APPENDIX AC
Data Item Descriptions (DID) - Acquisition
for the
Area Detection and Identification System
(ADIS)

Requisition Number:

Date: 31 August, 2018

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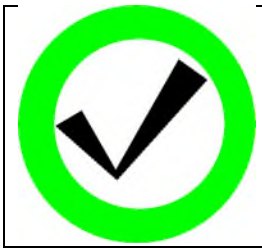

NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées.

Data Item Description (DID) List

The following table lists the DIDs contained in this Appendix, including their DID number as well as their associated Contract Data Requirements List (CDRL) number.

DID Number	Title	Associated CDRL	Subtitle
PM-101	Project Management Plan	PM-101	PMP
PM-102	Master Project Schedule	PM-102	MPS
PM-103	Monthly Progress Report	PM-103	
PM-104	Action Item Register	PM-104	AIR
PM-105	Meeting Documentation	PM-105	
PM-106	Significant Incident Report	PM-106	SIR
PM-107	Lexicon	PM-107	
PM-108	Request for Deviation/Request for Waiver	PM-108	RFD/RFW
PM-109	Quality Assurance Plan	PM-109	QAP
PM-110	Risk Register	PM-110	
SE-301	Not used	N/A	
SE-302	Test and Evaluation Master Plan	SE-302	TEMP
SE-303	Qualification Test Procedures	SE-303	QTP
SE-304	Qualification Test Report	SE-304	QTR
SE-305	Equipment Environmental Assessment	SE-305	EEA
SE-306	Software Version Description Document	SE-306	SVDD
SE-307	Not used	N/A	
SE-308	Engineering Change Proposal	SE-308	ECP
SE-309	Not used	N/A	
SE-310	Not used	N/A	
SE-311	Not used	N/A	
SE-312	Verification Traceability Matrix	SE-312	VTM
SE-313	Equipment Specification	SE-313	
IL-501	Integrated Logistics Support Plan	IL-501	ILSP
IL-502	Maintenance Plan	IL-502	Maint Plan
IL-503	Reliability Data	IL-503	
IL-504	Serial Number Register	IL-504	SNR
IL-505	Not used	N/A	
IL-506	Equipment Identification Plate Drawings	IL-506	ID Plate
IL-507	Not used	N/A	
IL-508	Marking Data for Storage and Shipment	IL-508	
IL-509	Packaging Data	IL-509	
IL-510	Provisioning Parts Breakdown/Recommended Spare Parts List	IL-510	PPB/RSPL
IL-511	Supplementary Provisioning Technical Documentation	IL-511	SPTD
IL-512	Not Used	N/A	

DID Number	Title	Associated CDRL	Subtitle
IL-513	Material Change Notice	IL-513	MCN
IL-514	Provisioning Drawings and Associated Parts List	IL-514	
IL-515	Operators Manual	IL-515	Op Man
IL-516	First Line Maintenance Manual	IL-516	Maint Man
IL-517	User Guide	IL-517	
IL-518	ADIS Kit List	IL-518	
IL-519	Not Used	IL-519	
IL-520	Training Needs Analysis	IL-520	TNA
IL-521	Training Plan	IL-521	TP
IL-522	Courseware	IL-522	
IL-523	Not Used	N/A	
IL-524	Course Evaluation Report	IL-524	
IL-525	Training Management Plan	IL-525	TMP
IL-526	Logistical Breakdown Structure	IL-526	LBS
IL-527	Not Used	N/A	
IL-528	Qualification Standards	IL-528	QS
IL-529	Safety Data Sheets	IL-529	SDS
IL-530	Laser Safety Data Sheets	IL-530	LSDS
IL-531	Configuration Status Accounting Report (CSAR)	IL-531	CSAR

Applicable Documents
The standards, specifications and publications identified in Volume 2-Annex A-Appendix AE are applicable to the extent specified in this document.

Any documents in Volume 2-Annex A-Appendix AE not specifically identified in the text of this document are to be considered as supplemental information.

In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence.

In the event of inconsistency within the document, the Technical Authority (TA) will provide clarification.

Unless otherwise specified, the issue or amendment of a document effective for this contract is the one in effect on the RFP closing date.

DID FORM Definitions
The following section defines the various blocks of information found on the Data Item Description (DID) forms:

BLOCK 1 – TITLE
The title of the data item for the DID.

BLOCK 2 - IDENTIFICATION NUMBER
The DID number, consisting of a sequential three-digit number and prefixed with an abbreviation code, to uniquely identify the DID.

BLOCK 3 - DESCRIPTION

Provides a general description of the data content requirements.

BLOCK 4 - APPROVAL DATE
Indicates the date of the originator's approval of the DID.

BLOCK 5 - OFFICE OF PRIMARY INTEREST (OPI)
The office of primary interest for the review, acceptance and/or approval of the data item.

BLOCK 6 - GIDEP APPLICABLE
An “X” indicates that the data is to be submitted by a Government organization or the Contractor to the Government/Industry Data Exchange Program (GIDEP). Otherwise the block is left blank.

BLOCK 7 - APPLICATION / INTERRELATIONSHIP
Provides the application details and interrelationship of the data item to other DIDs or documents.

BLOCK 8 - ORIGINATOR
Indicates the originator's office responsible for the DID.

BLOCK 9 - APPLICABLE FORMS
Indicates any form associated with the DID.

BLOCK 10 - PREPARATION INSTRUCTIONS
Provides the preparation instructions, including format and content requirements for the data.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Project Management Plan (PMP)**		2. IDENTIFICATION NUMBER **PM-101**
3. DESCRIPTION The PMP describes the Contractor's plan for integrating processes and organization to carry out the activities necessary to meet all contractual requirements.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL PM-101		
8. ORIGINATOR DCSEM 12-5		9. APPLICABLE FORMS

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The PMP should be in the Contractor's format.

10.1.2 It should be concise, simple and direct.

10.1.3 The PMP must be prepared and submitted in electronic format using Microsoft Word.

10.2 CONTENT

10.2.1 The PMP should describe the Contractor’s plan for organizing, staffing, controlling and directing all of Project activities to deliver compliant systems, technical data, integrated logistics support, and contract data requirements within schedule, resource and budgetary constraints.

10.2.2 The following items should be addressed:

10.2.2.1 Overview:

a. Purpose, Background, Scope and Objectives;
b. Assumptions, Constraints and Risks;
c. Project Deliverables;
d. Organization Summary; and
e. Schedule Summary.

10.2.2.2 Organization:

a. Roles and Responsibilities; and
b. Escalating Lines of Communications.

10.2.2.3 Management Processes:

a. Project Management Approach and Procedures;
b. Sub-Contractor Management;
c. Schedule Control;
d. Resource Allocation;
e. Security Management
f. Budget Control;
g. Quality Assurance;

h. Performance Monitoring;
i. Reporting;
j. Communications;
k. Problem Resolution;
l. Project Work Tasks/Elements Closing;
m. Process Improvement;
n. Risk Identification and Management;
o. Environmental, Health and Safety Issues Management;
p. Information Management (IM);
q. Change Control Processes;
r. Configuration management (CM) program;
s. Production Management, Procurement and In-service Support; and
t. Controls of Government Furnished Equipment (GFEs);

10.2.2.4 The PMP should include disaster recovery for all project data.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Master Project Schedule (MPS)**		2. IDENTIFICATION NUMBER **PM-102**
3. DESCRIPTION The MPS provides the DND Technical Authority (TA) with visibility of the Contractor's planned activities and accomplished activities to date, at a level of detail that is indicative of overall performance. The MPS is used to monitor schedule performance. It constitutes the principal framework for the planning, control of scheduled work and formal reporting of schedule status for the Contract.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL PM-102		
8. ORIGINATOR DCSEM 12-5DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The MPS should be prepared and submitted using Microsoft Project.

10.1.2 The MPS should be version controlled.

10.2 CONTENT

10.2.1 The MPS should include all contracted activities, deliverables and milestones.

10.2.2 The MPS should detail the sequencing, activity duration, milestones and all work breakdown activities which occur for the objectives and requirements of the contract to be achieved.

10.2.3 The MPS should include a detailed legend depicting the meaning of all symbols, abbreviations and colours utilized.

10.2.4 The MPS should include a listing of constraints and assumptions used in order to develop the activity duration, activity dependencies and associated network logic.

10.2.5 The MPS should be prepared in such a way as to allow for easy extraction, either by a one-stage filter of sub schedules such as System Engineering, ILS, and Verification or by the use of Master and Subproject files. When Master and Subproject files are used, schedule information should not be duplicated between the Master and Subproject.

10.2.6 The MPS should show a time-phased sequence of activities and events, and their relationship to the Work Breakdown Activities, to include as a minimum:

a. The sequence, duration and completion dates of activities and deliverable items;
b. Critical Path(s);
c. Program tasks down to the work package level;
d. Associated project milestones (both contractual and otherwise);
e. Delivery of associated documentation for review, approval and final delivery; and
f. Projected dates for any major project accomplishments not already covered as milestones.

10.2.7 The MPS should also include the associated network diagram (activity-on-node) showing network logic, mandatory, discretionary and external activity dependencies.

10.2.8 The MPS updates should:

a. Clearly indicate the “as of date” both in written form and graphically on any charts (Gantt etc.);
b. Clearly indicate progress in relation to the baseline schedule. Progress should show actual start and finish as well as percentage complete for activities in process; and
c. Clearly identify changes to the baseline activity (also applicable to new and deleted activities).

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Monthly Progress Report**		2. IDENTIFICATION NUMBER **PM-103**
3. DESCRIPTION To describe the progress made by the Contractor in meeting project schedules and milestones.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7.APPLICATION / INTERRELATIONSHIP CDRL PM-103		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Monthly Progress reports must be prepared in the Contractor's format.

10.1.2 The Monthly Progress Reports must be prepared and submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.

10.1.3 The Monthly Progress Reports must be unclassified.

10.1.4 The Progress Report should be concise, simple and direct.

10.2 CONTENT

10.2.1 In order to minimize the effort required to generate these reports, information contained in the reports must be on an exception basis, and must include only variations from Project work tasks or schedules that have occurred since the last Monthly Progress Report.

10.2.2 A full report of the items in the Monthly Progress Reports, with project impacts, risks and mitigation measures, must be provided at the next scheduled Project Review Meeting.

10.2.2.1 The report must focus on issues and concerns in the areas listed below. Areas to be covered in the reports are:

10.2.2.1.1 Project Management. This section must cover as a minimum, when relevant, summaries reflecting:

a. Contracting invoicing status;
b. Payment status;
c. Contract Change Proposals;
d. Delivery Schedule;
e. MPS;
f. CDRL/DIDs; and
g. GFE.

10.2.2.1.2 System Engineering. This section must cover as a minimum, when relevant, summaries reflecting:

a. Design progress;

b. Engineering Change Proposals;
c. Deviations and Waivers
d. Production;
e. Quality Assurance; and
f. Testing.

10.2.2.2 Integrated Logistics Support. This section must cover as a minimum, when relevant, summaries reflecting:

a. Maintenance Planning;
b. Logistics Engineering;
c. Supply Support;
d. Repair & Overhaul;
e. Special PHST;
f. Technical Publications;
g. Training; and
h. Subcontractor Issues.

10.2.3 The subject headings must remain relevant from the first instance that they have been reported on. They must be used in all future reports with the term “No change” inserted if no information is to be provided for a particular report.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Action Item Register (AIR)**		2. IDENTIFICATION NUMBER **PM-104**
3. DESCRIPTION/PURPOSE The AIR consists of itemized, dated and up-to-date records of all Contractor and DND issue items with the appropriate action/decisions detailed. The AIR will be a central repository to track all contractual issues arising from the work. The AIR is used to monitor issues, assign responsibility, direct action and track status.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION/INTERRELATIONSHIP CDRL PM-104		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The AIR must be prepared and submitted in electronic format using Microsoft Excel to allow DND to review, edit, sort and manipulate the data.

10.1.2 The AIR must be version controlled.

10.2 CONTENT

10.2.1 The AIR must contain the itemized, dated and up-to-date records of all approved Contractor, PWGSC and DND action items, and includes, but is not limited to, the following data:

a. Action item ID and Title;
b. Description;
c. Traceability to primary document, meeting minutes, report or activity;
d. Date opened;
e. Action addressee(s);
f. Status;
g. Date required to be closed;
h. Date closed; and
i. Resolution.

10.2.2 The AIR must list the action items sorted in the following order:

a. Project Management;
b. Systems Engineering;
c. Configuration Management;
d. Integrated Logistics Support, including in-service support;
e. Training;
f. Quality Assurance;
g. Financial Issues;

h. Environmental, Health and Safety Issues; and
i. Other issues

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Meeting Documentation**		2. IDENTIFICATION NUMBER **PM-105**
3. DESCRIPTION/PURPOSE Meeting Agendas provide an outline of the purpose, objectives and areas to be formally discussed at meetings. Minutes are used to document the discussions held at meetings between the Government and the Contractor, with particular emphasis on decisions and action items. Supporting documentation is provided with meeting agenda to facilitate discussion at meetings.		
4. APPROVAL DATE .	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION/INTERRELATIONSHIP CDRL PM-105		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Meeting Agendas, Minutes and Supporting Documentation must be in the Contractor's format.

10.1.2 The meeting documentation must be prepared and submitted in electronic format using Microsoft Office to allow DND to review, edit, and manipulate.

10.1.3 The meeting documentation must be unclassified.

10.1.4 Minutes must be distributed as PDF once approved by both Contractor and government representatives.

10.2 CONTENT

10.2.1 The agenda must include as a minimum:

a. Review of last meeting minutes (DID PM-105);
b. Review of project risks (DID PM-110);
c. Review of Project Schedule (DID PM-102);
d. Review of actions (DID PM-104); and
e. Business items as needed.

10.2.2 The Meeting Minutes must include the following information:

a. A copy of the agenda;
b. A list of all attendees with their title and contact number;
c. A record of discussion of all items tabled and action taken;
d. Specific identification of action items arising from discussions, including the name and appointment of each person required to take action on outstanding items and a scheduled time for response;
e. The proposed date, time and location of any follow-up meeting; and
f. Signature blocks for both Contractor and Government responsible representatives.

10.2.3 Copies of all data and information tabled at the meeting must be appended to the minutes.

10.2.4 The minutes are a record only and do not convey any executive authority. While they must be identified, action items must not be considered formally assigned or accepted because of approval of the minutes. Action items must be assigned and accepted through separate correspondence between the involved parties and with the approval of Contracting Authority (CA) and TA. The working language must be Canadian English.

<table>
<tr><th colspan="3">DATA ITEM DESCRIPTION</th></tr>
<tr><td colspan="2">1. TITLE
Significant Incident Report (SIR)</td><td>2. IDENTIFICATION NUMBER
PM - 106</td></tr>
<tr><td colspan="3">3. DESCRIPTION
The Significant Incident Report is the mechanism by which the Contractor must immediately notify the ADIS Project Office of an event that may have a serious impact on the project.</td></tr>
<tr><td>4. APPROVAL DATE</td><td>5. OFFICE OF PRIMARY INTEREST
DGLEPM / DCSEM 12-5</td><td>6. GIDEP APPLICABLE</td></tr>
<tr><td colspan="3">7. APPLICATION / INTERRELATIONSHIP
CDRL 106</td></tr>
<tr><td colspan="2">8. ORIGINATOR
DGLEPM / DCSEM 12-5</td><td>9. APPLICABLE FORMS</td></tr>
<tr><td colspan="3">10. PREPARATION INSTRUCTIONS

10.1 <u>FORMAT</u>

10.1.1 Significant Incident Reports (SIR) must be prepared and submitted in electronic format using Microsoft Office to allow DND to review, edit, and manipulate.

