS-203 | CDRL: App. A2.2 | | |
| A-LM-505-702/JS-001 | | | |

PREPARATION INSTRUCTIONS

- 6.1.1. Provide the following data for each Line Item in the contract which is subject to UID Marking:
 - 6.1.1.1. Describe which type of marking methodology will be used (i.e., Direct or Indirect Part Marking, Data Plate Modification, etc.).
 - 6.1.1.2. Describe the Imprint Method / Type of Label / Nameplate (i.e., Chemical Etch, Dot Peen, Laser, Thermal Transfer, Ink Jet, Photo Etch, etc.).
 - 6.1.1.3. Marking Specifications:
 - 6.1.1.3.1. Identify applicable engineering drawings requiring UID marking.
 - 6.1.1.3.2. Machine Readable Mark Generation Instructions.
 - 6.1.1.3.2.1. Define the UID construct method
 - 6.1.1.3.2.2. Identify format code, ISO/IEC syntax, and Data Qualifiers contained
 - 6.1.1.3.2.3. Identify the Enterprise Identifier (EID) (i.e. Cage, DUNS, or GS1).
 - 6.1.1.3.2.4. Identify the level of serialization (i.e., Part, Lot, Batch, Enterprise, etc.).
 - 6.1.1.3.2.5. If using Construct 1 18S, identify the sequence number generation process.
 - 6.1.1.3.2.6. Determine other data elements (if required) in the data matrix symbol (i.e. 30P and 30T).
 - 6.1.1.3.3. Identify the Human Readable Mark Generation elements to be included on the label.
 - 6.1.1.3.4. For labels/nameplates, identify which type of material will be used for the creation of the Mark (i.e., Aluminum, Polyacrylic, Metal Foil, Polyester, Polyvinyl, Aluminum Foil, Stainless Steel, etc.).
 - 6.1.1.3.5. Describe the overall layout of the Mark including:
 - 6.1.1.3.5.1. Size (Length, Width, Thickness, etc.).
 - 6.1.1.3.5.2. Shape (Circle, Square, Rectangle, Rounded Corners, etc.).
 - 6.1.1.3.5.3. Layout/Order (Location of Human and Machine Readable elements).
 - 6.1.1.3.5.4. Marking Location on Asset
 - 6.1.1.3.5.5. Type of Lettering (Font, Font Size, Color, etc.).

6.1.1.3.5.6. Attachment Method (Adhesive, Screws, Rivets, Tags, Bag and Tag, Tags and Bands, etc.). For Tag, and Bag/Band and Tag items, provide evidence of why part could not be marked and Government concurrence.

- 6.2.1. The UID Marking Specification must be submitted as a PDF file type.
- 6.2.2. **Soft Copy format submission size below 7MB** The UID Marking Specification may be submitted via email as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-ILS-201 UID Marking Specification [Rev #] [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** The UID Marking Specification must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. UID Marking Specification;
 - 6.2.3.3. ICLS-ILS-201;
 - 6.2.3.4. The Revision number, and
 - 6.2.3.5. The date of issue.

A3.11 DID - UID Data Submission

| DATA ITEM DESCRIPTION | | | |
|--|-----------------------|--|--|
| 1. TITLE 2. IDENTIFICATION NUMBER | | | |
| UID Data Submission | DID ICLS-ILS-202 | | |
| 3. DESCRIPTION | | | |
| To describe the required data elements associated with UII Marks applied to materiel and their constituent UII data IAW the Statement of Work, and to describe the data format required to facilitate data utilization by DND/CAF. | | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | | |
| CDRL/DID ICLS-ILS-201 | SOW: Para. 5.4 | | |
| CDRL/DID ICLS-ILS-203 CDRL: App. A2.2 | | | |
| A-LM-505-702/JS-001 | | | |

