The Demonstration, Manufacture and In-service support of the Combat Water Supply System (CWSS) Prime Contract for Provision and Support of Expeditionary Water Services

ILS Product Descriptions (PDs)

Annex C to

DEFFORM 47

INTEGRATED SUPPORT PLAN PRODUCT DESCRIPTIONS (ISP PD)

OPERATIONAL INFRASTRUCTURE PROGRAMME
Combat Water Supply System

PROVIDED FOR INFORMATION TO ALLOW CONTRACTOR TO TAILOR ITN RETURN

Product Discriptor		Title
0001	01	Integrated Support Plan
0002	01	Supportability Analysis Plan (SAP)
0003	01	ILS Associated Meetings
0004	01	Integrated Support Plan Element Plans
0005	01	Software Support Plan
1001	01	Supportability Analysis (SA) Tasks Plan
1002	01	Trade-Off Analysis Report
1003	01	Failure Modes Effects and Criticality Analysis (FMECA) Programme Plan
1004	01	Failure Modes Effects and Criticality Analysis (FMECA) Report
1005	01	Reliability Centred Maintenance (RCM) Programme Plan
1006	01	Reliability Centred Maintenance (RCM) Report
1007	01	Level Of repair analysis (LORA) Programme Plan
1008	01	Level Of Repair Analysis (LORA) Report
2001	01	Technical Documentation Management Plan (TDMP)
2002	01	Data Module Requirements List (DMRL)
2003	01	Final Deliverable Interactive Electronic Technical Publications (IETP)
2004	01	Delivered Publication Data Base (DPDB)
2005	01	Final Publication Data Base (FPDB)
3001	01	Supply Support Strategy
3002	01	Supply Support Plan
3003	01	Initial Provisioning Guidance Conference Requirements
3003	02	Initial Provisioning Guidance Document
3003	03	Initial Provisioning List (IPL)
3004	01	NATO Codification
3005	01	Illustrated Parts Catalogue
3006	01	Re-Provisioning Plan
4001	01	Supportability Case
4002	01	Supportability Case Report PD

ILS Product Description

Product Title	**Product Description Identifier**
Integrated Support Plan	PD0001-01

Description Synopsis

This PD contains the requirement for the format and content of the Integrated Support Plan (ISP) to be specified in the ILS SOR.

Purpose

The ISP is used by the MOD to evaluate, monitor and accept the contractor's planning and performance of the ILS programme task(s) as specified by the contract.

Full Description \ Product Composition

The ISP documents the management plans of the contractor for data gathering and analyses; task management, control and execution; and interface of the ILS programme task(s). The management plans of the contractor will demonstrate that integration the new system or equipment, when deployed, will satisfy all supportability criteria.

The ISP must contain each of the sections listed below. If there is no data or text requirement, the contractor will enter 'NOT APPLICABLE' and justify the reasons. The seven sections are as follows:

Introduction;
Support System Concept
Integrated Logistic Support (ILS) Programme Management, Organization and Performance;
ILS Programme Tasks;
Related plans applicable to the ILS Programme;
Programme plan and Milestone Schedule;
Glossary of acronyms and terms used in text.

1**. Introduction**

This section identifies the requirements of the ISP as specified in the ILS Statement of Work. This section contains the following sub-sections:

1.1. **Purpose and Scope**. This sub-section provides a statement regarding the purpose and scope of the ISP as the document for the management and performance of the contractual ILS programme.

1.2. **ISP Summary**. This sub-section provides a description of the ISP so as to establish a clear understanding of the scope, content and organization of the material presented.

1.3. **Updating Procedure**. This sub-section provides a description of how alterations to the ISP are to be developed, authorized and incorporated.

2. **Support System Concept.**

This section contains a summary of the system characteristics relevant to ILS and the support process. Included is an explanation of how the system will be utilized and supported in its intended operational role. This section contains the following sub-sections:

2.1. **System/Equipment Description**. This sub-section provides a brief description of the functional and physical characteristics of the system/equipment and its major sub-systems/equipments. Also included is a description of the physical and functional relationship between the equipment or system and any associated systems or equipments that it will interface with when operational.