10.2 <u>CONTENT</u>

10.2.1 SIR must contain the following minimum information:

a. Originator, date and identification number;
b. Essence of situation that prompts the report;
c. Identification of significant problems (e.g. Engineering problems, logistical problems, etc.);
d. Impacts on Project Master Schedule (PMS);
e. Impacts on other items, components or aspects of the Contract (e.g. deliverables, risk, requirements, materials, etc.);
f. Incidents that could have jeopardized the health of DND personnel or could have caused loss or damage to DND assets;
g. Accidents involving Government Furnished Equipment;
h. Actions taken to date;
i. Recommendations; and
j. Signature of Contractor's Project Manager.</td></tr>
</table>

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Lexicon**		2. IDENTIFICATION NUMBER **PM-107**
3. DESCRIPTION The Lexicon defines the terminology used to describe the system in both Canadian English and in Canadian French.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL PM-107		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Lexicon must be prepared and submitted in electronic format using Microsoft Office to allow DND to review, edit, and manipulate.

10.1.2 The Lexicon must be version controlled.

10.2 CONTENT

10.2.1 The Lexicon must define the terminology used to describe the system in both Canadian English and corresponding Canadian French.

10.2.2 The DND approved Lexicon must be the authority for all terminologies used for all project deliverables.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Request for Deviation (RFD)/Request for Waiver (RFW)**		2. IDENTIFICATION NUMBER **PM-108**
3. DESCRIPTION A Request for Deviation describes a proposed (prior to manufacture) temporary departure from configuration documentation, or drawings, for a specific number of units or for a specified period of time. A Request for Deviation enables the TA to determine the impact on performance, operational readiness, logistics support or other affected areas. A Request for Waiver is used to obtain authorization to deliver non-conforming material which does not meet the prescribed configuration documentation but is suitable for use "as is" or after repair. Use of a Request for Waiver is only to be considered in exceptional circumstances once all other options have been exhausted. A Request for Waiver enables the TA to evaluate and authorize acceptance of an item not conforming to contractual requirements.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL PM-108		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS DND 675 Request for Waiver Or Deviation	
10. PREPARATION INSTRUCTIONS 10.1 FORMAT 10.1.1 The Request for Deviation and Request for Waiver must use form DND 675. 10.1.2 Where there is insufficient space on the form to provide details of the impact, separate sheets detailing the significance must be attached. 10.1.3 The Request for Deviation / Request for Waiver must address any potential impact on system safety and health hazards. 10.1.4 The Request for Deviation / Request for Waiver may result in a change to the payment schedule and / or unit price.		

<table>
<tr><td colspan="3">DATA ITEM DESCRIPTION</td><td>DND Form 1409</td></tr>
<tr><td colspan="3">1. TITLE
Quality Assurance Plan (QAP)</td><td>2. IDENTIFICATION NUMBER
PM-109</td></tr>
<tr><td colspan="4">3. DESCRIPTION
The QAP describes the methodology used by the Contractor to implement his Quality System under the provisions of CAN/CSA-ISO 9001-16 - Quality Management Systems – Requirements</td></tr>
<tr><td>4. APPROVAL DATE</td><td colspan="2">5. OFFICE OF PRIMARY INTEREST
DGLEPM / DCSEM 12-5 (TA)</td><td>6. GIDEP APPLICABLE</td></tr>
<tr><td colspan="4">7. APPLICATION / INTERRELATIONSHIP
CDRL PM-109</td></tr>
<tr><td colspan="2">8. ORIGINATOR
DCSEM 12-5</td><td colspan="2">9. APPLICABLE FORMS</td></tr>
<tr><td colspan="4">10. PREPARATION INSTRUCTIONS
10.1 <u>FORMAT</u>
10.1.1 The QAP must be prepared and submitted using Microsoft Word to allow DND to review, edit, and manipulate.
10.2 <u>CONTENTS</u>
10.2.1 The QAP must be prepared in accordance with CAN/CSA-ISO 10005-05 (R2015) – Quality Management Systems – Guidelines for Quality Plans.</td></tr>
</table>

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Risk Register**		2. IDENTIFICATION NUMBER **PM-110**
3. DESCRIPTION The Risk Register documents risk identification, risk mitigation planning, risk management plan implementation and risk tracking. The data from the risk register must be comprehensive to enable management to make decisions on project outcome. A narrative briefly describing the risk, title, type (Scope, Schedule, Cost), root cause, risk response and planned mitigation strategies, timeframe in which risk expected to occur, and critical dates (risk reduction milestones).		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL PM-110		
8. ORIGINATOR DCSEM 12-5		9. APPLICABLE FORMS

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Risk Register must be in the Contractor's format. The format of the first submission will be subject to approval by DND, and once approved, must become the standard.

10.1.2 The Risk Register must be prepared and submitted in electronic format using Microsoft Office to allow DND to review, edit, and manipulate.

10.1.3 The Risk Register must be unclassified.

10.1.4 The Risk Register should be concise, simple and direct.

10.2 CONTENT

10.2.1 The Risk Register must capture and rank the risks in order of severity and must include:

a. Name and Description of the risk including Risk Statement and cause and effect;
b. Impact, likelihood and severity;
c. Timeframe in which the risk is expected to occur;
d. Efforts made in assessing the consequence of the identified risk area of scope, schedule, and cost on the program;
e. Risk response and mitigation strategies including contingency measures with regards to the Risk Area (Scope, Cost, Schedule), if the risks were to occur; and
f. Residual risk severity assessment

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Test and Evaluation Master Plan (TEMP)**		2. IDENTIFICATION NUMBER **SE-302**
3. DESCRIPTION The TEMP describes in detail the Test Program and the Product Acceptance.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP 7.1 CDRL SE-302 7.2 This Data Item links to the Contractor's Project Management Plan and Master Project Schedule. (DID PM-101 and DID PM-102) 7.3 This Data Item maps all of the Qualification Testing to the VTM.		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The TEMP must be in the Contractor's format.

10.1.2 The TEMP must be unclassified.

10.1.3 The TEMP must be prepared and submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.

10.2 CONTENT

10.2.1 The TEMP must be based on requirements found in the SysRS, Appendix AA to Annex A.

10.2.2 The TEMP must describe how each requirement therein will be satisfied in order to demonstrate conformance and must include the location and time where testing will occur.

10.2.3 The TEMP must include the resources, processes and policies necessary to ensure verification is properly controlled and documented for the duration of the contract.

10.2.4 The TEMP must address and describe the overall test philosophy, methodology, processes and approach for test and evaluation of ADIS. The TEMP must describe:

a. Level of test (system, subsystem and component);
b. Verification methods (test, demonstration, analysis, certificate of conformance);
c. In-house and external testing; and
d. Traceability of test cases to SysRS requirements.

10.2.5 The Contractor may recommend changes to the testing activities and sequences described in the SOW. Such recommendations must be fully substantiated and made in order to improve project efficiency or reduce ADIS testing costs.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Qualification Test Procedures (QTP)**		2. IDENTIFICATION NUMBER **SE-303**
3. DESCRIPTION The Qualification Test Procedures (QTP) provide detailed instructions to conduct Inspections, Demonstrations, Analyses and Tests on the equipment under test.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP 7.1 CDRL SE-302, CDRL SE-303 7.2 This DID applies to all QTPs.		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The QTP must be submitted in Microsoft Word.

10.2 CONTENT

10.2.1 Introduction. The following must be addressed in the introduction:

a. Scope and Purpose of the document;
b. System, subsystem, or equipment to be tested. The following identification must be provided.
    i. Test item name;
    ii. Model or part number;
    iii. Type of test item; and
    iv. The security classification of the document.

10.2.2 Referenced Documents. A list by document number, version and title of those documents cited in the test procedure document.

10.2.3 Test Requirements. The following must be included:

a. Required tests and parameters to be measured;
b. A list of required test equipment:
    i. Test equipment name (eg. environmental chamber, multimeter, breakout box, etc.);
    ii. Manufacturer/Model number; and
    iii. Accuracy and calibration requirements and dates.
c. Measurement tolerances;
d. Test facilities to be used; and
e. Failure criteria and mitigation, including for over-test and under-test conditions.

10.2.4 Test Procedures. The following, if applicable to the individual test, must be included for each test procedure:

a. Name of test;
b. Purpose of test;
c. Verification type (Test, Demonstration, Inspection, Analysis, Certificate of Conformance)
d. Traceability to specification requirements;
e. System configuration, test set-up diagrams including test equipment interconnections;
f. Applicable standards and procedures (eg. MIL-STD-810G, Method 501.7, Procedure I);
g. Test conditions to be imposed;
h. Performance parameters to be measured;
i. Pass/Fail criteria;
j. Detailed step-by-step operations to obtain the required test data; and
k. Caution and safety warnings as appropriate.

10.2.5 Test Data Sheets. Data sheets must be included with the procedure, or be separately attached to the end of all procedures. They must provide:

a. Test name and date of test;
b. Identification of item tested, including model and serial numbers;
c. Pre-conditioning of the test item;
d. Recording of test measurements, including date, time and applicable procedure step;
e. Identification of test Pass/Fail;
f. Signatures of test conductor and quality assurance inspector; and
g. Sufficient space reserved to allow for comments, observations or deviations from the test procedure.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Qualification Test Report (QTR)**		2. IDENTIFICATION NUMBER **SE-304**
3. DESCRIPTION The Qualification Test Report (QTR) documents the results, recommendations and action items of the tests.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP 7.1 CDRL SE-303, CDRL SE-304 7.2 This DID applies to all QTRs.		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The QTR must be submitted in Microsoft Word.

10.2 CONTENT

10.2.1 Executive Summary

10.2.2 Introduction. The Introduction must include the scope, the purpose of the document, and a summary table of the tests performed, date and pass/fail results. The test report must indicate clearly the security classification of the document.

10.2.3 Referenced Documents. A list by document number, version and title of those documents cited in the test report.

10.2.4 Detailed observations and test results. For each test, the detailed test results must contain the following:

a. Test name;
b. ADIS configuration tested;
c. Test set-up as well as system, subsystem, or equipment tested. The following identification must be provided.
    i. Test item name;
    ii. Model or part number; and
    iii. Type of test item;
d. Traceability to the test procedure document;
e. A clear and concise statement stating whether the test passed or failed.
f. Date and location of test;
g. Any deviations from the test procedure;
h. Detailed discussion of the results obtained, including failures, corrective actions taken and results of re-test;
i. All analyses, charts, graphs, instrument printouts, copies of test reports from external test facilities;

j. Test/Measurement Equipment Calibration Status;
k. Post test analysis including failure analysis, if applicable;
l. All test data sheets, complete with the test conductor's and quality assurance inspector's signatures; and
m. Conclusions and Recommendations.

DATA ITEM DESCRIPTION		
1. TITLE **Equipment Environmental Assessment (EEA)**		2. IDENTIFICATION NUMBER **SE-305**
3. DESCRIPTION The Equipment Environmental Assessment (EEA) identifies and documents potential environmental impacts of the equipment over various life-cycle phases (test and evaluation following production, operation and maintenance, and demilitarization and disposal) and the associated mitigation measures required to reduce or eliminate them.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION/INTERRELATIONSHIP 7.1. This DID contains content and preparation instructions for the EEA as required by the SOW.		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The EEA must be prepared and submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.

10.2 CONTENT

10.2.1 The EEA must include Safety Data Sheets (SDSs) that are less than three years old for all hazardous material (HAZMAT). SDSs should disclose the chemical ingredient information along with its Chemical Abstract Service Number (CAS number) and % composition. The Contractor may provide confidential information in a separate document. Note: Proprietary information will be treated with confidentiality.

10.2.2 The EEA must contain the following sections and information, as a minimum:

1 Title Page

a. Equipment Name and NATO Stock Number (NSN), if available
b. Originating Directorate:
c. Director General Land Equipment Program Management (DGLEPM) EEA Registration Number:
d. Assessment Contact: Name, title and company name of the author of the EEA

2 Executive Summary

a. Provide a brief summary of potential environmental impacts and recommended mitigation measures for each life-cycle (test and evaluation following production, operation and maintenance, and demilitarization and disposal).

3 Equipment Description

a. Equipment description: Provide an overview of the equipment and identify each major sub-system as per the Logistical Breakdown Structure (LBS).

b. For each major sub-system, identify the following:
    i. Ionizing radiation sources (radioisotopes and x-ray), e.g. Uranium, Radon, plutonium and tritium etc.
    ii. Non-ionizing radiation sources (radiofrequency and lasers).
    iii. Identify hazardous substances that are incorporated into the equipment design. Provide additional information in tabular form in Attachment 1.
    iv. Identify hazardous products that are:
    v. Used during manufacturing (i.e. paints/surface treatments, adhesives, lubricants, consumables such as batteries, etc.).
    vi. Recommended by the Contractor during the in-service life-cycle phase (i.e. lubricants, cleaners, decontaminants, etc.) or included in the Technical Documentation.
    vii. Provide information in tabular form in Attachment 2.
    viii. Provide Safety Data Sheets (SDS) in Attachment 3 for all hazardous products.

4 Environmental Assessment

a. For each lifecycle phase (test and evaluation following production, operation and maintenance, and demilitarization and disposal) discuss the following:
    i. Lifecycle activities: Describe anticipated activities (including operator and maintenance tasks that are detailed in Contractor provided Technical Documentation) 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. Note: The scope of the EEA excludes activities related to the use of munitions.
    ii. Environmental impacts: Describe the potential environmental impacts identified above.
    iii. Mitigation Measures: Describe mitigation measures to eliminate or reduce identified potential environmental impacts, including those that are part of the design, any warning devices, emission control equipment, spill response, safe handling and disposal procedures, training, Individual Protective Equipment (IPE), labels on equipment, cautions and warnings in the Technical Documentation, monitoring or inspections, etc.

5 Conclusions and Recommendations

a. Summarize the main environmental impacts and recommended mitigation measures.

6 References

a. List references consulted in the completion of the EEA (such as Canadian legislation, DND policies and procedures, technical documentation, etc.).
    i. Attachment 1– List of Hazardous Substances in the equipment
    ii. Attachment 2– List of Hazardous Products
    iii. Attachment 3– SDS for all hazardous products identified in the EEA

Attachment 1 - List of Equipment Parts Containing Hazardous Substances

Hazardous Substance	NSN	Original OEM Part Number	Item Description	Location	Additional Details

	Metal such as aluminum, antimony, arsenic, beryllium, brass, bronze, cadmium, hexavalent chromium, cobalt, copper, lead, manganese, mercury, molybdenum, nickel, platinum, silver, selenium, tellurium, thallium, tin, titanium, vanadium, zinc, radioactive and precious metals,					
	Asbestos					Type and Mil Spec
	Halocarbons					Quantity (kg) and volume (L). Include SDS in Attachment 3
	Polychlorinated Biphenyl					Form (liquid or solid), quantity (kg), volume (L) and concentration in ppm
	Mercury and its compounds					Manufacturer of component, form of mercury (e.g. liquid, vapour, amalgam, metal halide), quantity (kg) volume (L) and concentration in ppm

Attachment 2 – List of Hazardous Products

Hazardous Product	**NSN**	**Product Part Number / Manufacturer**	**Ingredient**	**CAS Number**	**Controls***
Adhesives, anti-seize, anti-static, batteries, solvents, cleaners and degreasers, compressed gases, coolant, corrosion inhibitor,					

	cutting fluid, decontaminant, desiccant, detector kit, dielectric compounds, fire extinguishing agent, flame retardant, fuel, grease, inspection penetrant, lubricants, paints and related commodities (topcoat, primer, wash-primer, thinner, paint stripper, powder coating, underbody coating), polishing compounds (automotive polish, leather care), refrigerants, sealants, spill kits, welding compounds (solder, flux, electrode etc.), etc.					

*Controls: Identify if the substance is regulated and proposed to be 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).

Attachment 3 –Safety Data Sheets (SDS) for all hazardous products identified in the EEA

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Software Version Description Document (SVDD)**		2. IDENTIFICATION NUMBER **SE-306**
3. DESCRIPTION The SVDD is the primary configuration control document used to track and control versions of software to be released to the operational environment. It is a summary of the features and contents for the software build. It identifies and describes the version of the software being delivered to DND including all changes to the software since the last SVDD was issued.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL SE-306		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The SVDD must be prepared and submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.

10.2 CONTENT

1 SCOPE

1.1 Identification

Provide full identification number(s), title(s), and abbreviation(s); and, if applicable, provide the version number(s) and release number(s).

1.2 Applicability

Identify the intended recipients of the software release and the operating system to be used.