6. PREPARATION INSTRUCTIONS

- 6.1.1. Definitions
 - 6.1.1.1. Definitions within this DID must be IAW the Unique Identification (UID) Clause within this Statement of Work.
- 6.1.2. Provide the following data for each item to be delivered that is subject to Unique Identification:
 - 6.1.2.1. Description (English)*
 - 6.1.2.2. Description (French)*
 - 6.1.2.3. NCAGE of item manufacturer*
 - 6.1.2.4. Manufacturer current part number*
 - 6.1.2.5. Manufacturer serial number*
 - 6.1.2.6. Item Weight β
 - 6.1.2.7. Unit of Weight †
 - 6.1.2.8. Acquisition Value β
 - 6.1.2.9. Acquisition Currency†
 - 6.1.2.10. Country of Manufacture β
 - 6.1.2.11. Year of Manufacture β
 - 6.1.2.12. Month of Manufacture †
 - 6.1.2.13. Embedded item (Y/N)*
 - 6.1.2.14. NCAGE of parent item manufacturer (if an embedded item)†
 - 6.1.2.15. Manufacturer part number (if an embedded item)†
 - 6.1.2.16. Manufacturer serial number (if an embedded item)†
 - 6.1.2.17. Unique item identifier of parent item (if an embedded item)†
 - 6.1.2.18. Unique item identifier of item*
 - 6.1.2.19. Unique Item Identifier Type*

- 6.1.2.20. Issuing Agency Code* 6.1.2.21. Enterprise Identifier of entity assigning UII (if concatenated UII is used)† 6.1.2.22. Item Original Part number (if UII is serialized within the part number)† 6.1.2.23. Item Lot or Batch Number (if UII is serialized within the batch or lot)† 6.1.2.24. Serial number used in UII (if concatenated unique item identifier is used)† 6.1.2.25. CAGE or DUNS of organization submitting the data* 6.1.2.26. Name of the person or office submitting the data* 6.1.2.27. E-mail address of the submitter* 6.1.2.28. Phone number of the submitter* 6.1.2.29. Contract Number under which the item is to be delivered*
- 6.1.3. NOTES:
 - 6.1.3.1. (*) indicates a Mandatory Field
 - 6.1.3.2. (β) indicates an Optional Field
 - 6.1.3.3. (†) indicates a Conditional Field
- 6.1.4. Marking Specifications
 - 6.1.4.1. A E is standard Materiel Identification Data Set for Serialized Equipment and is required for any serialized item (including embedded serialized items)
 - 6.1.4.2. F Weight is optional information
 - 6.1.4.3. G Unit of weight is conditional (required if Weight is not NULL)
 - 6.1.4.4. H Acquisition Value is optional information
 - 6.1.4.5. I Acquisition Currency is conditional (required if Acquisition Value is not NULL)
 - 6.1.4.6. J Country of Manufacture is optional information
 - 6.1.4.7. K Year of Manufacture is optional information
 - 6.1.4.8. L Month of Manufacture is optional information
 - 6.1.4.9. M, N, O NCAGE, Manufacturer Part Number and Manufacturer Serial number of superior equipment is conditional (required if item is installed in a superior equipment)
 - 6.1.4.10. P Concatenated UII required for ALL items subject to UID
 - 6.1.4.11. Q UII Type required to describe UID type (UID1, UID2, VIN, ESN, GIAI, GRAI, UDI)
 - 6.1.4.12. R Parent UII is conditional (required for all embedded items)
 - 6.1.4.13. S Parent UII must be submitted prior to, or along with, child UII. Child UIIs referencing a parent UII that is not registered will be rejected.
 - 6.1.4.14. T Issuing Agency code is conditional (required for all concatenated UIIs)
 - 6.1.4.15. U Enterprise Identifier responsible for ensuring uniqueness of UII is conditional (required for all concatenated UIIs)
 - 6.1.4.16. V Original part number is conditional for UII Data (required for UID2 construct when UIIs are serialized within the Part Number)
 - 6.1.4.17. W Lot / Batch number is conditional for UII Data (required for UID2 construct when UIIs are serialized within the Lot / Batch)

- 6.1.4.18. X Serial Number in UII Data set is conditional (required for concatenated UIIs); if UID2 construct is used, UII serial must match OEM serial number (column F)
- 6.1.4.19. Y AC is required to provide contact information of the entity submitting the data and the contract under which referenced equipment is to be delivered
- 6.1.4.20. C, U, Y Discrete Enterprise Identifiers are required for:
- 6.1.4.21. C The Enterprise ID of the original equipment manufacturer;
- 6.1.4.22. U The entity that assigned the UII (if concatenated UII is used);
- 6.1.4.23. Y The Enterprise ID of the entity that submitted the data to DND;
- 6.1.4.24. These Identifiers many be different or the same depending on which entity manufactured the equipment, which entity assigned the UII, which entity submitted the data to DND.