2.2 **Reliability Function Interface**. This section detail how the ILS activities will interact with the ARM function.

2.3 **Safety Management Interface**. This section detail how the ILS activities will interact bi-directionally with the safety management function

2.4 **Security Management Interface**. This section detail how the ILS activities will interact bi-directionally with the security management function.

2.5 **Configuration Management System Interface**. This section detail how the ILS activities will interact bi-directionally with the necessary configuration management system(s)

2.6 **Obsolescence Management System Interface**. This section detail how the ILS activities will interact bi-directionally with the obsolescence management system.

2.7 **Interoperability Interface Requirements**. This section details how interoperability is manage through life. Includes:
The exchange of information through information systems;
Compatibility of technology and equipment;
The working practices of people;
Compatibility of processes;
Other elements of the support solution that require interaction between organisations.

2.8 **Change Management System Interface**. This section details how the ILS programme interfaces with the Project capability management and control systems regime.

3. **ILS Programme Management, Organisation and Performance**.

This section provides a description of the overall process, involvingboth the MOD and the contractor, for use in managing and performing the contractual ILS programme. This section contains the following sub-sections:

3.1. **Contractor's Objectives, Policies, General Management Procedures**. These shall state the objectives, policies and general management procedures that relate to the ILS programme.

3.2. **Contractor's ILS Organisational Structure**. This shall describe the contractor's organizational structure that has been selected to accomplish the contracted ILS programme requirements. The identification of names, positions, functions, responsibilities and authority of those responsible for satisfying the contracted ILS programme shall be given.

3.3. **Sub-contractor and Vendor Interface Management**. This sub-section contains a list of all major sub-contractors (for the purpose of the ISP, major sub-contractors are termed as those responsible for supply of deliverables directly to the Prime contractor of the MOD) involved in the ILS methods of control and the organizational interfaces with the sub-contractors. Included is a general description of the method of specifying the ILS requirements in vendor sub-contracts and the means of controlling the accomplishment of specific work and deliverables.

3.4. **MOD ILS Organisation and Interface**. This sub-section contains a description of the MOD ILS organization, together with an indication of the relationship with the contractor's ILS organization.

3.5. **Design Interface Planning and Reporting**. This sub-section, in conjunction with the approved management system, contains a description of how the contractor will accomplish report and provide an audit trail for integration with a formal design influence programme. The design interface planning ensures that all the logistic requirements and maintenance decisions made by the other contractually required system engineering disciplines are input to and output from one another, in a timely manner. System engineering disciplines include, but are not limited to, the design programme the safety programme, the standardization programme and the ARM programme.

3.6. **Contractor's Objective**. This sub-section contains a description of the system that provides for the cost effective integration design, development, test and evaluation tasks required to progress from an operational requirement to the operational deployment of a system or equipment. Included is identification of the audit trail and reporting criteria.

3.7. **Contractor's Approach**. This sub-section contains the establishment of a logical sequence of activities and decisions which transform an operational requirement into a viable, cost effective system.

3.8. **Contractor's Integrating**. This sub-section describes the design interface/engineering discipline integration that will establish integration of all engineering, design and management efforts, and disciplines including Reliability, ILS, standardization and production. This is necessary to control the influences on the SA programmes, cost effective design enhancement and system/equipment design. Included is identification of the audit trail and the reporting criteria.

3.9. **Contractor's Control and Reporting**. This sub-section contains identification of the contractor's in-house report procedure. Included is the relationship between the technical programme planning and the schedule planning. Included is identification of the planned interface between specific task and management procedures that ensure the design influence and contractual provisions are met. Also contained is the establishment of ILS to influence design and system engineering.