1.3 System Overview

Proved a brief statement of the purpose of the system and the environments to which this document applies. Describe the general nature of the system and software; summarize the history of system development, operation, and maintenance; identify current and planned operating sites; and list other relevant documents.

1.4 Documentation Overview

Summarize the purpose and contents of this document and describe any security or privacy considerations associated with its use.

1.5 Points of Contact

Provide a list of Contractor points of contact involved in this effort.

2 REFERENCE DOCUMENTS

List the number, title, revision, and date of all documents referenced in or used in the preparation of this SVDD. If this SVDD is an update to an existing system, list the SVDD that this version is replacing as a reference document.

3 SOFTWARE VERSION DESCRIPTION

Summarize briefly in the ensuing sub-paragraphs (to include materials contained in the release, software components of the subsystem Computer Software Configuration Item (CSCI), documents used to establish the configuration of the CSCI, and any known problems).

3.1 Inventory of Materials Released

List by CM numbers, titles, abbreviations, dates, version numbers, and release numbers (as applicable), all physical media (for example, listings, tapes, disks) and associated documentation that make up the software version being released. Include applicable security and privacy considerations for these items, safeguards for handling them, such as concerns for static and magnetic fields, and instructions and restrictions regarding duplication and license provisions.

3.2 Inventory of Software Contents

List by identifying numbers, titles, abbreviations, dates, version numbers, and release numbers (as applicable), all computer files that make up the software version being released. Any applicable security and privacy considerations should be included.

3.3 Changes Installed

List all changes incorporated into the software version since the previous version. Identify, as applicable, the Engineering Change Proposals (ECP), Specification Change Notices (SCN), Notices of Revision (NOR), and any other forms associated with each change and the effects, if any, of each change on system operation and on interfaces with other hardware and software. (This section does not apply to the initial software version.)

3.4 Interface Compatibility

List and describe any other systems, Configuration Items (CI) or CSCIs affected by the change(s) incorporated in the current version, if applicable.

3.5 Adaptation Data

Identify and reference all unique-to-site data contained in the software version. For software versions after the first, describe changes made to the adaptation data.

3.6 Bibliography of Reference Documents

List by identifying numbers, titles, abbreviations, dates, version numbers, and release numbers (as applicable), all documents that establish the current version of the software.

3.7 Installation Instructions

Provide or reference the following information, as applicable:

a. Instructions for installing the software version, including instructions for deletion of old versions;
b. Identification of other changes that have to be installed for this version to be used, including site-unique adaptation data not included in the software version;
c. Security, privacy, or safety precautions relevant to the installation;
d. Procedures for determining if the version has been installed properly; and

e. A point of contact to be consulted if there are problems or questions with the installation.

3.8 Possible Problems and Known Errors

Identify any possible problems or known errors with the software version at the time of release, any steps being taken to resolve the problems or errors, and instructions (either directly or by reference) for recognizing, avoiding, correcting, or otherwise handling each one. The information presented will be appropriate to the intended recipient of the SVDD (for example, a user agency may need advice on avoiding errors, a support agency on correcting them).

3.9 Glossary

Include an alphabetical listing of all acronyms, abbreviations, and their meanings as used in this document. Also provide a list of any terms and definitions needed to understand this document.

4 APPENDICES

Appendices may be used to provide information published separately for convenience in document maintenance (for example, charts, classified data, etc.). As applicable, each appendix will be referenced in the main body of the document where the data would normally have been provided. Appendices will be lettered alphabetically (A, B, etc.), and the pages will be numbered A – 1, A – 2, etc.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Engineering Change Proposal (ECP)**		2. IDENTIFICATION NUMBER **SE-308**
3. DESCRIPTION The ECP describes and substantiates any engineering change required for a proposed alteration in the configuration of a CI and/or its related documentation. The ECP enables the Contractor and the TA to evaluate the proposed change fully prior to authorization.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL SE-308		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 Engineering Change Proposals (ECP) must be provided using the ECP Template, Figure 1A (see below).

10.2 CONTENT

10.2.1 The ECP must fully describe and substantiate the engineering change required.

10.2.2 ECP Template Field Descriptions

Block 1. DATE (YY/MM/DD). Enter the submittal date of the ECP.

Block 2. Enter name, address and contact information for DND or Contractor authority submitting the ECP.

Block 3. CLASS of ECP. Enter the class of ECP either “Class I” or “Class II”. Classifications of changes are determined in accordance with referenced paragraphs in Mil-Std-973:

Class I: Subject to Government Approval (Para. 5.4.2.2.1. and 5.4.2.2.2).
Class II: Subject to Government Approval for Classification Only (Para. 5.4.2.4.). Info copy of completed Class II change provided to DND.

Block 4. JUSTIFICATION CODE. (Reference Mil-Std-973)

B - Interface
C - Compatibility
D - Deficiency
O - Operational or Logistics Support
P - Production Stoppage
R - Cost Reduction
S - Safety

V - Value Engineering

Block 5. PRIORITY. Contractor recommendation for processing:

E - Emergency. Vital modification required to rectify a condition which may result in a serious hazard to personnel or equipment, or may seriously compromise national security. ECP to be actioned within 24 hours.
U - Urgent. Urgent modification required to rectify a condition that results in degraded mission effectiveness. ECP to be actioned within 5 days.
R - Routine. ECP to be actioned within 30 days.

Block 6. ECP DESIGNATION.

No. - Format "ECP-Y-NNN"
Y - C (Contractor) or P (Project Office – Canada) indicating Originator
NNN - Serial number unique for each change
Type – P (Preliminary) or F (Final)
Rev – Enter revision indicator to identify version
System Designation – Identify and describe the System/Sub-System affected by the ECP. Include reference to affected configuration identifier(s).

Block 7. SPECIFICATIONS/DOCUMENTS AFFECTED. List all specifications or documents affected by the change. This must include the management plans submitted for the contract. Copies of the specifications/documents showing proposed changes must be submitted with the ECP in order to assess the impact of the change. Attach separate list as required.

Block 8. DRAWINGS AFFECTED. List all drawings or documents affected by the change. Copies of the drawings showing proposed changes must be submitted with the ECP in order to assess the impact of the change. Attach separate list as required.

Block 9. TITLE OF CHANGE. Enter a brief title to identify the component or system affected by the change.

Block 10. DESCRIPTION OF CHANGE. Describe the change in definitive terms. Supplementary information must be attached to the ECP to the extent necessary to clearly portray the proposed change and obtain approval.

Block 11. NEED FOR CHANGE. Provide an explanation of the need for the change and indicate the benefit to DND (enhanced performance, range, reliability, maintainability, etc.). The nature of the defect, failure, incident, malfunction, etc. substantiating the need for the change must be provided in detail.

Block 12. CONTRACT NUMBER AND LINE ITEMS. Insert the contract number and identify reference areas of the contract, annexes, appendices and attachments, line item numbers etc., affected by the change.

Block 13. PRODUCTION EFFECTIVITY. Indicate the estimated date of when change will be incorporated on the production line. Also indicate the planned serial number or lot number of when the change will be implemented.

Block 14. EFFECT ON PRODUCTION DELIVERY SCHEDULE. Indicate the production delivery schedule for items incorporating the change and identify if the change is a variance from the current established production and delivery schedule.

Block 15. RETROFIT. Applicable when the change must be accomplished in accepted items by retrofit.

RECOMMENDED ITEM EFFECTIVITY. Indicate the lot numbers or serial numbers of the item(s) to be retrofitted as a result of the change.

ESTIMATED KIT DELIVERY SCHEDULE/LOCATIONS. Indicate details of delivery schedule, quantities and locations for completing the retrofit as a result of the change.

ESTIMATED COSTS/SAVINGS UNDER CONTRACT. Indicate the total estimated costs/savings of the ECP on the contract.

Block 16. SUBMITTING ACTIVITY. Print the name of the individual authorized to submit the ECP and have the ECP signed and dated.

ENGINEERING CHANGE PROPOSAL (ECP) TEMPLATE					
1. DATE (*YY/MM/DD*)					
2. ORIGINATOR NAME AND ADDRESS					
3. CLASS OF ECP (I or II)	4. JUSTIFICATION CODE (Applicable to Class I Only)		5. PRIORITY		
6. ECP DESIGNATION					
No.	Type		Revision		
SYSTEM DESIGNATION:					
7. SPECIFICATIONS / DOCUMENTS AFFECTED			8. DRAWINGS AFFECTED		
Spec/Doc No.	Title	Rev	Dwg. No.	Title	REV
9. TITLE OF CHANGE					
10. DESCRIPTION OF CHANGE					
11. NEED FOR CHANGE					
12. CONTRACT NUMBER AND LINE ITEMS					
13. PRODUCTION EFFECTIVITY			14. EFFECT ON PRODUCTION DELIVERY SCHEDULE		
15. RETROFIT					
RECOMMENDED ITEM EFFECTIVITY			ESTIMATED KIT DELIVERY SCHEDULE / LOCATIONS		
ESTIMATED COSTS / SAVINGS UNDER CONTRACT					

16. SUBMITTING ACTIVITY – Authorized Signature (Print Name and Sign) Date
IMPACT ANALYSIS / EFFECTS
ITEMS / SYSTEMS DIRECTLY AFFECTED
OTHER SYSTEMS AFFECTED
OTHER CONTRACTORS / ACTIVITIES AFFECTED
EFFECTS ON PERFORMANCE / SYSTEM SPECIFICATIONS
EFFECTS ON EMPLOYMENT, INTEGRATED LOGISTICS SUPPORT, TRAINING, OPERATIONAL EFFECTIVENESS OR SOFTWARE
EFFECTS ON ITEM SPECIFICATIONS

Figure 1A. ECP Template

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Verification Traceability Matrix (VTM)**		2. IDENTIFICATION NUMBER **SE-312**
3. DESCRIPTION The Verification Traceability Matrix (VTM) documents the path from each ADIS requirement in the SysRS through to individual test results to demonstrate that each and every requirement is met throughout the design, test and verification process.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL SE-312		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The VTM must be submitted in electronic format using Microsoft Office.

10.2 CONTENT

10.2.1 The VTM must show, by the paragraph number in each document, the traceability from each ADIS SysRS requirement through specifications, hardware and software description documents, test plans, test procedures to a specific test report where the SysRS requirement is verified.

10.2.2 The traceability links from one document to another can be one-to-one, one-to-many or many-to-one linkages.

<table>
<tr><td colspan="3">DATA ITEM DESCRIPTION DND Form 1409</td></tr>
<tr><td colspan="2">1. TITLE
Equipment Specification</td><td>2. IDENTIFICATION NUMBER
SE-313</td></tr>
<tr><td colspan="3">3. DESCRIPTION
The Equipment Specification is a comprehensive document of the physical, performance and other technical characteristics of the ADIS as it is designed and built.</td></tr>
<tr><td>4. APPROVAL DATE</td><td>5. OFFICE OF PRIMARY INTEREST
DGLEPM / DCSEM 12-5 (TA)</td><td>6. GIDEP APPLICABLE</td></tr>
<tr><td colspan="3">7. APPLICATION / INTERRELATIONSHIP
CDRL SE-313</td></tr>
<tr><td colspan="2">8. ORIGINATOR
DCSEM 12-5</td><td>9. APPLICABLE FORMS</td></tr>
<tr><td colspan="3">10. PREPARATION INSTRUCTIONS
10.1 <u>FORMAT</u>
10.1.1 The Equipment Specification must be prepared and submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.
10.2 <u>CONTENT</u>
10.2.1 The Equipment Specification must be in accordance with D-01-300-100/SG-000 as a Product Specification, and must reflect the actual as designed and built ADIS system and individual equipment.</td></tr>
</table>

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Integrated Logistics Support Plan (ILSP)**		2. IDENTIFICATION NUMBER **IL-501**
3. DESCRIPTION The Integrated Logistics Support Plan (ILSP) describes the Contractor's strategy, plans, methodologies and processes for meeting the requirements of the contract, showing how the processes fit together to form a totally integrated management system to provide an integrated logistic support program including both, acquisition and In Service Support (ISS). The ILSP will be used to provide the DND Equipment Management Team (EMT) insight into the Contractor's planning, approach to managing the scope of the work, and interfaces with the Contractor's organization.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-501		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The ILSP must be prepared and submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.

10.1.2 The ILSP must be in the Contractor's format.

10.1.3 The ILSP must be version controlled.

10.2 CONTENT

10.2.1 The ILSP must include all aspects of the ILS Program including overviews of maintenance, training and In Service Support.

10.2.2 The ILSP must be a stand-alone document that provides sufficient information to allow the reader to understand how each activity is to be completed and managed without reference to other documents, unless otherwise indicated.

10.2.3 The ILSP must identify all assumptions and constraints and reference any policies that will affect the completion of work as defined in the acquisition and ISS SOWs.

10.2.4 The ILSP must document in detail the Contractor's program to complete the following ILS elements in accordance with the acquisition and ISS SOWs:

a. Logistics and In-Service Support Management;
b. Logistic Support technical elements identified in the acquisition and ISS SOWs;
c. Provisioning Support;

d. Technical Publications;
e. Supply Support;
f. Training and training support; and
g. Engineering support.

10.2.5 The ILSP must describe how the Contractor will meet and manage the security requirements of the contract in relation to the support and systems and equipment to be supported.

10.2.6 The ILSP must describe the Contractor's arrangements for the receipt, custody, storage, care, maintenance and issue, of any GFE provided to the Contractor under the contract.

10.2.7 The ILSP must describe the organizational structure responsible for managing and providing support under the contract, including:

a. The Contractor's organizational structure for completing the contract; and
b. Identification of key personnel with specific responsibilities, contact information.

10.2.8 The ILSP must describe the processes to be applied by the Contractor to satisfy the Quality Management System requirements of the contract including, if applicable ISO 9001 registration scope.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Maintenance Plan (Maint Plan)**		2. IDENTIFICATION NUMBER **IL-502**
3. DESCRIPTION The Maintenance Plan (Maint Plan) describes how the equipment will be supported and maintained by DND. Using maintenance analysis data, the Maintenance Plan provides the rationale for acquiring logistics support resources and forms the basis for provisioning and technical manual development.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-502		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Maint Plan must be prepared and submitted using Microsoft Word to allow DND to review, edit, and manipulate.

10.1.2 The Maint Plan must be version controlled.

10.2 CONTENT

10.2.1 The Maint Plan must include:

Maintenance Plan Number

Maintenance Plan Date

1. Equipment Identification

Identify the system/equipment for which the Maint Plan is applicable:

- Item Name
- Version or Model Number
- Military Type No. (AN/)
- Reference (Manufacturer's Part) No.
- CAGE Code

2. Maintenance Rational

- Maintenance Plan Rational

3 Description

- Line Drawing or Photograph
- Brief narrative description of the system/equipment.

4. Reliability and Maintainability Characteristics

Provide for each Maintenance Significant Item:

- Maintenance Replacement Rate (MRR)
- Mean Time To Repair (MTTR)
- Repair Cycle Time

5. Maintenance Tasks

List the maintenance tasks performed by DND, grouped by level of maintenance (operator, first line) and by category (preventive, corrective). Present the data in the following format:

LCN/ALN	TASK IDENTIFICATION	TASK FREQUENCY	MEAN ELAPSED TIME	RESOURCE REQUIREMENTS	MAINTENANCE LEVEL

6. Logistic Resource Requirements

For each required resource (e.g. digital voltmeter, torque wrench, etc.), indicate its usage by completing the following table.

RESOURCE REQUIREMENTS	RECOMMENDED QUANTITY	REQUIRED FOR LCN/ALN	ITEM NAME	MAINTENANCE LEVEL

7. Personnel Requirements

Summarize the personnel requirements by completing the following summary for each military occupation:

OCCUPATION TYPE (Operator, 1st Line)	EQUIPMENT	MAINTENANCE LEVEL	MANHOURS PER YEAR

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Reliability Data**		2. IDENTIFICATION NUMBER **IL-503**
3. DESCRIPTION The Reliability Data provides the baseline data used to define the ADIS reliability characteristics.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-503		
8. ORIGINATOR DCSEM-5-12	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The computer generated reliability prediction and the reliability block diagram must be prepared in the Contractor's format.