6.2. SOFT COPY FORMAT

- 6.2.1. The data must be delivered in a ".CSV" or ".XLS: format"
- 6.2.2. The data must be presented IAW the following UID Data Submission template:



MIDS UID Ter

- 6.2.3. **Soft Copy format submission size below 7MB** The UID Data Submission may be submitted via email as follows:
 - 6.2.3.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.3.2. Subject Field: ICLS-ILS-202 UID Data Submission [Rev #] [Date of Issue]
- 6.2.4. **Soft Copy format submission size at or above 7MB** The UID Data Submission must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.4.1. ISO Container Lifting System
 - 6.2.4.2. UID Data Submission;
 - 6.2.4.3. ICLS-ILS-202;
 - 6.2.4.4. The Revision number, and
 - 6.2.4.5. The date of issue.

A3.12 DID - UID Verification and Validation Report

| DATA ITEM DESCRIPTION | | |
|--|--------------------------|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | |
| UID Verification and Validation Report | DID ICLS-ILS-203 | |

3. DESCRIPTION

The Unique Identification (UID) Verification and Validation Report is a tabular list providing UID marking activity, validation and verification data such as: physical asset marking, registration, inventory audits, quality audits, and verification/validation results.

This Data Item Description (DID) contains format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

4. RELATED DOCUMENTS

5. CONTRACT REFERENCE

SOW: Para. 5.4

CDRL/DID ICLS-ILS-202

A-LM-505-702/JS-001

6. PREPARATION INSTRUCTIONS

- 6.1.1. Definitions must be as in A-LM-505-702/JS-001, latest version at the time of the solicitation. Other documents referenced in A-LM-505-702/JS-001 must also be applied in the context of UID Validation and Verification.
- 6.1.2. The Contractor's report format is acceptable.
- 6.1.3. Each UII mark must be validated for data contents IAW A-LM-505-702/JS-001.
- 6.1.4. Verification for mark quality of the first article for each item type is required. A sampling plan based on lot size may be used to verify remaining UII marks within a lot. In order to pass, a mark must meet the minimum quality standards set out in A-LM-505-702/JS-001.
- 6.1.5. Verification and validation results must include at a minimum the data set out in 10.7 below (with exception of Verifications, for which a representative sample may be verified as per 10.4).
- 6.1.6. Marks failing verification or validation must be replaced with compliant marks by the Contractor prior to acceptance of the items.
- 6.1.7. The tabular report must include the following alphanumeric fields:
 - 6.1.7.1. Unique Item Identifier (UII).
 - 6.1.7.2. UII Type (Construct).
 - 6.1.7.3. Enterprise Identifier (EID).
 - 6.1.7.4. EID Type (CAGE/NCAGE, DUNS, etc).
 - 6.1.7.5. Original Equipment Manufacturer (OEM) Part Number.
 - 6.1.7.6. Service Assigned Serial Number (if assigned).
 - 6.1.7.7. Original Equipment Manufacturer (OEM) serial number.
 - 6.1.7.8. Equipment Nomenclature (name and type).
 - 6.1.7.9. National Stock Number (NSN).
 - 6.1.7.10. Validation Date.