3.10. **Post-Design Services (PDS).** This section shall contain a description of the contractor's approach for providing PDS to the MOD in the context of ILS. The contractor shall consider PDS, and its consequences on ILS, in terms of its effects on maintaining an effective support policy with optimum costs throughout the life of the equipment. The following shall be addressed:

3.10.1. Control and maintenance of design records.

3.10.2. Maintenance of technical information.

3.10.3. Provision of support for equipment hardware and software.

3.10.4. Implementation of technical tasks to investigate obsolescence issues.

4. **ILS Programme Tasks.**

This section contains a detailed description of how the contractor will accomplish all ILS programme tasks stated in the ILS programme Statement of Work or equivalent specification. For ILS programme tasks not covered by separately deliverable plans, a detailed description is to be contained in this section. This section contains the following sub-sections:

4.1. **SA Activities and the Logistic Information Repository (LIR).** This sub-section contains a detailed description of the plans for the accomplishment of SA Activities and Sub activities, and associated documentation in the LIR, as defined in the contract.

4.2. **Other Standards**. This sub-section provides a detailed description of all other relevant standards or tasks, as defined in the contract.

5. **Related Plans Applicable to the ILS Programme**.

This section contains appropriate appendices as related plans required for the ILS programme effort. This
section contains the following sub-section:

5.1. **Related Plans**. This sub-section references the contractually required ILS programme tasks; eg SA Plan in accordance with PD0002-01, and all separately deliverable plans for all contractually required ILS element development efforts; eg Documentation Management Plan, Supply Plan, Training and Training Equipment Plan etc prepared in accordance with PD0004-01.

6. **Programme Plan and Milestone Schedule.**

This section contains the programme plan and master milestone schedule for the ILS effort. This section contains the following sub-sections:

6.1. **Master Milestone Chart.** This sub-section is a master milestone chart to include all programme milestones, eg Preliminary and Critical Design Reviews (PDRs & CDRs).

6.2. **ILS Programme Milestone Chart**. This sub-section is a milestone chart for events required to accomplish all required ILS programme tasks, eg ILS Conferences and Reviews. 6.3. **ILS Element Milestone Chart**. This sub-section is a milestone chart for the events required to accomplish all contractually required support element development efforts, including Technical Publications, Supply Support, etc. 7. **Glossary, Acronyms and Terms.** This section shall contain a glossary of all acronyms and special terms or words used in the text.
Format and Presentation ADOBE PDF Microsoft Office
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified

ILS Product Description	
Product Title Supportability Analysis Plan (SAP)	**Product Description Identifier** PD0002-01

Description Synopsis

This product description defines the Supportability Analysis Plan (SAP). The SAP is the primary management tool used to establish and execute an effective SA programme. When submitted as a response to an Invitation to Negotiation (ITN), Request for Tender (RFT) or Statement of Work (SOW), it is used in the source selection process.

Purpose

The plan identifies the contractor's approach and description of how the Supportability Analysis (SA) will be conducted to meet the SA programme requirements as part of the engineering effort.

Full Description \ Product Composition

This product Description identifies the content and preparation instructions of the SAP resulting from the work described by. The SAP must contain each of the sections listed below. If there is no data or text requirement, the contractor will enter 'NOT APPLICABLE' and justify the reasons. The SAP describes how the contractor SA programme will be conducted to meet overall programme requirements. The plan is a self supporting document, and may form part of the Integrated Support Plan. It will be updated by the contractor throughout the life of the contract, subject to MOD acceptance.

1. **The SAP includes**:

1.1. **SA programme description.** This section describes how the SA programme will be conducted to meet the system and logistic requirements contained in the applicable programme documents.

1.2. **SA programme/schedule.** This section contains a schedule with estimated start and completion points for each SA programme activity. Included is the relationship of the SA schedule with other ILS programme requirements and associated engineering requirements.

1.3. **Management structure and organization.** This section identifies the management structure applicable to SA. Included is the relationship with the MOD SA organization.

1.4. **Applicability.** This section contains a description of how SA will be tailored to the contractor's specific proposed solution.