10.1.2 Mean Time Between Failures (MTBF) Data must be prepared and delivered in Microsoft Excel format and as further described herein.

10.1.1 The Reliability Data must be version controlled.

10.2 CONTENT

10.2.1 The Contractor must provide substantiation of 1000 hrs MTBF via predicted or actual field data:

a. A computer generated Reliability prediction using MIL-HDBK-217 (Part Stress Method), Ground Mobile environment at 20 deg. C, constant operation (i.e. no on-off cycle) or actual field data (if available) and NRPD 11 for non-electronic parts.
b. Prediction must indicate which methodology was used in preparation of the data i.e. predicted or actual field data
c. Actual device field data may be used. If so, the applicable item and data source must be clearly identified.
d. A sample Reliability Block Diagram (RBD) of the ADIS down to the Line Replaceable Unit (LRU) is shown in Figure 3.
e. Means of fault detection.

10.2.2 The computer generated reliability prediction results must:

a. Show predicted results for the ADIS and all failure rates of the contributing LRUs/assemblies including LRU components.
b. Prediction results for each LRU will be distinct and easily identifiable from other LRU /assembly results.
c. LRU/ assembly components must be identified including the quantity used, base and total failure rates.
d. Individual LRU failure rates must be summarized and used in preparation of the RBD as described in section 10.2.3 below.

e. The results must identify items where actual field reliability data was used in place of predicted results.

10.2.3 The individual LRU failure rates must be recorded for each block in the RBD that contribute to the overall ADIS predicted failure rate.

10.2.4 The RBD shown in Figure 3 assumes a serial relationship between block components for sample purposes only. The Contractor must generate an RBD representative of its proposed ADIS (including any block redundancies).

10.2.5 The Contractor is not responsible for providing reliability data for GFE.

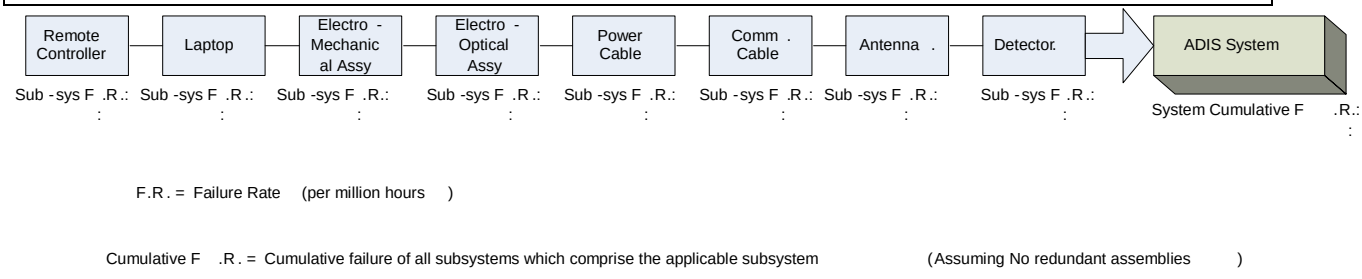

Figure 3: Sample ADIS System Reliability Block Diagram (RBD)

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Serial Number Register (SNR)**		2. IDENTIFICATION NUMBER **IL-504**
3. DESCRIPTION The ADIS **Serial Number Register** (SNR) contains information relating to the serialization of ADIS system equipment and shipment dates.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5(TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-504		
8. ORIGINATOR DCSEM-12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The SNR must be prepared and submitted in electronic format using Microsoft Word or Microsoft Excel to allow DND to review, edit, and manipulate.

10.1.2 The SNR must be version controlled.

10.2 CONTENT

10.2.1 All ADIS SNR must be maintained.

10.2.2 An updated copy of the complete SNR must be submitted with each shipment.

10.2.3 The SNR data must be listed in order of shipment dates with the most current shipment date data listed first, then the previous shipment etc.

10.2.4 The following column cells must be contained in the register (where applicable) as a minimum:

a. Item No;
b. Contract Number;
c. Order Number (if applicable);
d. Item Description;
e. Item Serial No.;
f. Quantity in Shipment;
g. Shipment Date ;
h. Destination (as shown on shipping documents);
i. Contract Line Item Number;
j. Invoice No.;
k. Item Warranty Expiry Date; and
l. Shelf Life

10.2.5 The Contractor may include any other equipment movement information as deemed warranted.

10.2.6 The Contractor is responsible to provide SNR for all Contractor supplied equipment, but not for GFE.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Equipment Identification (ID) Plate Drawings**		2. IDENTIFICATION NUMBER **IL-506**
3. DESCRIPTION The Equipment Identification Plate Drawings provides the information required to obtain design approval prior to the production of Equipment Identification plates.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-506		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The proposed Equipment Identification Plate Drawings must be in the Contractor's format and submitted as Engineering drawings, and in electronic format, as described in DID-IL-514: Provisioning Drawings and Associated Parts List.

10.2 CONTENT

10.2.1 The Equipment Identification Plate drawings must be prepared in accordance with D-02-002-001/SG-001, Identification Marking of Canadian Military Property.

10.2.2 The Equipment Identification Plate Data must, as a minimum, contain the following information:

a. The Item Name in both Canadian English and Canadian French* including Manufacturer's or Type Number, as applicable;
b. NSN;
c. Serial Number (if applicable);
d. CAGE Code;
e. Manufacturer's Part Number;
f. Contract Number;
g. Special Characteristics, if applicable e.g. 208V 3 Phase; and
h. DND CANADA MDN.

10.2.3 Drawings of identification plates must include the following data:

a. Proposed marking;
b. Marking arrangements;
c. Type and size of characters;
d. Colour scheme;
e. Material and finish of plate;
f. Size and thickness of plate;
g. Method of affixing; and
h. Protective coating (if used).

* **Note:** The Item Name must be both the Canadian English and Canadian French names assigned to the item in the LBS.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Marking Data For Storage and Shipment**		2. IDENTIFICATION NUMBER **IL-508**
3. DESCRIPTION The Marking Data For Storage and Shipment provides detailed information required to provide visibility of all system and spare parts shipping labels.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-508		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Marking data must be prepared and submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.

10.1.2 The Marking data must be in the Contractor's format and as further described herein.

10.1.3 The Marking Data review document must be version controlled.

10.2 CONTENT

10.2.1 Marking Data for Storage and Shipment must be in accordance with D-LM-008-002/SF-001 Specification for Marking for Storage and Shipment and as further described herein.

10.2.2 The following information must appear on all shipping containers and palletized unit loads:

a. Manufacture's Name;
b. Part Number;
c. NSN;
d. Nomenclature;
e. Quantity/Unit of Issue;
f. Date of manufacture;
g. Date of repair or overhaul;
h. Drawing number;
i. Batch/ lot number;
j. Protection and Date Marking;
k. Contract Serial Number;
l. Special Markings; and
m. Shelf Life.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Packaging Data**		2. IDENTIFICATION NUMBER **IL-509**
3. DESCRIPTION The Packaging Data identifies packaging requirements for all items delivered as part of the Contract that are to be shipped to or stored at DND facilities.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-509		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Packaging Data must be in the Contractor's format.

10.1.2 The Packaging Data must be prepared and submitted using Microsoft Word to allow DND to review, edit and manipulate.

10.1.3 The Packaging Data document must be version controlled.

10.2 CONTENT

10.2.1 The Packaging Data must identify packaging requirements in accordance with D-LM-008-002/SF-001, Specification for Marking for Storage and Shipment, for all items delivered as part of the Contract that are to be shipped to or stored at DND facilities. The Packaging Data must include the following:

a. Item Identification:
   i. Item Name*;
   ii. Reference (Manufacturer's Part) Number;
   iii. CAGE Code; and
   iv. NSN (if assigned); and
b. Packaging Data:
   i. Unit Pack Size (length, width, depth)
   ii. Unit Pack Weight;
   iii. Packing Code (Level of Protection, A, B or C, in accordance with Section 3.1 of D-LM-008-011/SF-001);
   iv. Hazardous Code (Regulated/Non-regulated); and
   v. Special Packaging Instructions.

10.2.2 To reduce the need for redundant data, similar items may be grouped with the same packaging data applying to the group.

10.2.3 All units of measures must be metric, i.e. length in meters, weight in kilograms, etc.

* **Note:** The Item Name must be both of the Canadian English and Canadian French names assigned to the item in the LBS.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Provisioning Parts Breakdown (PPB)/Recommended Spare Parts List (RSPL)**		2. IDENTIFICATION NUMBER **IL-510**
3. DESCRIPTION The Provisioning Parts Breakdown (PPB)/Recommended Spare Parts List (RSPL) provides the data needed by DND to identify, catalogue, calculate and procure the range and depth of repairable and consumable spares needed by each line of maintenance.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-510		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The PPB/RSPL must be prepared and provided electronically using Microsoft Excel (see D-01-100-214/SF-000 for column definitions and table below for column organization) to allow DND to review, edit, and manipulate.

10.2 CONTENT

10.2.1 The PPB/RSPL for ADIS must contain the data elements specified in Table below – Provisioning Documentation Data Elements, for each item considered for provisioning.

10.2.2 PPB/RSPL must include all spare parts and consumables as they are identified.

10.2.3 The PPB must provide a top down breakdown of the system equipment in the configuration in which it is being procured.

10.2.4 The PPB must be accompanied by copies of all top level drawings and Parts Lists that are required to verify the complete and current configuration of the equipment.

10.2.5 The RSPL must list First Line spares deemed necessary to maintain the system equipment and its associated support equipment for a period of 24 months exclusive of any warranty period.

10.2.6 The PPB/RSPL also identifies repairable items as well as their respective MTBF data so that sparing analysis can be performed

10.2.7 The PPB/RSPL must list all equipment (e.g. laptop computer, Electro-optical unit, electro-mechanical, Control unit, cables, battery chargers, hard storage cases etc.) in the proposed system, and their respective First Line replaceable spare parts (e.g. screws, sensors, track, lens cups etc.) required to maintain the equipment as described in the Maintenance and Support Concept.

10.2.8 The PPB/RSPL must list recommended spares required to maintain the equipment (ADIS and support equipment) for a 24 month period assuming the combined usage rate of 1000 hrs per year per ADIS (for a total of 32 systems x 1000 hrs = 32,000 operating hrs per year).

10.2.9 The attached sample PPB/RSPL gives spreadsheet format and a sample equipment breakdown and their respective indenture codes as 1, 2, etc. (based upon the LBS). Indenture codes C (level 3) and below must represent all ADIS and support equipment 1st Line maintenance spare parts.

10.2.10 The table must be completed by the Contractor by providing the required data as identified at the top of the spreadsheet.

10.2.11 Data for indenture levels 3 and below will be identified and listed for each of the ADIS and support equipment. Sample inputs have been inserted for some of the data fields for example purposes only and may or may not be applicable to the specific piece of equipment.

10.2.12 Each PPB/RSPL submission bears version identification (i.e. date or version).

10.2.13 PPB/RSPL contents and data must be consistent with those contained in the approved Provisioning Drawings & Associated Lists see DID IL-514 (where applicable), and Logistical Breakdown Structure (LBS) see DID IL-526.

10.2.14 Abbreviations used in the Provisioning Documentation table are as follows:

OEM:	Original Equipment Manufacturer;
NSN:	NATO Stock Number;
Qty/Assy:	Quantity per Assembly;
UOI:	Unit of Issue;
PLT:	Procurement Lead Time (Long Lead Time Items);
REP:	Repairability: [Repairable R, Non-Repairable (NR)];
DMC:	Demilitarization Code;
MTBF	Mean Time Between Failure; and
NA:	Not Applicable.

NOTE: The Indenture Code is a code which illustrates a lateral and descending “family tree” relationship of each line item to and within the system or end item and its discrete components (units), assemblies and subassemblies, and subassemblies beginning with “A” for the system, “B” for the system components, “C” for assemblies, “D” for subassemblies, etc.

ADIS Sample PPB/RSPL

Notes:

1 This table must be completed in accordance with D-01-100-214/SF-000

2 Item names and contents MUST match those shown in the LBS, drawings and other project documentation.

Item #	Indent. Code	Item Name	Applicable Drawing Title	Supplier Part Number	OEM Part Number (if different from Supplier)	Cage Code	NSN	Qty per Assy	UOI	Std Unit Price $CDN	PLT (days)	Recomm. Buy Qty For Total Usage Rate of 24,000 hrs/yr	Recomm Total QTY Spares for 2 Years	Total Cost $CDN	REP	DMC	Shelf Life	MTBF (hrs)	Contains Hazardous Material (Yes/No)
001	A	ADIS																	
002	B	Transit Case																	
003	C	Lid Seal																	
004	C	Handles																	
005	D	Screws																	
006	B	Electro-Optical Unit																	
007	B	Laptop Computer																	
008	B	Remote Controller																	
009	B	Power Cable																	
010	B	Comm. Cable																	
011	B	Tripod																	
012	B	Consumables																	
013		ETC																	

014		Consumables																
015																		

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Supplementary Provisioning Technical Documentation (SPTD)**		2. IDENTIFICATION NUMBER **IL-511**
3. DESCRIPTION The SPTD provides the information required to uniquely identify, for cataloguing purposes, all Configuration Items (CI) and DND Spare Parts and Consumable Items within the scope of this Contract that are not already in the Canadian Government Catalogue of Materiel (CGCM).		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-511		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The SPTD must be prepared and submitted in electronic format using Microsoft Office to allow DND to review, edit, and manipulate..

10.2 CONTENT

10.2.1 The SPTD must be prepared in accordance with the current issue of D-01-100-214/SF-000, *Preparation of Provisioning Documentation*, for content purposes. The SPTD must provide the following data to clearly define each CI for cataloguing:

a. Item Name, Version or Model Number;
b. Manufacturer part number;
c. Manufacturer CAGE Code;
d. Alternate part number, with applicable CAGE Code;
e. NSN, if assigned by another country;
f. Unit of Issue;
g. Item drawing or illustration;
h. Technical specifications, including relevant standards;
i. Physical characteristics, such as dimensions, tolerances, materials, mandatory processes, surface finish, protective coating;
j. Electrical characteristics;
k. Performance data, including the item's environmental and operating conditions;
l. Item shelf life and associated information such as storage conditions/restrictions, packaging, etc.;
m. Disposal procedures and restrictions; and
n. Commercial catalogue data.

10.2.2 The SPTD must identify any proprietary data or restrictions imposed on the release of its technical data to government entities in Canada or abroad.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Material Change Notice (MCN)**		2. IDENTIFICATION NUMBER **IL-513**
3. DESCRIPTION The MCN provides the information required whenever changes to provisioning documentation occurs, including anticipated obsolescence issues.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE N/A
7. APPLICATION / INTERRELATIONSHIP CDRL IL-513		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 A MCN must be prepared in accordance with D-01-100-215/SF-000, Preparation of Material Change Notice, to identify changes to parts or assemblies (down to the lowest replaceable part) or technical data using Microsoft Word or Microsoft Excel.

10.2 CONTENT

10.2.1 The MCN must include the information shown below.

10.2.2 The MCN must substantiate the change, describe any change in the performance parameters or tolerances of affected parts or assemblies, and recommend a course of action for DND.

MANAGEMENT DATA

Contractor

Equipment Name

Contract Number

MCN Sequence Number

Submitted By Approved/Rejected (DND use only) Change Authority

ACTION REQUIRED (Check one only)

☐ Delete existing item without replacement

☐ Add new item

☐ Replace existing item with new item

☐ Amend existing item

DATA FIELD CHANGED	EXISTING DATA	NEW DATA
- Item Number (unique sequence no.)	_____	_____
- Indenture Code	_____	_____
- Item Name	_____	_____
- Reference (Manufacturer's Part) No.	_____	_____
- CAGE Code	_____	_____

- OEM's Part Number (if assigned) _____
- NATO Stock Number (if assigned) _____
- Quantity Per Assembly _____
- Standard Unit Price _____ _____
- Unit of Issue (UOI) _____ _____
- Unit of Measure _____
- Government Supplied Material (GSM) _____
- Procurement Lead Time (PLT) _____
- Reference Designation _____
- Shelf Life _____ _____
- Usage Rate _____ _____
- Recommended Buy Quantity _____

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Provisioning Drawings & Associated Lists**		2. IDENTIFICATION NUMBER **IL-514**
3. DESCRIPTION Provisioning Drawings & Associated Lists to define the Product Baseline for in-service configuration management and to provide a source of information to support configuration, maintenance and provisioning analysis activities.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-514		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Provisioning Drawings & Associated Lists, including Reference Documents, must be provided in accordance with the requirements set out and in the final form specified in Section 10.2.