- 6.1.7.11. Validation Result (Pass/Fail).
- 6.1.7.12. Verification Date.
- 6.1.7.13. Verification Result (Pass/Fail).
- 6.1.7.14. Other Event/Activity Date* (optional).
- 6.1.7.15. Other Event/Activity* (optional).
- 6.1.7.16. For items marked that "Fail" IUID validation or verification, identify corrective action (whether the item has been re-marked or scrapped).
- 6.1.7.17. *Other Event/Activity will be defined in the Contract Data Requirements Lists (CDRLs) if required.
- 6.1.8. The Key attributes for the report are the validation and verification columns which each indicate (Pass/Fail). (NOTE: Most verification apparatus provide electronic records with pass/fail summaries for both verification and validation.)
- 6.1.9. A "Pass" validation value must be assigned to records whose data matrix symbol(s) properly encode Item Unique Identification data as prescribed in A-LM-505-702/JS-001 requirements for machine readable information (MRI) marking.
- 6.1.10. A "Pass" verification value must be assigned to records whose data matrix symbol(s) meet or exceed the Symbol Quality standards set out in A-LM-505-702/JS-001 for data matrix symbol quality. These must be accompanied with a detailed Verification report for each mark that was verified.
- 6.1.11. The Contractor must ensure machine-readable UII marks required under this contract are permanently placed on the items subjected to contractually-required performance testing prior to that testing; and further must include all mark serviceability problems in the item's test report(s).

- 6.2.1. The data must be delivered in a ".CSV" or ".XLS" format
- 6.2.2. **Soft Copy format submission size below 7MB** The UID Verification and Validation Report may be submitted via email as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-ILS-203 UID Verification and Validation Report [Rev #] [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** The UID Data Submission must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. UID Verification and Validation Report;
 - 6.2.3.3. ICLS-ILS-203:
 - 6.2.3.4. The Revision number, and
 - 6.2.3.5. The date of issue.

A3.13 DID - Provisioning Parts Breakdown

| DATA ITEM DESCRIPTION | | |
|------------------------------------|--------------------------|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | |
| Provisioning Parts Breakdown (PPB) | DID ICLS-ILS-204 | |

3. DESCRIPTION

Provisioning documentation is needed by DND to identify, catalogue, calculate and procure the range and depth of spare and repair parts needed to support the approved in-service maintenance, and to handle, store and transport these items.

4. RELATED DOCUMENTS

CDRL/DID ICLS-ILS-204

D-01-100-214/SF-000

5. CONTRACT REFERENCE

SOW: Para. 5.1

CDRL: App. A2.2

6. PREPARATION INSTRUCTIONS

- 6.1.1. For each item considered for provisioning, the provisioning and packaging data identified below must be provided in electronic form suitable for entry into the DND DRMIS system.
- 6.1.2. The Contractor must provide these data in a timely manner, consistent with the need for initial provisioning, long lead time and interim spares data requirements.
- 6.1.3. The data element names are provided for both DND usage, and the formal MIL-STD-1388/2B or GEIA-STD-0007B. Data Element Definition (DED) numbers referenced in the body of this DID are extracted from MIL-STD-1388-2B, Appendix E.

| DND Data Element Name | 1388 2B name (Where different to Canadian name) | 1388 DED# | GEIA- STD- 0007-B | Provisioning List | CBIL |
|--|---|--------------|-------------------------|----------------------|--------------------|
| Item Sequence Number | Provisioning List Item Sequence Number (PLISN) | 309 | | Reqd | Reqd |
| Indenture Code | Indenture Code | 162 | 2520 | Reqd | N/A |
| Item Name | | 182 | 2790 | Reqd | Reqd |
| Manufacturer's Reference No. (Note 1) | Reference number | 337 | 4400 | Reqd | Reqd |
| CAGE Code (Note 1) | | 046 | 1520 | Reqd | Reqd |
| Contractors Part Number (Note 2) | Additional Reference Number | 006 | 4400 | Reqd | Reqd |
| CAGE Code (Note 2) | | 046 | 1520 | Reqd | Reqd |
| NATO Stock Number | National Stock Number and Related data | 253 | 2280 | If Assigned | If Assigne d |
| Quantity per Assembly | | 316 | 4190 | Reqd | Reqd |
| Standard Unit Price | Unit of Issue Price | 490 | 3990 | Reqd | Reqd |
| Unit of Issue | | 488 | 5700 | Reqd | N/A |
| Unit of Measure | | 491 | 5720 | N/A | Reqd |
| Production Lead Time | | 299 | | Reqd | N/A |
| Reference Designation | | 335 | 4380 | Reqd | N/A |
| Shelf Life | | 377 | 4730 | Reqd | Reqd |