1.5. **SA Activities.** This section identifies each SA activity that will be accomplished to meet the contracted SA requirements and the extent to which they will be performed.

1.6. **Equipment Breakdown Structure (EBS)/SA candidate list.** This section includes the EBS identification of items upon which SA will be performed and documented. Also included is the SA candidate list and applicable selection criteria. The list will include all items recommended for analysis, items not recommended and the appropriate justification for selection or non-selection.

1.7. **Control of Subcontractors SA programmes.** This section contains the internal SA processes and management of subcontractors along with an explanation of how such processes will be integrated and managed into the overall SA programme.

1.8. **Introduction/Identification.** This section identifies the End Item, procuring authority, preparing authority, contract number and general background to the Plan.

1.9. **Purpose of the Plan.** This section contains details of the purpose of the Plan.

1.10. **Interface requirements.** This section includes a description of how SA Activities and data will interface with other ILS and system oriented tasks and data. This description includes analysis and data interfaces with the following programmes as applicable:

- 1.10.1. System/equipment design programme;
- 1.10.2. System/equipment reliability & maintainability programme;
- 1.10.3. Human factors Integration programme;
- 1.10.4. Standardization programme;
- 1.10.5. Parts control programme;
- 1.10.6. System safety programme;
- 1.10.7. Packaging, handling and storage programme;
- 1.10.8. Transportation and transportability programme;
- 1.10.9. Initial provisioning programme;
- 1.10.10. System / equipment testability programme;
- 1.10.11. Survivability programme;
- 1.10.12. Technical documentation programme;
- 1.10.13. Training and training equipment programme;
- 1.10.14. Facilities programme;
- 1.10.15. Support equipment programme;
- 1.10.16. Test and evaluation programme.

1.11 **SA Process standards.** This section details what if any SA process standards will be used for a particular SA task / ILS element.

1.12. **Supportability Analysis Configuration system.** This section contains an explanation of the configuration system to be used for SA candidate items

1.13. **Design requirements dissemination.** This section includes the method by which supportability related design requirements are disseminated to designers and associated personnel. Also included is the method by which supportability related design requirements are disseminated to subcontractors and the controls levied under such circumstances.

1.14. **Government Furnished Assets (GFA).**
This section contains the identification of government assets to be furnished to the contractor, and the schedule for its required delivery.

1.15. **SA data updates and validation.** This section contains the procedure for updating and validating SA data, including configuration control procedures.

1.16. **Status and control procedures.** This section defines the procedures used to evaluate the status and control of each activity, and the identification of the unit authorized with responsibility for executing each activity.

1.17. **Deficiency control.** This section contains the procedures, methods and controls for identifying and recording design problems or deficiencies affecting supportability. It also contains an identification of corrective actions required and the status if action taken to resolve the problems.

1.18. **Data collection.** This section contains a description of the data collection system to be used by the performing activity to document, disseminate and control SA and related design data. Included are the identification of responsibilities and dependencies.

1.19. **Design review procedures.** This section includes a description of design review procedures which provide for official review and control of related design information with SA the SA programme participation.

1.20. **Training.** The training and experience of the SA team shall be stated, and the method by which further personnel will be trained.

1.21. **SA for Software.** This section explains the need for support analysis for software.

1.22. **Comments.** This section will provide for comments on the SA Strategy,

as supplied. This could include the need for further data to be supplied and any contradictions between the SA Strategy and other documentation. 1.23. **Quality Assurance.** This section identifies the measures that shall be taken to ensure correct application of Quality Assurance procedures for SA.
Format and Presentation ADOBE PDF Microsoft Office
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 1 licence Supplier Not Specified

ILS Product Description	
Product Title ILS Associated Meetings	**Product Description Identifier** PD0003-01

Description Synopsis

This product description identifies the requirement for agendas, minutes and actions associated with ILS/SA meetings. The minutes shall be raised by the contractor and agreed with MOD.