10.1.2 All drawings must be bilingual (Canadian English and Canadian French).

10.1.3 Applicable Documents

a. C-01-000-100/AG-004, Production and Acquisition of Engineering Data;
b. D-01-400-002/SF-000, Drawings, Engineering and Associated Lists;
c. ASME Y14.100 dated 2004-01-01, Engineering Drawing Practices;
d. ASME Y14.24 dated 2004, Types and Applications of Engineering Drawings;
e. ASME Y14.34 dated 2002, Associated Lists;
f. ISO 9660 dated 1988, Information Processing - Volume and File Structure of CDROM for Information Interchange;
g. CAN/CSA-Z234.1 dated 2000-12-01, Canadian Metric Practices Guide; and
h. TIFF Revision 6, Adobe Systems Incorporated dated June 3, 1992.

10.2 CONTENT

10.2.1 Drawing Level: The Contractor must deliver top-Level 2 drawings in order to support the PPB (DID-IL-510) contents and the LBS (DID- IL-526). The Contractor must also deliver exploded view drawings and illustrated parts list in accordance with MIL-PRF-38807C to support maintenance activities and the generation of an “Illustrated Repair Parts Manual and Scale” by DND.

10.2.2 DND/CAF Data Lists (CAGE 35907) Data Lists complete with Cover Sheets are required and must be prepared in accordance with the governing standard and supplied as part of the Provisioning Drawings. Data Lists must be prepared at the item level of assembly (and/or end item) declared for future production by the Technical Authority.

10.2.3 Reference Documents Reference documents called up on the provisioning drawings (excepting those, which are government, society and readily available industrial specifications or standards) must be included as part of the provisioning drawings and associated lists.

10.2.4 Contractor Drawings Existing Contractor drawings must be acceptable provided they meet the requirements of paragraph 3.2 of D-01-400-002/SF-000. In the event that contractor drawings do not meet the specified requirements the contractor must rework the drawings to ensure that the requirements are met.

10.2.5 DND/CAF Drawings (CAGE 35907) New Provisioning Drawings and Associated Lists must be prepared in accordance with the governing Specification/Standard and the clauses set out herein.

10.2.5.1 Drawing Number Allocation CAF drawing numbers must be allocated for use on DND/CAF engineering drawings and associated lists (data lists and cover sheets). The allotment must be requested in writing from DSCO (address as specified herein). Requests must specify the quantity of numbers required, the contract number and contract name. Drawing number requests must be sufficiently liberal to preclude the necessity of subsequent requests. Allocated CAF drawing numbers must be used for this contract only.

10.2.5.2 Technical Data Action Notice (TDAN) A TDAN must be prepared listing all Drawings and Associated Lists delivered as a result of the contract. A sample TDAN can be provided upon request. The TDAN number for this project is will be assigned at Contract Award.

10.2.5.3 Forms Drawing and Associated List electronic forms must be Government supplied material and obtained by written request to DSCO.

10.2.5.4 Drawing System The mono-detail drawing system must be used.

10.2.5.5 Drawing Types The contractor must provide the necessary types of drawings that will satisfy the sophistication of the specified drawing level and must be subject to the approval of both the DND Technical Authority and DSCO.

10.2.5.6 Parts Lists Parts lists must be prepared integral with the drawings. On multi-sheet drawings, the parts list must be placed on sheet one (1).

10.2.5.7 Control Drawings Control drawings as defined in the governing standard must be prepared for commercial items approved for use in the design, which are not defined by Government or nationally recognized industrial specifications and standards.

10.2.5.8 Interface Control Drawings Interface control drawings must be prepared describing the mechanical and electrical interfaces between sub-systems and components.

10.2.5.9 Family-Tree Drawing(s) The contractor must prepare a Family-Tree Drawing(s) of the complete configuration of the Provisioning Drawing Package and it must be subject to the approval of both the DND Technical Authority and DSCO.

10.2.5.10 Title / Revision Blocks Identifiers must be inserted in the Title / Revision Block of each Drawing and Associated List as shown in Table 3.

10.2.5.11 Units of Measure Units of measure will be in metric, which must comply with Z234.1-00 Canadian Metric Practices Guide.

10.2.6 Integration The prime Contractor must be fully responsible for the integration of Contractor and DND/CAF Drawings to form a complete Provisioning Drawing Package.

10.2.7 Data Rights. Unless otherwise specified in the Terms and Conditions of the contract, the Government of Canada must have rights in data as set out below.

10.2.7.1 Data Rights Legend. The Contractor must mark all Foreground and Background Provisioning Drawings and Associated lists delivered under this contract with a complete notation indicating the ownership of the rights in the Drawings and Associated lists and the rights granted to Canada in the following legend:

"This document is furnished pursuant to a contract bearing the Serial No XXXXXXX, dated _____ between (Name of Contractor and Her Majesty the Queen in Right of Canada. This document contains Background Intellectual Property (and/or Foreground Intellectual Property - choose as appropriate) as defined in the Contract which may be used only in the manner specified in the Contract."

10.2.7.2 Unlimited Rights (Foreground Data-CAGE 35907) The Government of Canada must have unlimited rights in all Provisioning Drawings, Associated Lists and Reference Documents produced or provided as a result of this contract. The Government of Canada must have the right to use, translate into Canada's other official language, duplicate, revise or disclose such technical data, in whole or in part, in any manner and for any purpose whatsoever, and to have or permit others to do so.

10.2.7.3 Limited Rights (Background Data) The Government of Canada must have limited rights only and must hold in confidence all Existing Provisioning Drawings, Associated Lists and Reference Documents supplied under this contract that bears the Contractor's "Limited Proprietary Rights" restrictive legend. The Government of Canada must have the right to use, translate, duplicate or disclose such technical data, in whole or in part, by or for the Government of Canada, with the express limitation that such technical data must not, without the express written permission of the Contractor furnishing such technical data, be:

a. Released or disclosed in whole or in part outside the Government of Canada;
b. Used in whole or in part by the Government of Canada for manufacture; and
c. Used by a party other than the Government of Canada, except for:
    i. Emergency repair or overhaul work only, by or for the Government of Canada, where the item or process concerned is not reasonably available to enable timely performance of the work, provided that the release or disclosure thereof outside the Government of Canada must be made subject to the prohibition against further use, release or disclosure, and
    ii. Release to other Governments for the furtherance of the mutual defense of Canada and other such Governments, only for the information and evaluation within such Governments, or for such Governments under the conditions of (i) above.

10.2.8 Quality Assurance Provisions. Quality of the Provisioning Drawings and Associated Lists delivered on this contract is the responsibility of the contractor and subject to the quality requirements of the contract.

10.2.8.1 Acceptance: Acceptance of the Provisioning Drawings, Associated Lists and Reference Documents for technical content requirements will be the responsibility of the DND Technical Authority. Acceptance of the Provisioning Drawings, Associated Lists, Reference Documents and Electronic Data Deliverables for format requirements will be DSCO.

10.2.8.2 Interim Deliverables for Acceptance Purposes Two complete, full-size, print copy sets of the Provisioning Drawings, Associated Lists and Reference Data must be delivered in hard copy form for acceptance purposes (reduced size" print copies may be acceptable provided that they are legible). If the package cannot be accepted, for reasons of either technical content or format, it may be necessary to resubmit the print copy sets.

10.2.8.3 Level 2 – Prototype Following acceptance of the Level 2 Provisioning Drawings, Associated Lists and Reference Documents, the Level 2 Provisioning Drawings, Associated Lists and Reference Documents must be forwarded to DSCO.

10.2.9 Final Deliverables. Upon acceptance, the Level 2 Provisioning Drawings, Associated Lists and Reference Data must be delivered in soft copy form as outlined herein.

10.2.9.1 Soft Copy Deliverables must include the Provisioning Drawings, Associated Lists, Reference Data and the associated Metadata in electronic form.

10.2.9.2 Provisioning Drawings. Unless otherwise specified in the individual tasks, Provisioning Drawings must be delivered in the Native format, Vector data and in the distributed format, Raster data. Multi-sheet Drawings must be delivered one sheet per file.

10.2.9.3 Vector data must be delivered in their native file format in which the data was originally created.

10.2.9.4 Raster data must be delivered in accordance with Para 9.1.6 herein.

10.2.9.5 Associated Lists must be delivered in the native Microsoft Word file and a PDF file (300 DPI).

10.2.9.6 Reference Documents Reference Documents must be delivered as a PDF file (300 DPI) or in a format deemed acceptable by the DSCO.

10.2.9.7 TDAN must be delivered in the native Microsoft Word file and a PDF file (300 DPI). Alternate file formats may be acceptable provided they have been discussed and approved in writing by DSCO. NOTE: One (1) hard copy of the TDAN complete with contractor's signatures must be provided with the final deliverables.

10.2.9.8 Metadata (Capture of Related Information). Metadata (the data that describes data objects) must be provided for all Provisioning Drawings, Associated Lists and Reference Data deliverables. Metadata records must contain the information in the order shown in Table. Metadata must be delivered as a Microsoft Access database table. Sample Metadata record entries are shown at Figure 4.

10.2.9.9 Database Table. Each delivered image must have a corresponding database record. All records must be entered into a single Microsoft Access database table. Fields without corresponding information must remain blank. The Microsoft Access database file must be named "metadata.mdb".

10.2.9.10 File Formats for Raster Data Raster data must be Tagged Image File Format in accordance with Adobe Systems Inc. specification "TIFF Revision 6", compressed to CCITT Group 4. Files must be UNTILED and be wholly raster (hybrid files must not be delivered).

10.2.9.11 Pel Density Raster image pixel element (Pel) density must be 200 dpi.

10.2.9.12 Position of Pels Position of Pels must be as follows:

10.2.9.12.1 Portrait Data: line progression 270 degrees, Pel path 0 degrees.

10.2.9.12.2 Landscape Data: line progression 270 degrees, Pel path 0 degrees.

10.2.9.13 Image Sizes Image sizes as outlined in Table 4 are provided as a guide and sizes may vary slightly, but no more than plus or minus one inch (25 mm) in either width or length.

10.2.9.14 Cropping. Images must be cropped such that the provisioning drawing is free from extraneous information. For example, drawing formats having an inside and an outside border must be cropped closely to the outside of the outside border. Drawing formats having only one border, where zone or quadrant identification is outside of that border must be cropped such that the zone information is retained.

10.2.9.15 Skew Correction In general, skew correction is not required. If the Contractor deems it necessary, correction must be done to 0 degrees and 90 degrees.

10.2.9.16 Despeckling If any despeckling is required, the Contractor must ensure that data integrity is not compromised by this operation.

10.2.9.17 Image Foreground /Background Images must be black on white background.

10.2.9.18 File Names/Batch Number Allocation File names and a batch number must be requested in writing from DSCO. Quantity of file names required must be specified at the time of the request.

10.2.9.19 Media of Delivery The media form for final delivery of electronic data must be CD-ROM, written in accordance with ISO 9660. (File compression software must not be used.) Each CD-ROM and its case must be labelled or marked in a method of the contractor's choosing. Each label or marking must display the Batch Number, Contract / Task number, TDAN number and the date the CD-ROM was created.

10.2.10 Packaging/Marking/Loss/Damage. Reproducible and non-reproducible data must be preserved, packaged, and marked in accordance with CAF Standard D-LM-008-022/SG-000. Exterior shipping containers must be marked with the contract and TDAN number and in the event of loss or damage while in shipment, the responsibility for replacement must be that of the primary Contractor and must be at the primary Contractor's expense.

10.2.10.1 Mail or Courier Delivery DSCO Deliverables must be forwarded to:

Department of National Defence
National Defence Headquarters,
MGen George R. Pearkes Building,
OTTAWA ON K1A 0K2

Attention: DSCO 5-3-5

10.2.10.2 Inquiries or Visits After contract award, DSCO may be contacted at (819) 994-9352, fax (819) 997-0302. The address is:

Department of National Defence
National Defence Headquarters,
MGen George R. Pearkes Building,
OTTAWA ON K1A 0K2Attention: DSCO 5-3-5

TABLE 3 - INDEX FIELDS

Order	Field Name	Max Field Length	Field Definition / Description	Example Entry
1	**FILENAME** *(all one word)*	12 (8.3)	Name of electronic file - unique filename for uploading in database. File names will be issued by DTICS 3-2. Alpha characters **must** be uppercase.	**LZ00235.TIF**
2	**BATCHNO** *(all one word)*	8	Batch number - used for uploading files in database. Batch number will be assigned with filenames. Alpha characters **must** be uppercase.	**LZ001**
3	**DOCUMENTNO** *(all one word)*	25	This field **must** contain the document number.	**9775458**
4	**REVISION**	3	Letter or number indicating the revision level. If there is no rev, indicate with dash (“-”)	**B**
5	**SHEETNO** *(all one word)*	3	Sheet number x of y. Enter the value of x.	**1**
6	**NOOFSHEETS** *(all one word)*	3	Sheet number x of y. Enter the value of y.	**1**
7	**FRAMENO** *(all one word)*	3	Frame number x of y. Enter the value of x. (This field is applicable only when capturing data from aperture cards.) When field is not applicable, leave blank.	
8	**NOOFFRAMES** *(all one word)*	3	Frame number x of y. Enter the value of y. (This field is applicable only when capturing data from aperture cards.) When field is not applicable, leave blank.	
9	**NSCM**	5	This field **must** contain the NATO Supply Code for Manufacturers (NSCM) of the Owner of the data. (Also known as FSCM, CAGE or NCAGE code.)	**35097**
10	**SIZE**	2	This field contains the document size. -For imperial sizes use A, B, C, D, E, F, G, H, J, K and LE (for legal) -For metric sizes use A4, A3, A2, A1, A0 and B1.	**A2**
11	**ADDITIONALIDENTIFIER** *(all one word)*	10	This open field **must** be used when two (2) or more documents have the same document number but are different documents. e.g. Document 12345,	**DCR 001**

			Document 12345 DCR 001, then “DCR 001" would be entered in this field. When field is not applicable, leave blank.	
12	**DATARIGHTS** *(all one word)*	1	The data rights as specified in the contract. "L" for “LIMITED” or “U" for "UNLIMITED”	**U**
13	**DOCUMENTTITLE** *(all one word)*	240	Title of document. (i.e. Drawing title)	**BRACKET ASSY**
14	**TDANNO** *(all one word)*	12	This field **must** be used to enter the TDAN number assigned for the project.	**034471008**
15	**ERN**	8	This field **must** be used for the Equipment Registration Number. Information **must** be provided if required, otherwise the field may be left blank.	
16	**EAC**	8	This field **must** be used for the Equipment Application Code. Information **must** be provided if required, otherwise the field may be left blank.	
17	**EQUIPMENT**	75	Name of the Equipment. Information **must** be provided if required, otherwise the field may be left blank.	

Table 4 DRAWING SIZES

METRIC DRAWING SIZES			
Drawing Size	W x L (max) (mm)	Pels Per Line	Number of Lines
A4	210 X 297	1656	2344
A3	297 X 420	2344	3312
A2	420 X 594	3312	4680
A1	594 X 841	4680	6624
A0	841 X 1189	6624	9368
B1	707 X 1000	5567	7875
NORTH AMERICAN / IMPERIAL DRAWING SIZES			
Drawing Size	**W x L (max) (inches)**	**Pels Per Line**	**Number of Lines**
A	8.5 x 11	1704	2200
B	11 x 17	2200	3400

C	17 x 22	3400	4400
D	22 x 34	4400	6800
E	34 x 44	6800	8800
F	28 x 40	5600	8000
G	11 x 90	2200	18000
H	28 x 143	5600	28600
J	34 x 176	6800	35200
K	40 x 143	8000	28600
Legal	8.5 x 14	1704	2800

Sample record entries (Metadata) in database table:

(The following table is shown on two lines to suit page width.)