| Usage Rate | Maintenance Replacement Rate I (MRRI) | 211 | | Reqd | N/A |
|---|--|--------|------|------|------|
| Recommended Buy Qty | Total Qty Recommended for 24 months of Preventive and Corrective Maintenance | 453 | 4310 | Reqd | Reqd |
| Source, Maintenance and Recoverability Code (SMR) | | 389 | 4830 | Reqd | N/A |
| Degree of Protection Code | | 074 | | Reqd | Reqd |
| Unit Weight Unpacked | Unit Weight | 497 | 3190 | Reqd | N/A |
| Unit Size Unpacked | Unit Size | 496 | 2890 | Reqd | N/A |
| Unit Pack Cube | | 493 | | Reqd | N/A |
| Material Safety Data Sheet Required | | (None) | | Reqd | Reqd |
| Special Material Content Code | | 395 | | Reqd | Reqd |

Note 1: This P/N and CAGE code must be that issued by the Prime Contractor, or Integrator, for the system being provisioned.

Note 2: This P/N (s) and CAGE code (s) must be those of Original Equipment Manufacturer(s) (OEM's)

- 6.1.4. To determine Usage Rate the following calculation must be applied:
 - 6.1.4.1. Usage Rate = Task Frequency x Quantity per task
 - 6.1.4.2. Where:
 - 6.1.4.2.1. Task Frequency = (Failure Rate + De-rating Factors) x Conversion Factor x Annual Operating Requirements
 - 6.1.4.2.2. De-rating Factors are:

| 6.1.4.2.2.1. Induced Failures: | 1 |
|--------------------------------|---------|
| | MTBM-IN |
| 6.1.4.2.2.2. No Defect: | 1 |
| | MTBM-ND |

- 6.1.4.3. The Conversion Factor adjusts the Annual Operating Requirements, taking into account the duty cycle, i.e., proportion of time the provisioned item is working compared to the time that the system is operating.
- 6.1.4.4. For preventive maintenance resulting in items being removed and replaced, extend the calculation to take into account the time between scheduled removals:

| MTDD | חמ | N 47 |
|------|----|------|

- 6.2.1. The data must be delivered in a ".CSV" or ".XLS: format"
- 6.2.2. **Soft Copy format submission size below 7MB** The Provisioning Parts Breakdown may be submitted via email as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-ILS-204 Provisioning Parts Breakdown [Rev #] [Date of Issue]

- 6.2.3. **Soft Copy format submission size at or above 7MB** The UID Data Submission must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. Provisioning Parts Breakdown;
 - 6.2.3.3. ICLS-ILS-204;
 - 6.2.3.4. The Revision number, and
 - 6.2.3.5. The date of issue.

A3.14 DID - Supplementary Provisioning Technical Documentation

| DATA ITEM DESCRIPTION | | |
|--|--------------------------|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | |
| Supplementary Provisioning Technical Documentation (SPTD) | DID ICLS-ILS-205 | |
| 3. DESCRIPTION | | |
| Supplementary Provisioning Technical Documentation (SPTD) uniquely identify, for cataloguing purposes, each item in each provisioning list that has not already been assigned a NATO Stock Number. | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | |
| CDRL/DID ICLS-ILS-204 | SOW: Para. 5.1 | |
| D-01-100-214/SF-000 | CDRL: App. A2.2 | |