Purpose

To formalise meeting conduct

Full Description \ Product Composition

This PD describes the format and content required for the production of meeting agendas, minutes and resultant actions required.

1. The meetings will be scheduled at dates and times agreed between MOD and the contractor. Meetings shall be chaired jointly by the MOD ILS manager (MILSM), or nominated representative, and the contractor ILS manager (CILSM), or nominated representative.
2. The meeting minutes format/agenda may include the following items; this list shall not be considered exhaustive and will be developed and tailored to suit individual project specific requirements:
    - 2.1. **Title.** This item shall include the meeting number, name, venue address and date.
    - 2.2. **Attendees.** This item shall contain a list of personnel attending the meeting.
    - 2.3. **Apologies.** This item will contain a list of invited personnel not present at the meeting.
    - 2.4. **Matters arising.** This item contains matters arising from the minutes of the previous meeting and gives an opportunity to discuss and agree the previous minutes.
    - 2.5. **Discussion.** This item includes presentation of reports and correspondence and general discussion including progress measured against milestones in accordance with the ILS programme and any associated problems.
    - 2.6. **Any other business.** This item gives an opportunity to discuss any subject deemed relevant to the aims and objectives of the project.
    - 2.7. **Meeting Closure.** This item shall include the date, time and venue of the next meeting.
    - 2.8. **Annex.** This item shall contain a listing of actions that shall be clearly identified and annotated with the instigator of the action, the individual or organization tasked with carrying out the action and the action completion/due date. The actions shall have no implications regarding changes to the contractual status of the project.
    - 2.9. **Distribution.** Attendees plus all agencies, departments and personnel not attending the meeting but requiring copies of the minutes.
3. The minutes shall be an accurate account of the meeting in order to clearly record what was discussed and what actions were agreed to be carried out in defined timescales.
4. The minutes shall be signed by both co-chairmen to signify their acceptance.
5. Discussion at meetings shall be conducted ‘without prejudice’ and shall not affect the rights and liabilities of the parties to the contract

Format and Presentation

ADOBE PDF
Microsoft Office

Allocated Responsibilities

Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 1 licence Supplier Not Specified

ILS Product Description	
Product Title Integrated Support Plan Element Plans	**Product Description Identifier** PD0004-01

Description Synopsis

This product description identifies and describes the contractor's Integrated Logistic Support (ILS) Element Plans. The plans describe the specific techniques to be used, tasks to be performed and the development and integration into the overall ILS/SA programme and related programmes. Individual Element Plans may be amalgamated and submitted as one plan for MOD acceptance.

Purpose

The principal purpose of the plans is to provide the MOD with a basis for review and evaluation of the contractor's proposed ILS elements and their integration with the overall ILS and engineering programmes. They also identify the establishment of contractual ILS elements compliance requirements and for providing the milestone schedule. The plan is the basic tool used to establish and execute an ILS element programme. When submitted in response to an Invitation to Negotiation (ITN), Request for Tender (RFT) or Statement of Work (SOW), it is used in the source selection process.

Full Description \ Product Composition

Detailed Requirements

1. Introduction.
    - 1.1. Identification and description of the End Item.
    - 1.2. Identification of the contractor, contract number and contracting organization.
    - 1.3. Identification of all element programme milestones.
2. Reliability Plan shall be in accordance with advice and guidance given in Def Stan 00-40and include the following:
    - 2.1. Identification of the contractor's programme organizational structure responsible for reliability.
    - 2.2. An explanation of how data selection, data flow, data storage and data control will be co-ordinated.
    - 2.3. A description of the contractor's procedure for implementing the requirements of Failure Modes, Effects and Criticality Analysis (FMECA). The precise requirements are contained in PD1003-01 FMECA Programme Plan and PD1004-01 FMECA Report.
3. Maintainability Plan shall be in accordance with advice and guidance given in JSP 886 Vol7 Part 08-03 and include the following:
    - 3.1. Identification of the contractor's programme organizational structure responsible for maintainability.
    - 3.2. An explanation of how data selection, data flow, data storage and data control will be co-ordinated.
    - 3.3. A description of the contractor's procedure for implementing the requirements of Reliability-Centred Maintenance (RCM). The precise requirements are contained in PD1005-01 RCM Programme Plan and PD1006-01 RCM Report.
    - 3.4. A description of the contractor's procedure for implementing the Requirements of a Level Of Repair Analysis (LORA). The precise requirements are contained in PD1007-01 LORA Programme Plan and PD1008-01 LORA Report.
4. Logistics Test and Evaluation Plan shall describe how testing and evaluation will be conducted to assist in the engineering design and development processes.
5. Human Factors Integration (HFI) Plan shall be in accordance with advice and guidance given in JSP 886 Volume 7 Part 08-09, and include:

5.1. An explanation of how the End Item design will minimise human factor risks in all areas in order to promote safe, efficient and reliable operation.
5.2. An explanation of HFI process and its impact on human factors engineering, manpower, personnel, training, safety and health hazard assessments.
5.3. Identification of existing knowledge, skill and experience capabilities.
5.4. Identification of training needs analysis and an explanation of how suitable courses will be implemented.
5.5. Details of how training effectiveness will be measured.
5.6. Identification of the process by which training courses will be updated and further developed as technical standards relating to the End Item evolve.

6. Facilities Plan shall contain the following:
6.1. Procedures for identification, justification, costing and development of new facilities.
6.2. A description as to how the requirements for purpose built facilities will be avoided or reduced to the minimum.
6.3. An explanation of the need for the identification of specialist facilities.
6.4. Plans for any modification to existing facilities.

7. Supply Support Plan shall be in a format agreed by SME

8. Support Equipment Plan shall contain the following:
8.1. Explanation of optimum utilization of existing in-Service Support Equipment, including the use of common tools or standard Test Equipment wherever possible and the avoidance of new Support Equipment and Special To Type Test Equipment (STTE).
8.2. A description of the requirement of, and justification for any proposed new Support Equipment.
8.3. A description of the requirements for hand tools, mechanical test equipment and electrical/electronic test equipment.

9. Documentation Management Plan is addressed separately under PD2001-01.

10. Packaging, Handling, Storage and Transportation Plan (PHS&T Plan) shall be in accordance with the requirements of advice and guidance given in JSP 886 Volume 7 Part 08-02 and include:
10.1. Identification of resources and methods for packaging, handling, storage and land, sea and air transportation with particular regard to policies, procedures, specific requirements and safety precautions.
10.2. Considerations relating to equipment disposal, to include any associated risks.
10.3. An explanation of any specific packaging and handling requirements.
10.4. An explanation of the use of bar coding.

Format and Presentation
ADOBE PDF
Microsoft Office

Allocated Responsibilities
Customer owner - MOD ILS Manager
Supplier Owner – ILS Manager
Customer Assurance SEOC Team Representative
Supplier Assurance Quality Manager

Quality Assurance
Quality method Formal Review
Performance Indicators – Not Specified
Quality check skills required
Customer MOD ILS Level 1 licence
Supplier Not Specified

ILS Product Description	
Product Title Software Support Plan	**Product Description Identifier** PD0005-01

Description Synopsis

This product descriptor identifies and describes the Software Support Plan. The plan describes the application of the SA methodology to the software element of the system or equipment. It addresses:

a. Definition of software support package.
b. Impact of software on the support policy.
c. Identification, quantification and minimisation of support resources.
d. Documentation of software within the Information Repository.

Purpose

The principle purpose of this product descriptor is to provide the MOD with a basis for review and evaluation of the proposed Software Support Plan.