FILENAME	BATCHNO	DOCUMENTNO	REVISION	SHEETNO	NOOFSHEETS	FRAMENO	NOOFFRAMES
LZ000235.TIF	LZ001	9775458	B	1	1	1	1
LZ000236.TIF	LZ001	9775457	-	1	1		

FIGURE 4: Sample Metadata Records

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Operators Manual (Op Man)**		2. IDENTIFICATION NUMBER **IL-515**
3. DESCRIPTION The Op Man provides detailed information associated with the operation, care, operator maintenance and storage as well as personnel and equipment safety of the ADIS.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-515		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Maintenance Instructions must be delivered in accordance with one of the following options as selected by the DND ILSM:

a. Option 1: Existing bilingual Canadian English and Canadian French commercial Op Man in Contractor format; or
b. Option 2: Initial submission in existing commercial and foreign government unilingual Canadian English Op Man in conformance with C-01-100-100/AG-005 and final submission in bilingual Canadian English and Canadian French; or
c. Option 3: Newly written bilingual Canadian English and Canadian French Op Man prepared in conformance with C-01-100-100/AG-006.

10.1.2 The Op Man must be prepared and submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.

10.1.3 The Initial submission must be unilingual Canadian English and the final submission must be bilingual (Canadian English and Canadian French).

10.1.4 Two hard covers (front and back) will form part of the Op Man:

a. The top (title) page of the Op Man must represent the cover (top) page of the Canadian English and Canadian French versions of the Instructions.
b. The Canadian English and Canadian French cover sheets must bear the following:
c. DND document configuration number (to be provided by DND) on the top outer corner;
d. Picture of the applicable equipment;
e. Document title;
f. System name and nomenclature (if applicable);
g. NSN;
h. Version Date (date format as yyyy/mm/dd); and
i. OPI: DCSEM 12-5

10.1.5 Figures and tables must be placed immediately next to the referring text descriptions.

10.1.6 Figures and tables must be identified by the document section followed by the figure sequence number and the description text (e.g. Figure 1-5 GPS Unit).

10.1.7 All photographs must be in colour.

10.1.8 Document page numbering must list the section and page (e.g. 1-1, 2-34)

10.1.9 All "DANGER", "WARNING" and "CAUTION" text contained in the body of the manual must be summarized at the beginning of the manual.

10.1.10 "DANGER", "WARNING", "CAUTION" and "NOTES" headings must be capitalized, in bold, placed in the middle of the page with boxed with lines or dots above and below the label. Applicable text will be placed immediately below the heading.

10.2 CONTENT

10.2.1 The Op Man must cover all issues associated with the operation, care and maintenance, storage as well as personnel and equipment safety of the ADIS. As a minimum, the Op Man must address the following:

a. Brief description of system contents, insert pictures where possible with a table and itemized listing of all contents cross-referenced with the photo contents. Each itemized item shall then be described at a high level and technical description;
b. Data summary (e.g. specifications for the system and replaceable assemblies or sub-assemblies (if applicable))
c. Equipment set-up and mounting procedures;
d. Description of controls and instruments;
e. Pre-use testing or inspection;
f. Operating procedures and equipment specific precautions;
g. Operator maintenance, cleaning and care, including operator preventive maintenance (including removal and installation of parts);
h. Consumable replacement;
i. Basic diagnosis and/or fault finding;
j. Storage;
k. Safety, including personnel and equipment;
l. Hazardous material issues associated with the operation and care of the equipment, including the required procedures for handling and disposing of such materials;
m. Tools used for Operator maintenance (if any);
n. Weight and Measures chart;
o. Any post shutdown actions or precautions (closing down drills);
p. Operating under unusual conditions;
q. Emergency Operating Procedures;
r. Operation of Ancillary Equipment;
s. Applicable Environmental Health and Safety (EHS) warnings and instructions in direct relation of EHS risks presented in the contents;
t. Any other information recommended by the Contractor and agreed upon by DND.

10.2.2 The Op Man must be organized in the following manner:

10.2.2.1 The initial front sheets must contain:

a. Summation of all DANGER text contained in the document;
b. Summation of all WARNING text contained in the document;
c. Summation of all CAUTION text contained in the document; and
d. "Safety Data" table containing a summation of all safety related issues
e. Table of Contents
f. List of Figures
g. List of Tables
h. How To Use This Manual (general description of the manual organization etc.)
i. Chapter 1 General Information (equipment name and model numbers, purpose of equipment, manufacturer, warranty information, nomenclature cross reference table (if required), list of abbreviations and picture or figure of the ADIS .
j. Chapter 2 Equipment Description (system description)
k. General Characteristics (weight, dimensions, size, performance etc.
l. Description of Kit Contents (insert picture of ADIS with a table and itemized listing of all system contents cross-referenced with the photo contents. Each itemized item must then be described at a high level.
m. Chapter 3 Operating Instructions (Provide operating instructions for the various equipment comprising the ADIS. Include tables showing operating modes vis-à-vis applicable equipment settings and remarks. Figures or photos must be included to aid in operation description whenever possible.
n. Chapter 4 Equipment Set-Up and Interconnection Procedures (detail how equipment is to be assembled/mounted for use for all configurations. Figures or photos must be included to aid in mounting procedure description whenever possible.
o. Chapter 5 Troubleshooting Procedures
p. Chapter 6 Operator Maintenance and Cleaning
q. Removal and Installation of Parts
r. Preventive maintenance actions and frequency
s. Appendix A Operator Repair Parts and Special Tools List (include photos of equipment with their associated spare parts including tables with the following column headings: Item No., NSN, Cage Code, Part No., Description and Useable on Code, Quantity)
t. Index

10.2.2.2 The cover page of the publication shall indicate which controlled goods classification applies:

a. Reviewed/Confirmed Controlled technical data
b. Controlled Technical Data Identified as Operations Instructions
c. Unreviewed Technical Data
d. Reviewed/Confirmed "not" Controlled Technical Data
e. and apply the appropriate marking ("Reviewed/Confirmed "not" Controlled Technical Data" shown below) provided by the TA.

NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods.

AVIS

Cette documentation a été révisée par l'autorité technique et ne contient pas de marchandises contrôlées.

10.2.2.3 The publication shall include the following text in the Foreword:

"DND is granted the irrevocable right to use, copy, reproduce, and amend the Technical Publications provided by [CONTRACTOR].

On accorde au MDN le droit irrévocable d'employer, copier, reproduire, et modifier les publications techniques fournies par [ENTREPRENEUR]."

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **First Line Maintenance Manual (Maint Man)**		2. IDENTIFICATION NUMBER **IL-516**
3. DESCRIPTION The Maint Man describes all first line maintenance tasks and procedures for all repairable equipment contained in the ADIS.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5(TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-516		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The Maintenance Instructions must be delivered in accordance with one of the following options as selected by the DND ILSM:

a. Option 1: Existing bilingual Canadian English and Canadian French commercial Maintenance Instructions in Contractor format; or
b. Option 2: Initial submission in existing commercial and foreign government unilingual Canadian English Maintenance Instructions in conformance with C-01-100-100/AG-005 and final submission in bilingual Canadian English and Canadian French; or
c. Option 3: Newly written bilingual Canadian English and Canadian French Maintenance Instructions prepared in conformance with C-01-100-100/AG-006.

10.1.2 The Maint Man must be submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.

10.1.3 The Initial submission may be unilingual Canadian English and the final submission must be bilingual (Canadian English and Canadian French).

10.1.4 Two hard covers will form part of the Op Man:

10.1.5 All Maint Man photographs must be in color.

10.1.6 The Canadian English and Canadian French cover sheets must bear the following:

a. DND document configuration number (to be provided by DND) on the top right hand corner;
b. Picture of the applicable equipment;
c. Document title;
d. System name and nomenclature (if applicable);
e. NSN;
f. Version Date (date format yyyy/mm/dd); and
g. OPI: DCSEM 5

10.1.7 All Maint Man sheets must have the DND document configuration number (to be provided by DND) on each page starting with page 1 top outer corner right hand corner and top left corner of page 2.

10.1.8 Figures and tables must be placed immediately following the referring text descriptions.

10.1.9 Figures and tables must be identified by the document section followed by the figure sequence number and the description text (e.g. Figure 1-5 Lens cap)

10.1.10 Document page numbering must list the section and page (e.g. 1-1, 2-34)

10.1.11 Maint Man pages must be size 8.5 inches wide x 11 inches long (21.6 cm x 27.9 cm) except where figures (e.g. diagrams) require more space.

10.2 CONTENT

10.2.1 The Manual shall describe, in detail, all Preventive and Corrective maintenance tasks to be performed by DND personnel as identified in the Maintenance Plan and procedures for the equipment and its associated tools and test equipment.

10.2.2 The Maint Man must describe the following as a minimum: Incoming test routines; diagnosis of faults, spare parts removal procedures (including exploded view drawings); re-assembly of equipment; desiccation and/or purging procedures; outgoing tests and calibration requirements and procedures.

10.2.3 The Maint Man must identify resources, facilities, spare parts (including quantities), consumables, tools and test equipment, workmanship level, test flow charts and any other technical or procedural details required to properly and successfully complete each task.

10.2.4 The Maint Man must contain a complete parts list down to the replaceable First Line replaceable spare parts level and their associated quantities, and with the required reference to the applicable exploded view drawings, diagrams, pictures or images.

10.2.5 The Maint Man must contain all necessary drawings, diagrams, pictures, images and information in sufficient details and clarity to properly guide the maintainer during the conduct of each maintenance tasks.

10.2.6 The Maint Man must cover all personnel and equipment safety issues associated with the maintenance of the equipment.

10.2.7 The Maint Man must cover all hazardous material issues associated with the maintenance of the equipment, including the required procedures for handling and disposing of such materials.

10.2.8 The Maint Man must identify all Intellectual Property information applicable to the equipment and supporting data, if applicable.

10.2.9 “DANGER” headings must be capitalized, in bold, placed in the middle of the page with boxed or dotted outline bars above and below the label. Applicable warning text will be placed immediately below the heading and must be capitalized and bolded.

10.2.10 " WARNING" headings must be capitalized, in bold, placed in the middle of the page with boxed or dotted outline bars above and below the label. Applicable warning text will be placed immediately below the heading and must be capitalized and bolded.

10.2.11 "CAUTION" headings must be capitalized, in bold, placed in the middle of the page with a solid bar on both sides of the label. Applicable caution text will be placed immediately below the heading and must be capitalized and bolded.

10.2.12 "NOTE" headings must be capitalized, bolded placed in the middle of the page. Applicable note text will be normal size, in bold and placed immediately below the heading.

10.2.13 Danger, Warning, Caution and notes must precede the applicable text or action to which they refer.

10.2.14 The Maint Man must be organized in the following manner:

10.2.14.1 The initial front sheets must contain :

a. Summation of all DANGER text contained in the document;
b. Summation of all WARNING text contained in the document;
c. Summation of all CAUTION text contained in the document; and
d. "Safety Data" table containing a summation of all safety related issues
e. Table of Contents
f. List of Figures
g. List of Tables
h. Chapter 1 Introduction
i. **General** (provide a high level description of the ADIS)
j. Warranty Information
k. **Equipment Characteristics, Capabilities and Features** (including applicable Dangers, Warnings and Cautions)
l. **Location and Description of Major Components** (including equipment breakdown figures and diagrams)
m. **ADIS Configuration** (description including a system breakdown diagram)
n. **Equipment Data** (tabular form if possible)
o. Mechanical Functions
p. Optical Functions
q. Electrical Functions
r. Chapter 2 First Line Maintenance Instructions
s. General
t. **Applicable Documents** (list the applicable equipment Operators Instructions as well as equipment specific documents to be supplied by the Contractor. In addition, list the following DND documents:
    i. C-66-010-010-001/VP-000, Optical Fire Control Instruments – Care, Preservation and Storage of Instruments
    ii. C-66-010-002/VC-001, Refinishing of Electro-Mechanical Equipment
    iii. C-66-010-003/MN-000, Cleaning Mechanical Components of Instruments
    iv. C-66-010-007/MN-001, Cleaning of Optical Elements
    v. C-66-020-001/NC-000, Inspection Procedures for Electro-Mechanical equipment

u. **Apparatus and Tools** (list in tabular form with the following column headings: Item No., National Stock No., Description, Part No., and Quantity)
v. **Repair Parts** (brief description and reference to Chapter 5 which will contain all repair parts data)
w. Site and Shelter Requirements
x. Inspection and Repair Techniques
y. Service Upon Receipt of Material
z. **Removal and Installation of Components** (details removal and installation procedures for each first line part (including applicable figures and diagrams). Each line part task **must** have its own procedure. Procedures must be subdivided into two (2) headings, Disassembly and Assembly)
aa. **Tests and Adjustments** (details any test and adjustment required for each piece of equipment to ensure serviceability e.g. desiccation))
bb. **Serviceability Check** (describes procedures to be used to verify serviceability of repaired item in tabular form. Table must contain the following columns: Item No., Item to Check/Service, Procedure, Not Fully Mission Capable if, Corrective Action)
cc. **Troubleshooting** (describes procedures to be used to isolate possible malfunctions of the equipment in tabular form. The table must contain the following columns: Item No., Problem, Probable Cause, Corrective Action)
dd. **Packing** (special packing instructions if required)
ee. Preventive maintenance actions and frequency
ff. Chapter 3 Decontamination
gg. Equipment
hh. Procedures
ii. Chapter 4 Repair Parts and Special Tools List
jj. **Genera**l Identify figures and tables applicable to each piece of equipment to be repaired. Include the following:
kk. Figures of each repairable equipment. The figures must include an itemized list of the main equipment replaceable components with corresponding numbered arrows pointing to the components on the figure
ll. Tables listing details of the components. (The tables must contain the following columns: Item No., National Stock No., Cage Code, Part Number, DMC, Description, Quantity)
mm. Alphabetical Index

10.2.14.2 The cover page of the publication shall indicate which controlled goods classification applies:

a. Reviewed/Confirmed Controlled technical data
b. Controlled Technical Data Identified as Operations Instructions
c. Unreviewed Technical Data
d. Reviewed/Confirmed "not" Controlled Technical Data
e. and apply the appropriate marking ("Reviewed/Confirmed "not" Controlled Technical Data" shown below) provided by the TA.

NOTICE

This documentation has been reviewed by the technical authority and does not contain controlled goods.

AVIS

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10.2.14.3 The publication shall include the following text in the Foreword:

"DND is granted the irrevocable right to use, copy, reproduce, and amend the Technical Publications provided by [CONTRACTOR].

On accorde au MDN le droit irrévocable d'employer, copier, reproduire, et modifier les publications techniques fournies par [ENTREPRENEUR]."

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **User Guide**		2. IDENTIFICATION NUMBER **IL-517**
3. DESCRIPTION The ADIS User Guide is a bilingual (Canadian English/Canadian French) brief, complete and compact guide in the form of an aide-mémoire to be used after initial training, describing and illustrating the mounting, set-up and high level operation of the equipment.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-517		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The User Guide must be compact such that it can be stored with the equipment or be attached to the equipment.

10.1.2 The User Guide must be submitted in electronic format using Microsoft Word to allow DND to review, edit, and manipulate.

10.1.3 Initial submission may be unilingual Canadian English. The Final submission shall be one document with Canadian English and Canadian French texts on side-to-side facing pages bearing its own DND supplied document configuration number e.g. C-XX-XXX-000/JS-001

10.1.4 The User Guide must be weatherproof and durable media, legible in low-light conditions.

10.1.5 The User Guide must conform to C-01-100-100/AG-005, Acceptance of Commercial and Foreign Government Publications as Adopted Publications, or if no commercial publication exists C-01-100-100/AG-006 Writing, Format and Production of Technical Publications.

10.1.6 All photographs must be in colour.

10.1.7 The User Guide must contain information in condensed format.

10.1.8 The User Guide must be produced on a sturdy waterproof plasticized type white paper product with good strength, tear and soil resistant characteristics capable of withstanding high humidity, dirt and grease.