PREPARATION INSTRUCTIONS

6.1. CONTENT

- 6.1.1. The SPTD must include sufficient data to clearly define each item for cataloguing.
- 6.1.2. The SPTD must include
 - 6.1.2.1. Item Name (DED 201 or GEIA 2790);
 - 6.1.2.2. Reference (Manufacturer's Part) No. (DED 337 or GEIA 4400); and
 - 6.1.2.3. CAGE Code (DED 046 or GEIA 1520).
- 6.1.3. The SPTD must include as applicable:
 - 6.1.3.1. Configuration drawing of item; assembly, wiring or schematic drawing; illustrated parts list
 - 6.1.3.2. Technical specification, including relevant standards
 - 6.1.3.3. Physical characteristics, such as dimensions, tolerances, materials, mandatory processes, surface finish, protective coating;
 - 6.1.3.4. Electrical characteristics;
 - 6.1.3.5. Performance data, including the environmental and operating conditions under which the item must perform;
 - 6.1.3.6. Mounting requirements;
 - 6.1.3.7. Special features which contribute to the uniqueness of the item; and
 - 6.1.3.8. Commercial catalogue data
- 6.1.4. The SPTD must be sequenced in the same order as the provisioning list that it supplements.
- 6.1.5. The SPTD must include identification of any limitations on the use or publication of any data provided.

- 6.2.1. The data must be delivered in a ".CSV" or ".XLS: format"
- 6.2.2. **Soft Copy format submission size below 7MB** The Provisioning Parts Breakdown may be submitted via email as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-ILS-205 Supplementary Provisioning Technical Documentation [Rev #] [Date of Issue]

- 6.2.3. **Soft Copy format submission size at or above 7MB** The Supplementary Provisioning Technical Documentation must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. Supplementary Provisioning Technical Documentation;
 - 6.2.3.3. ICLS-ILS-205;
 - 6.2.3.4. The Revision number, and
 - 6.2.3.5. The date of issue.

A3.15 DID - Technical Manual

| DATA ITEM DESCRIPTION | | |
|--|--------------------------|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | |
| Technical Manual | DID ICLS-ILS-206 | |
| 3. DESCRIPTION | | |
| The Technical Manual must describe the tasks necessary for installation, operation and maintenance of the ICLS system. | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | |
| C-01-100-100/AG-008 - Writer's Guide for Technical Documentation | SOW: Para. 5.2 | |
| D-01-100-204/SF-000 - Specification - Preparation Of Preventive Maintenan Instructions | ce CDRL: App. A2.2 | |
| D-01-100-205/SF-000 - Specification - Preparation Of Corrective Maintenand Instruction | ce | |
| D-01-100-207/SF-002 – Specification – Preparation of Interim Illustrated Par | ts | |

6. PREPARATION INSTRUCTIONS

Manuals for Land Equipment

6.1. **CONTENT**

- 6.1.1. The Technical Manual must cover, at a minimum, the following information:
 - 6.1.1.1. System overview;
 - 6.1.1.2. System Operation, including:
 - 6.1.1.3. System unpacking;
 - 6.1.1.4. Installation on an ISO container;
 - 6.1.1.5. Lifting / Lowering procedures;
 - 6.1.1.6. Removal from an ISO container
 - 6.1.1.7. Preventive Maintenance tasks and procedures;
 - 6.1.1.8. Corrective Maintenance tasks and procedures;
 - 6.1.1.8.1. Corrective Maintenance instructions must include corrective maintenance tasks which can be completed in one hour or less.
 - 6.1.1.9. Preparation for Storage and Transportation;
 - 6.1.1.10. Illustrated Parts List
- 6.1.2. The manual must be provided in both English and French.
- 6.1.3. Each ICLS must have a hard copy of the TA approved Technical Manual.
- 6.1.4. The Technical Manual hard copies must be weather resistant.
- 6.1.5. The Technical Manual Hard copies must be stored in a weather proof holder affixed to the ICLS or ICLS storage adaptor.

6.2. **SOFT COPY FORMAT**

6.2.1. The data must be delivered in .pdf format.

- 6.2.2. **Soft Copy format submission size below 7MB** The Technical Manual may be submitted via email as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-ILS-206 Technical Manual [Rev #] [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** The Technical Manual must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. Technical Manual;
 - 6.2.3.3. ICLS-ILS-206;
 - 6.2.3.4. The Revision number, and
 - 6.2.3.5. The date of issue.