Full Description \ Product Composition
Detailed Requirements

1. INTRODUCTION
   1.1. Identify the requirements of the Software Support Plan (SSP).
2. SCOPE
   2.1. Define the purpose and scope of the SSP.
   2.2. Describe the equipment applicable - Computer Software Configuration Items/Computer Software Units (if known).
3. REFERENCES
   3.1. Define the policy/guidance for the software, if applicable, e.g.
   - DEF STAN 00-600 ILS - Requirements for MOD Projects
   - DEF STAN 00-60 Pt 3 Guidance for Application of Software Support
   - JSP886 Vol 7 Pt 4 Software Support
   - RTCA/DO-178B Software Considerations in Airborne Systems and Equipment Certification

   3.2. Define the relationships to other plans that contain any pertinent information, e.g. ISP. How does this SSP fit in with all other plans?
4. STRATEGY
   4.1. Detail any strategy or direction/guidance received from the Project Team or other Customer during development of the support concept/strategy.
   4.2. Define the support concept.
5. ORGANISATION
   5.1. Define the organisational structure that will be responsible for software support. This may include Military personnel/Teams if appropriate.
   5.2. Define the contractor's programme (if known).
   5.3. Define the structure of the Software Configuration Management Board (SCMB), stating its composition, responsibilities, etc - Project Team Leader, ILSM, Contractor, etc.
6. SOFTWARE MODIFICATION
   6.1. Software modification falls into the following four categories:
   - Corrective - The diagnosis and fixing of errors, from localised changes to more fundamental design fixes.
   - Adaptive - Changing the software so that it can work properly in a changing environment, and can be adapted to changes in the environment, such as changes in other software, hardware or even user practices.
   - Perfective - Includes the addition of new functions and enhancements and changes to existing functions.

- Preventative - Improving the sustainability of the software, so that future changes can be done more rapidly and easily. These include complexity reduction and activities such as refactoring, which are aimed at improving the understandability of software, without changing the externally observed functional behaviour of the software.

Note: Depending upon your view, you could define 3 categories where perfective also covers preventive.

7. CHANGE REQUESTS
   - 7.1. Detail how changes or suggested improvements become Software Change Requests (SCRs).
   - 7.2. Detail how these change requests will be actioned - recording, prioritising, approval, tracking, etc.
   - 7.3. Define how the SCMB will grant approval of change requests.

Flow Charts or diagrams are often helpful here.

8. FAULTS
   - 8.1. Reporting - State how problems/faults will be recorded and tracked.
   - 8.2. Query evaluation - how will queries/faults be investigated to determine their impact on the system and its severity? What mechanisms will be used to determine if the problem is to be corrected and a scr raised? What is the impact if the fault is not corrected - could a workaround be utilised, for example?
   - 8.3. Corrective action - how do scrs get logged and authority given for corrective action? How are the corrective actions carried out? Indicative response times for corrective action should also be stated (if applicable)?
   - 8.4. Implementation - define how the software update will actually be embodied within the platform and by whom?

9. RAPID RESPONSE SOFTWARE CHANGES
   - 9.1. Define how any rapid response software changes will be carried out, processes, timelines, etc

10. CERTIFICATION & QUALIFICATION
    - 10.1. Define how any software modifications will be tested and revalidated for use. How will they be cleared / released for use?

11. OPERATIONAL SUPPORT
    - 11.1. Define the operational support needed, e.g.

- Helpdesk - define what helpdesk support is needed, e.g. 8-5 or 24/7? Detail who will provide this support and where it will be (location).
- Define what processes are needed to load, re-load, replicate, copy, store, distribute and carry out any handling activity on software, firmware and data.

12. MISSION SUPPORT
    - 12.1. Define what data support is needed, if any. This could be mission data that requires to be uploaded prior to its use or downloaded post use.

13. SUPPORT EQUIPMENT & PROCESSES
    - 13.1. Detail any applicable equipment or processes needed for support. These should include:

- Documentation
- Software engineering environment
- Software tools
- Support & test equipment
- Software licences & IPR issues

14. RESOURCES
    - 14.1. Personnel - define any attributes the user must have, i.e. Skills, rank, trade, service, security level, etc.
    - 14.2. Training - list any training required by the user that will enable them to utilise the software applications.