10.1.9 The user guide must be capable of withstanding a wide range of ambient temperatures (+30ºC to -20ºC).

10.2 CONTENT

10.2.1 The User Guide must summarize, through text and illustrations, equipment set-up, operations safety and basic servicing. Instructions given in the User Guide, while presented differently, must be consistent with the instructions provided in the Operator Instructions (DID IL-515).

10.2.2 The User Guide must contain information required to perform daily inspections.

10.2.3 The User Guide must identify key safety and handling precautions.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **ADIS Kit List**		2. IDENTIFICATION NUMBER **IL-518**
3. DESCRIPTION/PURPOSE The ADIS Kit List identifies items in the ADIS kit as well as location in transit cases.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION/INTERRELATIONSHIP CDRL IL-518		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 ADIS kit list must be prepared in accordance with C-01-100-100/AG-006, Writing, Format and Production of Technical Publications.

10.1.2 The ADIS Kit List must be a weatherproof concise guide, such as laminated single card or small laminated folded sheet, etc.

10.1.3 The ADIS Kit List must be bilingual Canadian English and Canadian French.

10.1.4 The ADIS Kit List must use colour pictorials or drawings to identify item location in transit cases.

10.2 CONTENT

10.2.1 The ADIS Kit List must list the contents of the System and map the system component connectivity when unpacked, and show their system component layout when fully packed for transport.

10.2.2 Data to be included are:

f. Item Number;
g. Item name;
h. Part number; and
i. Quantity.

10.2.3 Kit list must include GFE.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Training Needs Analysis (TNA) Report**		2. IDENTIFICATION NUMBER **IL-520**
3. DESCRIPTION The Training Needs Analysis (TNA) is used to determine the training gap when updating capabilities through a project or new training requirements when new capabilities are provided by a project. The TNA should identify the capability and what training is required, including prerequisites, objectives, training times, and resources. The outcome of the TNA is a report which provides a full analysis of the training and training support requirements as a result of the introduction of the new or changed capability.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-520		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 REFERENCE DOCUMENTS

j. A-P9-050-000/PT-002, Volume 2, CFITES – Needs Assessment;
k. A-P9-050-000/PT-003, Volume 3, CFITES – Analysis of Instructional Requirements;
l. A-P9-050-000/PT-004, Volume 4, CFITES – Design of Instructional Programmes;
m. Latest revised Operator Manual; and,
n. Latest revised First Line Maintenance Manual.

10.2 FORMAT

10.2.1 The TNA Report must be prepared and submitted in electronic format using Microsoft Office to allow DND to review, edit, and manipulate.

10.2.2 The TNA must be revision controlled

10.3 CONTENT

10.3.1 The TNA must be developed in accordance with Canadian Forces Individual Training and Education System (CFITES),

10.3.2 The TNA must integrate input from all Subcontractors responsible for providing input to the training program and clearly shows how the training gaps or conflicts identified will be addressed.

10.3.3 The TNA must include but is not limited to the following aspects/headings:

a. Executive summary;
b. Background – of the project (the TNA should be able to be understood if read alone);
c. Aim – of the analysis;

d. Limitations and constraints- that affect the analysis;
e. Assumptions – that affect the results of how the gap will be bridged;
f. Methodology – how the data was collected (i.e. interviews, document reviews, surveys) in order to reach the conclusion;
g. Findings – an identification of any performance gap (Based on identified need or deficiency, current level of training vs desired level of training, identifies the training gap).
h. Training requirements – a description of how the performance gaps will be addressed, defining the training requirements to address the following based on the target population analysis provided by DND:
i. Tasks requirements to include levels of proficiency;
j. skill requirements;
k. knowledge requirements; and
l. attitude requirements.
m. Resources;
n. Training strategy – a proposed list of training programs/courses including description;
o. A proposed list of required Initial Cadre Training serials;
p. Safety Measures;
q. Options analysis – a list of various options to meet the needs of the learners;
r. Recommendations/Conclusions/Implementation plan – the selection of the most efficient and effective option and a conclusion of the analysis that indicates the way forward; and
s. A notes section that contains any general information that aids in the understanding of the document.

10.3.4 A recommended outline for the TNA Report is as follows:

1 Executive summary;

2 Background – of the project (the TNA should be able to be understood if read alone);

3 Aim – of the analysis;

4 Limitations and constraints- that affect the analysis;

5 Assumptions – that affect the results of how the gap will be bridged;

6 Approach and Methodology – Analysis

6.1 Resource Research and Data Collection Methodology;

6.2 Training Target Population;

6.3 Prerequisites by course;

6.4 ICT, Training requirements;

6.5 Detailed task lists by course; and

6.6 Difficulty/Importance / Frequency (DIF) Analysis for Train/No Train decisions.

7 Approach and Methodology – Design

7.1 Instructional Development Plan;

7.1.1 Method/Media Analysis overview for each module including opportunities to employ the following (but not limited to these examples)

7.1.1.1 Interactive multimedia Instruction (IMI) levels;

7.1.1.2 Mobile Learning Opportunities;

7.1.1.2.1. Electronic Performance Support Systems (EPSS);

7.1.1.2.2. Intelligent Tutoring;

7.1.1.2.3. Embedded Training; and

7.1.1.2.4. Synthetic Environment;

7.1.1.3 Instructional Strategy Employed;

7.1.1.3.1. Formal In-house training;

7.1.1.3.2. On-the-Job Training;

7.1.1.3.3. Trainers;

7.1.1.3.4. Distance/Distributed training;

7.1.1.3.5. Other strategies as identified; and

7.1.1.3.6. Interaction between courseware and training devices;

7.1.1.4 DLN usage: Courseware;

7.1.1.5 Training device usage

8 Approach and Methodology – Conduct

8.1 Infrastructure requirements;

8.2 Estimate of resources required to deliver training;

8.3 Concept of training;

8.4 Anticipated schedule of training;

8.5 Student assessment (i.e. a description of methods used to verify that training requirements were met)

8.5.1 Formative

8.5.2 Summative.

8.6 Initial Cadre Training (ICT)

8.6.1 Concept of operations for ICT; and

8.6.2 Overview of plan for ICT.

8.7 Steady-State Training (SST)

8.7.1 Overview of course content

8.7.2 Overview of plan for SST.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Training Plan (TP)**		2. IDENTIFICATION NUMBER **IL-521**
3. DESCRIPTION The Training Plan (TP) is a course content/lesson guidance document used by the CAF to describe an instructional program which achieves, at optimal cost, the Performance Objectives which were defined in the Qualification Standard (QS).		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-521		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 REFERENCE DOCUMENTS

t. A-P9-050-000/PT-004, Volume 4, CFITES - Design of Instructional Programmes;
u. A-P9-050-000/PT-004 (Interim), Volume 4, CFITES - Interim Guidance –Design of Instructional Programmes;
v. A-P9-050-000/PT-007, Volume 7, CFITES - Evaluation of Learners;
w. DAOD 5039-6 Delivery of training and education in both official languages;
x. Latest revised Operator Manual; and,
y. Latest revised First Line Maintenance Manual.

10.2 FORMAT

10.2.1 The TP must be prepared in the format adhering to the provided template and to CFITES. Electronic copies of individual TP must be delivered in a format compatible with Microsoft Word, to allow DND to review, edit and manipulate.

10.2.2 The TP must be revision controlled

10.3 CONTENT

10.3.1 A TP must be developed in accordance with CFITES and by reconciling the approved TNA report, QS and the latest revised editions of the Operator and First Line Maintenance Manuals.

10.3.2 The TP must be modular with an indication of what Performance Objectives and Enabling Objectives must be achieved to obtain the operator qualification, and which are required for the maintainer qualification.

10.3.3 The TP must include but is not limited to the following aspects:

a. Course objectives;

b. Training objectives referred in CFITES as Performance Objectives (PO). PO must include performance statement, conditions statement and standard statement;
c. Course content and structure: a detailed plan of the subject matter, indicating performance objectives, enabling objectives, teaching points and their interrelationships in a scalar diagram;
d. Lesson specifications to include the performance, conditions and standard of the enabling objective, supporting teaching points, references, learning activities (method, media and environment), estimated timings, assessment directions and any remarks that further clarify the design intent;
e. An analysis of the requirement;
f. List of equipment or material required from DND / CAF;
g. Training Organization and Instructor Resources;
h. Course titles;
i. Course durations;
j. Course timetable;
k. Language of instruction for each course;
l. Minimum and maximum numbers of students per course;
m. Instructor, including details of instructor's relevant experience, for each course;
n. Prerequisite student training/experience for each course;
o. Environmental considerations;
p. Related documents;
q. Training Limitations;
r. Training method for each course;
s. Training material and training aids used for each course;
t. Assessment Plan (including criteria and process);
u. Main references table;
v. Student Course Evaluation ("Course Critique"); and
w. Instructor Self Evaluation.

10.3.4 The following topics must be addressed in the content of the operator course as a minimum:

a. Overview of System theory;
b. Equipment overview;
c. Equipment set-up;
d. Pre-use testing/inspection;
e. Use and operation;
f. User maintenance and care;
g. Consumable replacement;
h. Basic diagnosis and/or fault finding;
i. Storage;
j. Safety, including personnel and equipment; and
k. Hazardous material issues, including handling and disposal.

10.3.5 The following topics must be addressed in the content of the first line Maintenance course as a minimum:

a. Inspection and testing;

b. Troubleshooting and fault finding;
c. Preventive maintenance procedures;
d. Corrective maintenance procedures;
e. Maintenance resources, facilities, assemblies/sub-assemblies, consumables, tools and test equipment required;
f. Packaging, Handling, Storage and Transportation (PHST);
g. Personnel and equipment safety issues; and,
h. Controlled Goods and Intellectual Property issues for the equipment and its associated data, including disposal.

10.3.6 The TP must include in the remarks section of each EO, any information which would assist the instructor with the material.

10.3.7 The TP must have a detailed daily schedule of training events broken down into fifty (50) minutes periods. The schedule must include a minimum of four non-training related fifty (50) minutes periods per week that the students will use for fitness training and administration.

10.3.8 The TP must have a detailed assessment plan outlining all Enabling Checks (EC) and Performance Checks (PC).

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Courseware**		2. IDENTIFICATION NUMBER **IL-522**
3. DESCRIPTION The Courseware contains all the material (including training aids and job aids) used for training CAF personnel in both the operator and maintenance functions of the system. The Courseware will be used for ICT and updated for SST.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-522		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 REFERENCE DOCUMENTS

a. A-P9-050-000/PT-005, Volume 5, CFITES - Development of Instructional Materials;
b. A-P9-050-000/PT-007, Volume 7, CFITES - Evaluation of Learners;
c. DAOD 5039-6, Delivery of Training and Education in Both Official Languages;
d. SCORM Requirements for AFIILE Version 1.0;
e. DLN – Course Development Guide.
f. Latest revised Operator Manual; and,
g. Latest revised First Line Maintenance Manual.

10.2 FORMAT

10.2.1 The Courseware will be prepared in the Contractor's format and approved by DND. The Contractor must implement any DND recommended format changes.

10.2.2 Courseware must be prepared and submitted in electronic format using Microsoft Office to allow DND to review, edit, and manipulate.

10.2.3 The Courseware must be bilingual in Canadian English and Canadian French prior to ICT2.

10.2.4 The Courseware must be revision controlled.

10.3 CONTENT

10.3.1 The Courseware must be complete with all content required to train students to achieve the learning outcomes identified in the training plan;

10.3.2 Courseware is the material required for conducting instruction/learning and assessment events (including training and job aids). The Courseware must comply with the requirements of the

CCD and be approved by DND. All electronic content must be Sharable Content Object Reference Model (SCORM) compliant. The Courseware includes but is not limited to:

10.3.3 Master Lesson plan. The Lesson Plan to include as a minimum:

a. Version and amendment details for version control;
b. Reference(s) needed to deliver the material;
c. Lesson Objective;
d. List of equipment; or material required for delivery;
e. Instructor human resource requirements (i.e. assistant instructors);
f. List of training material requiring to be handed out;
g. Introduction, body, conclusion; and
h. Specific sequence of events for the lessons explaining actions of the instructor (s) and learners. Incorporate questions, confirmation questions, individual/group activities for training and assessment;
i. Computer Assisted Instructional modules, including learning objects (SCORM compliant) if applicable;
j. Reference materials to included operators and maintenance manuals;
k. Student handouts;
l. Student study materials;
m. Student evaluation tool (course critique);
n. Instructor course evaluation "critique" tool;
o. Training aids and job aids;
p. Training scenario scripts - if applicable;
q. Enabling Checks (EC) including instructor and learner instructions on how to conduct the assessments and any assessment tools (i.e. marking guide, correction guide, and checklist); and
r. Performance Checks (PC) including instructor and learner instructions on how to conduct the assessments and any assessment tools (i.e. marking guide, correction guide, and checklist).

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Course Evaluation Report**		2. IDENTIFICATION NUMBER **IL-524**
3. DESCRIPTION/PURPOSE Course Evaluation is designed to document the contractor's continuous improvement of training as a result of the evaluation of identified object and subjective data sources. The Course Evaluation Report summarizes the delivery of each serial and identifies issues in course delivery with solutions to those issues.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-512 (TA)	6. GIDEP APPLICABLE
7. APPLICATION/INTERRELATIONSHIP CDRL IL-524		
8. ORIGINATOR DCSEM 12-512	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 REFERENCE DOCUMENTS

a. A-P9-050-000/PT-011 Volume 11 CFITES – Evaluation of Instructional Programmes,
b. A-P9-050-000/PT-Z11, Volume 11(1) CFITES – Evaluation and Validation Techniques.

10.2 FORMAT

10.2.1 The Course Evaluation Report must be prepared in the contractor's format to include the items cited under the "Content" section of this document. It must be submitted in electronic format using Microsoft Suite to allow DND to review, edit, and manipulate.

10.3 CONTENT

10.3.1 Collect data: The contractor will collect data from each ICT course serial. This data must come from the following sources:

a. Observation of training:
b. Instructor Monitoring;
c. Instructor Feedback;
d. Trainee course critiques;
e. Trainee Assessment results; and
f. Input from DND.

10.3.2 Analyze data: The contractor must analyze and trend the data by ICT course from sources at para 10.3.1 in order to identify improvement opportunities.

10.3.3 The Course Evaluation Report must contain at a minimum:

a. Part 1

i. Date;
ii. Location of training;
iii. POs and EOs covered during training;
iv. Number of both successful and unsuccessful attendees; and
v. List of instructional staff.

b. Part 2
i. Identification of portions of the training that were deemed very successful;
ii. Identification of problems that arose during the training;
iii. Recommendations to improve the training along with the level of effort required for the correction. Each recommendation must be supported by an example encountered during ICT (i.e. the instructor ratios were too small; the number of students on a course was too big; or the initial teaching points could best be taught prior to arrival on the course) or include source data (i.e. course critique comment); and
iv. Identification of timelines to correct the issues.

10.3.4 Implement Change:

10.3.4.1 Approved changes are implemented by the contractor prior to the next ICT serial or final submission of the CCD and Courseware.

10.3.4.2 Approved changes must be implemented in the Qualification Standard (QS), Training Plan (TP) and all Courseware.

10.3.4.3 A Course Evaluation Report must be delivered after each ICT course.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Training Management Plan (TMP)**		2. IDENTIFICATION NUMBER **IL-525**
3. DESCRIPTION The Training Management Plan (TMP) describes the integrated approach and methodology the Contractor will use for the analysis, design, development and implementation of the Training Program.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-525		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 REFERENCE DOCUMENTS

a. A-P9-050-000/PT-001, Volume 1, CFITES - Introduction/Description;
b. A-P9-050-000/PT-Z01, Volume 1(1), CFITES - Supplement – Glossary;
c. A-P9-050-000/PT-002, Volume 2, CFITES - Needs Assessment;
d. A-P9-050-000/PT-003, Volume 3, CFITES - Analysis of Instructional Requirements;
e. A-P9-050-000/PT-004, Volume 4, CFITES - Design of Instructional Programmes;
f. A-P9-050-000/PT-005, Volume 5, CFITES - Development of Instructional Materials;
g. A-P9-050-000/PT-006, Volume 6, CFITES - Conduct of Instructional Programmes;
h. A-P9-050-000/PT-007, Volume 7, CFITES - Evaluation of Learners;
i. A-P9-050-000/PT-011, Volume 11, CFITES - Evaluation of Instructional Programmes;

10.2 FORMAT

10.2.1 The TMP must be submitted in electronic format using Microsoft Office to allow DND to review, edit, and manipulate.