A3.16 DID - Operator's Quick Reference Card

| DATA ITEM DESCRIPTION | | |
|--|--------------------------|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | |
| Operator's Quick Reference Card (OQRC) | DID ICLS-ILS-207 | |
| 3. DESCRIPTION | | |
| The OQRC provides essential instructions for the safe set-up and operation of the equipment. | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | |
| C-01-100-100/AG-008 - Writer's Guide for Technical Documentation | SOW: Para. 5.2 | |
| | CDRL: App. A2.2 | |

6. PREPARATION INSTRUCTIONS

6.1. **CONTENT**

- 6.1.1. The OQRC must provide operators essential instructions for safe operation of the ICLS:
 - 6.1.1.1. Set-up and installation on ISO Containers
 - 6.1.1.2. Lifting procedures.
 - 6.1.1.3. Tear down and stowage procedures:
- 6.1.2. The checklist must be bilingual.
- 6.1.3. The French and English text may be on separate pages.
- 6.1.4. The OQRC may be in the Contractor's format.

6.2. HARD COPY FORMAT

- 6.2.1. The checklist must be condensed to fit one (1) 8.5"x11" (letter) format page, either single or double sided.
- 6.2.2. The final physical copies of the checklist must be weatherproof.
- 6.2.3. One (1) hard copy must be included with each ICLS system.

- 6.3.1. The data must be delivered in .pdf format.
- 6.3.2. Soft Copy format submission size below 7MB The OQRC may be submitted via email as follows:
 - 6.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.3.2.2. Subject Field: ICLS-ILS-207 OQRC [Rev #] [Date of Issue]
- 6.3.3. **Soft Copy format submission size at or above 7MB** The OQRC must be submitted on CD or DVD media and be labelled as follows:
 - 6.3.3.1. ISO Container Lifting System
 - 6.3.3.2. OQRC;
 - 6.3.3.3. ICLS-ILS-207;
 - 6.3.3.4. The Revision number, and
 - 6.3.3.5. The date of issue.

A3.17 DID – Loose Component Checklist

| DATA ITEM DESCRIPTION | | | |
|--|--------------------------|--|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | | |
| Loose Component Checklist (LCC) | DID ICLS-ILS-208 | | |
| 3. DESCRIPTION | | | |
| The LCC lists the loose components stowed within the ICLS Transport Container. | | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | | |
| C-01-100-100/AG-008 - Writer's Guide for Technical Documentation | SOW: Para. 5.2 | | |
| | CDRL: App. A2.2 | | |

7. PREPARATION INSTRUCTIONS

7.1. **CONTENT**

- 7.1.1. The LCC must provide operators a listing of components stowed within the ICLS Transport Container:
 - 7.1.1.1. The LCC must list all loose components of the ICLS system.
 - 7.1.1.2. The LCC must identify and list all stowage specific components (such as secondary containers, straps, tarps, etc).
 - 7.1.1.3. The LCC must allow the operator to inventory the system's loose components when the ICLS is deployed or stowed.
- 7.1.2. The checklist must be bilingual.
- 7.1.3. The French and English text may be on separate pages.
- 7.1.4. The LCC may be in the Contractor's format.

7.2. HARD COPY FORMAT

- 7.2.1. The checklist must be condensed to fit one (1) 8.5"x11" (letter) format page, either single or double sided.
- 7.2.2. The final physical copies of the checklist must be weatherproof.
- 7.2.3. One (1) hard copy must be included with each ICLS system.

- 7.3.1. The data must be delivered in .pdf format.
- 7.3.2. Soft Copy format submission size below 7MB The LCC may be submitted via email as follows:
 - 7.3.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 7.3.2.2. Subject Field: ICLS-ILS-208 LCC [Rev #] [Date of Issue]
- 7.3.3. **Soft Copy format submission size at or above 7MB** The LCC must be submitted on CD or DVD media and be labelled as follows:
 - 7.3.3.1. ISO Container Lifting System
 - 7.3.3.2. LCC;
 - 7.3.3.3. ICLS-ILS-208;
 - 7.3.3.4. The Revision number, and
 - 7.3.3.5. The date of issue.

A3.18 DID - Training Master Lesson Plan

| DATA ITEM DESCRIPTION | | |
|---|--------------------------|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | |
| Training Master Lesson Plan | DID ICLS-ILS-209 | |
| 3. DESCRIPTION | | |
| The Training Master Lesson Plan forms the basis of training to be performed during Initial Cadre Training (ICT) and provides instructors with the essential instructions and teaching points to prepare and deliver instruction on the equipment's key characteristics and operation. | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | |
| DID ICLS-ILS-210 | SOW: Para. 5.3 | |
| | CDRL: App. A2.2 | |

6. PREPARATION INSTRUCTIONS

6.1. **CONTENT**

- 6.1.1. The Contractor develop a Training plan documenting training material requirements and preparation, including:
 - 6.1.1.1. ICT training session schedules;
 - 6.1.1.2. Training equipment
 - 6.1.1.3. Training site requirements, and
 - 6.1.1.4. Training support requirements.
- 6.1.2. The Training Plan must document training materials down to individual learning objectives and teaching points.
- 6.1.3. The Training Plan must encompass:
 - 6.1.3.1. An overview of all ICLS components;
 - 6.1.3.2. Set-up procedure;
 - 6.1.3.3. Lifting and lowering procedures;
 - 6.1.3.4. Tear-down and stowage procedures;
 - 6.1.3.5. Troubleshooting procedures, and
 - 6.1.3.6. Operator Maintenance procedures.

- 6.2.1. The data must be delivered in .pdf format.
- 6.2.2. **Soft Copy format submission size below 7MB** The Training Master Lesson Plan may be submitted via email as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-ILS-209 Training Master Lesson Plan [Rev #] [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** The Training Master Lesson Plan must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. Training Master Lesson Plan;

6.2.3.3. ICLS-ILS-209;

6.2.3.4. The Revision number, and

6.2.3.5. The date of issue.

A3.19 DID - Video Training Package

| DATA ITEM DESCRIPTION | | |
|--|--------------------------|--|
| 1. TITLE | 2. IDENTIFICATION NUMBER | |
| Video Training Package | DID ICLS-ILS-210 | |
| 3. DESCRIPTION | | |
| The Video Training Package will provide instructional videos, enabling operators and maintainers to gain or maintain basic knowledge and proficiency in operation of the ICLS system. The Video Training Package will supplement ICT training, and enable continuous training support to widely distributed operators and maintainers. | | |
| 4. RELATED DOCUMENTS | 5. CONTRACT REFERENCE | |
| DID-ILS-ICLS-209 | SOW: Para. 6.2.7 | |
| | CDRL: App. A2.2 | |

6. PREPARATION INSTRUCTIONS

6.1. **CONTENT**

- 6.1.1. Training Videos must be produced to cover each element of the Training Master Lesson Plan.
- 6.1.2. Training videos must align with the structure of the Training Master Lesson Plan.
- 6.1.3. Multiple training plan teaching points can be incorporated into a single video, up to a maximum individual video duration of 15 minutes.
- 6.1.4. Training videos must be in English and French, for all aural and text in the video.
 - 6.1.4.1. English and French Training Videos must be submitted as separate videos.

- 6.2.1. The data must be delivered in .mp4 format.
- 6.2.2. **Soft Copy format submission size below 7MB** The Video Training Package may be submitted via email as follows:
 - 6.2.2.1. To Field: As per the related CDRL section 9.A. Addressee, as identified in the contract.
 - 6.2.2.2. Subject Field: ICLS-ILS-210 Video Training Package [Rev #] [Date of Issue]
- 6.2.3. **Soft Copy format submission size at or above 7MB** The Video Training Package must be submitted on CD or DVD media and be labelled as follows:
 - 6.2.3.1. ISO Container Lifting System
 - 6.2.3.2. Video Training Package;
 - 6.2.3.3. ICLS-ILS-210;
 - 6.2.3.4. The Revision number, and
 - 6.2.3.5. The date of issue.