10.3 CONTENT

10.3.1 The TMP must describe the integrated approach and methodology the Contractor will use for the analysis, design, development, and implementation of the Training Program as well as the support and transition to the in-service life of the delivered capability.

10.3.2 The TMP must include the following:

a. Overview of the Training Program, including proposed training and training support activities to meet all of the training requirements identified by and in response to the SOW;
b. Description of assumptions, priorities and constraints on which the training program is based;

c. Description of how the Contractor will adhere to CFITES, including a description of the approach and methodology/process used to ensure the development, implementation and quality assurance of the training deliverables required of this SOW;
d. Description of how the Contractor will adhere to Canadian Armed Forces and Canadian Army (CA) policies and directives related to training;
e. Contractor's training Organizational Breakdown Structure (OBS) to show the authority and responsibility of each organizational unit, including Subcontractor organizational responsibilities to the Contractor and to DND;
f. A description of how the training requirements will be analyzed and captured within the Qualification Standards (QS) and Training Plans (TP);
g. A description of how the training requirements will be designed into Initial Cadre Training (ICT) and Steady State Training (SST);
h. A description of how the courseware, training aids and student assessments will be developed and verified;
i. If deemed necessary, a description of how the courseware will be integrated with Defence Learning Network (DLN), tested, verified and validated prior to delivery;
j. A description of how all serials of all courses of the ICT are evaluated and updated before delivery of the next serial and before transferred over to DND;
k. The proposed DND involvement, including the approach that will be used by the Contractor to incorporate the Training Development working group (TDWG) into all phases of work;
l. A Verification Traceability Matrix (VTM) demonstrating that all contractual obligations have been met.
m. Confirmation that all rights to repurpose, reproduce, modify, amend or otherwise change all training materials is conveyed to DND on delivery of these materials; and
n. Description of the plans and intentions for Transition to Steady State Training (including risks, issues and mitigation actions).

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Logistical Breakdown Structure (LBS)**		2. IDENTIFICATION NUMBER **IL-526**
3. DESCRIPTION The Logistical Breakdown Structure (LBS) defines the complete system with its Configuration Items (CI) in a top down graphical representation.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-526		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The LBS must be prepared and submitted in Microsoft Visio format.

10.2 CONTENT

10.2.1 The LBS must define the system including the selected System Configuration Items (CIs) and the selected First-line Spare Parts Maintenance Items as determined in the Maintenance Plan.

10.2.2 The LBS must be a pictorial hierarchical (top-down) representation of the system decomposition down to the First Line part level, including identification of each item selected as a CI.

10.2.3 Each item listed in the LBS must be identified with the following data:

a. Item Name;
b. NSN (if available);
c. Manufacturer's Part Number;
d. Quantity (if on the same item);
e. CAGE Code; and
f. Indenture code.

10.2.4 Identical CIs not on under the same CI must be shown separately and as an indenture under its respective CI.

10.2.5 The LBS must be supported by top level drawings and parts lists required to verify the complete and current configuration of the equipment in accordance with Provisioning Drawings and Associated Lists DID IL-514.

10.2.6 The LBS must be version controlled (i.e. date of revision).

10.2.7 The LBS contents and data must be consistent with those contained in the approved Provisioning Drawings & Associated Lists see DID IL-514 (where applicable) and Provisioning Parts Breakdown (PPB) see DID IL-510.

10.2.8 CIs labels and ID Plates must be shown where applicable (see Figure 5 below).

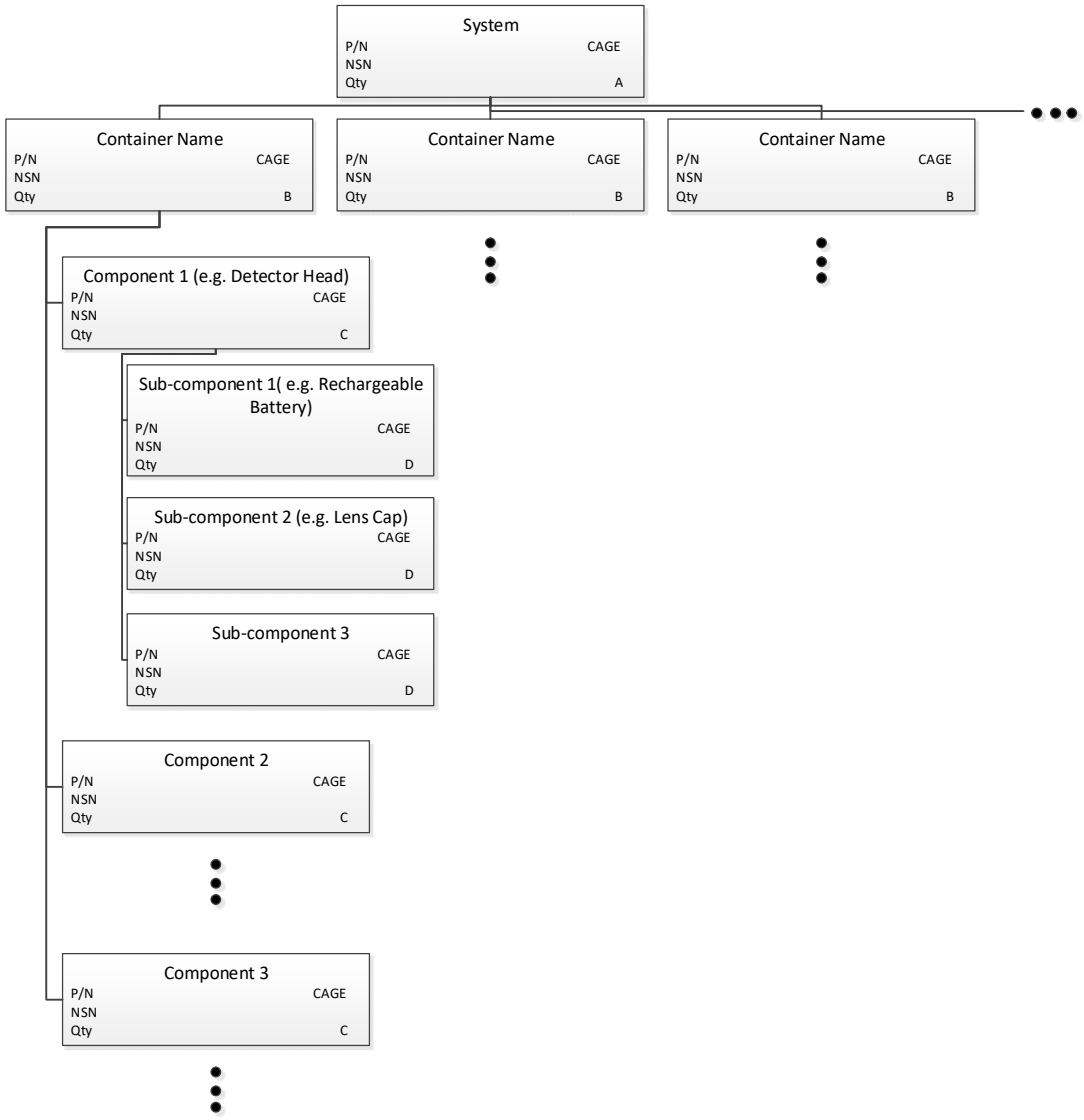

Figure 5: Sample ADIS Logistical Breakdown Structure (LBS)

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Qualification Standard (QS)**		2. IDENTIFICATION NUMBER **IL-528**
3. DESCRIPTION The Qualification Standard (QS) is a formal document used by the CAF to guide the design development, conduct, evaluation and validation of IT&E programs. The primary purpose of the QS is to control the Quality of the instruction by describing the tasks the trainee must learn to perform, the conditions under which they must be performed and the standard of the performance needed to attain operational requirements and or departmental goals.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5 (TA)	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP CDRL IL-528		
8. ORIGINATOR DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 REFERENCE DOCUMENTS

a. A-P9-050-000/PT-003, Volume 3, CFITES – Analysis of Instructional Requirements;
b. A-P9-050-000/PT-003, Volume 3, CFITES – Interim Guidance - Analysis of Instructional Requirements; and
c. DAOD 5039-6 Delivery of training and education in both official languages.
d. Latest revised Operator Manual; and,
e. Latest revised First Line Maintenance Manual.

10.2 FORMAT

10.2.1 The QS must be prepared in the format adhering to the provided template and to CFITES. Electronic copies of the QS must be delivered in a format compatible with Microsoft Office Suite.

a. Content
    i. A modularized QS must be developed using the provided template by reconciling the approved TNA report.
    ii. The contractor must determine the Training Management details, particularly planning factors and resource requirements to be considered in the conduct and management of training.
    iii. The contractor must complete the analysis of instructional requirements IAW CFITES. The outcome of this analysis is the Performance Objectives (POs) and Enabling Objectives (EOs) groups and sequences.
    iv. The contractor must develop standards which members are to achieve for each PO as statements which are observable and measurable IAW CFITES.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Safety Data Sheet (SDS)**		2. IDENTIFICATION NUMBER **IL-529**
3. DESCRIPTION		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP This DID contains the format, content and preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the Contract.		
8. ORIGINATOR DGLEPM / DCSEM 12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 SOURCE DOCUMENT

10.1.1 The applicable issue of the cited documents, including their approval dates, and dates of any applicable amendments and revisions shall be as specified in the Contract.

10.2 PREPARATION INSTRUCTIONS

10.2.1 SDS shall be prepared for ADIS and any recommended support equipment (e.g. decontamination) that possess or utilize hazardous products.

10.2.2 A SDS is an information paper containing data relative to a specific product. The SDS must be bilingual (Canadian English/Canadian French). The types of information shown are detailed in the Hazardous Products Act, Controlled Products Regulations. There is no specific format established by law in Canada, however the SDS must, as a minimum, contain the following information:

a. Hazardous Ingredients:
    i. CAS Number;
    ii. Ingredient name; and
    iii. Ingredient percentage.
b. Preparation Information:
    i. Name and phone number of person, group or party responsible for producing SDS; and
    ii. Date of SDS preparation.
c. Product Information:
    i. Manufacturer's name, address and emergency phone number;
    ii. Supplier identifier, address and emergency phone number (if not the same as the manufacturer);
    iii. Product identifier; and
    iv. Product use data.
d. Physical Data:

i. Physical state (gas, liquid, solid);
ii. Appearance and odour;
iii. Specific gravity, vapour density;
iv. Evaporation rate;
v. Boiling point;
vi. Freezing point;
vii. pH; and
viii. Coefficient of water/oil distribution.

e. Fire or Explosion Hazard:
   i. Conditions of flammability;
   ii. Means of Extinction;
   iii. Flash point and method of determination;
   iv. Upper and lower explosion limits;
   v. Auto ignition temperature;
   vi. Hazardous combustion products; and
   vii. Explosion data: Sensitivity to static discharge and mechanical impact.

f. Reactivity Data:
   i. Conditions under which the product is chemically unstable;
   ii. Name of substance or class of substance of which the product is incompatible;
   iii. Conditions of reactivity; and
   iv. Hazardous decomposition products.

g. Toxicological Properties:
   i. Route of entry: Skin contact, skin absorption, eye contact, inhalation and ingestion;
   ii. Effects of acute and chronic exposure to product;
   iii. Exposure limits (Threshold Limit Values);
   iv. Irritancy and sensitization of product;
   v. Carcinogenicity, Teratogenicity and Mutagenicity of product;
   vi. Reproductive toxicity; and
   vii. Name of toxicologically synergistic products.

h. Preventative Measures:
   i. Personal protective equipment to be used;
   ii. Specific engineering controls to be used;
   iii. Procedures to be followed in case of leak or spill;
   iv. Waste disposal;
   v. Handling procedures and equipment;
   vi. Storage requirements; and
   vii. Transportation information.

i. First Aid Measures:
   i. Specific first aid measures.

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Laser Safety Data Sheet (LSDS)**		2. IDENTIFICATION NUMBER **IL-530**
3. DESCRIPTION The LSDS must provide all the necessary data required to operate the laser in a safe manner during training and field operations, and must provide all the information required to ensure to safe operation during training and field operations.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM 12-5	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP		
8. ORIGINATOR DGLEPM / DCSEM12-5	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 The LSDS must be in MS Word and as further described in section 10.2.1 below.

10.2 CONTENT

10.2.1 The LSDS must contain the following data elements:

Title: Chemical Information System (Insert Military Designation)

1. **NSN:** (Insert ADIS NSN if laser is built into the ADIS. If external and removable, rename to **Laser NSN** and insert laser NSN)

2. OEM Part Number: (Insert OEM P/N)

3. NDHQ LCMM: (Leave Blank)

4. Manufacturer: (Insert Manufacturer Name)

5. System Parameters:

a. Type: (Insert laser type e.g. gallium arsenide (GaAs) laser diode):

b. Wavelength: (Insert laser wavelength)

c. Energy (Q): Insert laser energy at the various operating modes (e.g. aimer, illuminator)

d. Pulse duration (t): (insert pulse duration for the various operating modes (e.g. aimer, illuminator)

e. Emergent beam diameter (a) at the exit aperture: (Insert beam diameter and applicable distances at the various operating modes (e.g. aimer, illuminator)

f. Beam divergence: Insert beam divergence and tolerance in milirad (mrad) at the various operating modes (e.g. aimer, illuminator)

g. Pulse repetition rate (PRR): (Insert PRR)

6. Nominal Ocular Hazard Distance: (Insert NOHD and any applicable descriptions/explanations. In particular, describe NOHD in Unaided and Aided (with 7x50 binoculars) views as well as the various operating modes (e.g. Aimer and Illuminator) and identify any differences between operating and training modes. Impact on Night Vision Goggles operations should be considered.

7. Nominal Skin Hazard Distance: (insert data for the various operating modes e.g. Training, Tactical)

8. Diffuse Reflection Hazard: (Insert data)

9. Classification: (State laser classification ratings for the various operating modes)

10. Suitable Protective Goggles: (Identify protective goggles required to cover all laser operating modes stating manufacturer and goggle model)

11. Minimum Goggles Optical Density (O.D.): (State O.D. for the various laser operating modes and whether a single goggle will cover all requirements)

DATA ITEM DESCRIPTION		DND Form 1409
1. TITLE **Configuration Status Accounting Report (CSAR)**		2. IDENTIFICATION NUMBER **IL-531**
3. DESCRIPTION The CSAR must detail the information required to effectively manage Configuration Items (CIs) and provide visibility of Configuration Management activities, including status of deviations, waivers and engineering changes.		
4. APPROVAL DATE	5. OFFICE OF PRIMARY INTEREST DGLEPM / DCSEM-12	6. GIDEP APPLICABLE
7. APPLICATION / INTERRELATIONSHIP		
8. ORIGINATOR DGLEPM / DCSEM-12	9. APPLICABLE FORMS	

10. PREPARATION INSTRUCTIONS

10.1 FORMAT

10.1.1 CSAR must be in the Contractor's format.

10.2 CONTENT

10.2.1 The Configuration Status Accounting Report (CSAR) must meet the intent of MIL-STD-3046. The CSARmust detail the information required to effectively manage CIs such as drawings, software, technical publications, etc. and provide visibility of Configuration Management activities, including status of deviations, waivers and engineering changes.

10.2.2 The CSAR must provide as a minimum identification of each CI including software/firmware if applicable, its document/engineering drawing number and applicable revision/version as well as list all new, outstanding and historical Engineering Change Proposals (ECP), Request for Deviations (RFD), Request for Waivers (RFW), Specification Change Notices (SCN), Notice of Revisions (NOR) and Material Change Notices (MCN), including their status, against each CI. Sample CIs include, but are not limited to:

- Drawings;
- Software/firmware;
- Technical publications;
- Training material;
- Specifications;
- Certifications;
- Warranties;

- Identification Number Registry
- ECP, RFD, RFW, MCN;
- Advisories;
- Etc.

10.2.3 The CSAR must bear version identification (i.e. date or revision).