14.3. Facilities - define what facilities are needed, if any. Some projects, as part of their software support, opt to have a service software team and therefore identify the need for buildings, desks, power, etc. Are any reference or test systems needed, e.g. Rigs?

15. TRANSITION

15.1. How is the transfer from development to support (maintenance) to be effected? Is it to be done at all or is maintenance to remain with the original development team at the original site?

16. SAFETY

16.1. Detail any safety aspects related to software. If applicable, refer to the overall Safety Plan.

17. SECURITY

17.1. Define any security implications with the classification of software (Restricted, Classified, etc.). If applicable, refer to the Security Plan.

18. RISK MANAGEMENT

18.1. Define how risks will be managed for software. If applicable, refer to the Risk Management Plan.

19. QUALITY SYSTEM/ASSURANCE

19.1. Define how to ensure quality has been maintained for any software modifications. This will include additional factors, e.g. documentation, processes, etc. If applicable, refer to the Quality Management Plan.

20. CONFIGURATION MANAGEMENT

20.1. Define how configuration management will be applied for all software modifications. If applicable, refer to the Configuration Management Plan.

21. OBSOLESCENCE MANAGEMENT

21.1. Define how obsolescence will be managed for all software. If applicable, refer to the Obsolescence Management Plan.

Format and Presentation

ADOBE PDF
Microsoft Office

Allocated Responsibilities

Customer owner - MOD ILS Manager
Supplier Owner – ILS Manager
Customer Assurance SEOC Team Representative
Supplier Assurance Quality Manager

Quality Assurance

Quality method Formal Review
Performance Indicators – Not Specified
Quality check skills required
Customer MOD ILS Level 2 licence
Supplier Not Specified

ILS Product Description	
Product Title Supportability Analysis (SA) Tasks Plan	**Product Description Identifier** PD1001-01
Description Synopsis This PD identifies a Plan for SA Activities and sub activities that will be performed.	
Purpose The principal use of this PD is to provide the MOD with a basis for review and evaluation of activities for ensuring contractual compliance.	
Full Description \ Product Composition The following tasks are normally carried out by the customer and shall only be included in the plan under exceptional circumstances: SA strategy Supportability analysis plan Programme and design reviews Use study The following tasks are normally conducted by the contractor and shall be covered by the plan unless tailored out. Mission hardware, software, firmware and support system standardization; Comparative system; Technological opportunities; Supportability and supportability related design factors; Functional requirements identification; Support system alternatives; Evaluation of alternatives and trade-off analysis; Maintenance Task Analysis; Early fielding analysis; Post production support analysis; Supportability test, evaluation and verification.	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager	
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified	

ILS Product Description	
Product Title Trade-Off Analysis Report	**Product Description Identifier** PD1002-01

Description Synopsis

This product description defines a format for the presentation of trade-off analysis results.

Purpose

The principal use of the trade-off report is to advise the MOD of the trade-off analysis results to determine contractual compliance

Full Description \ Product Composition

1. The format of the report shall contain each of the sections listed below. If there is no data or text requirement, the contractor shall justify the reasons. The format shall be as follows:
   1.1. Introduction.
   1.2. Aim.
   1.3. Assumptions and Constraints.
   1.4. General.
   1.5. Results.
   1.6. Recommendations.
   1.7. Annexes.

Detailed Requirements

Content.

2. The trade-off analysis shall be accomplished by the contractor and include the following topics:
   2.1. **Introduction.** The contents of the introduction shall refer to relevant papers and give any previous decisions which have been reached, and would normally give the scope and purpose of the analysis conducted. Describe briefly the circumstances leading to the production of the report. In addition, describe briefly the system/equipment under analysis.
   2.2. **Aim.** The aim of the report is to recommend to the MOD the proposed support system and document the results of the analysis of risks, costs, availability, support and other factors which determined the recommended best approach to support.
   2.3. **Assumptions and Constraints.** The nature of the trade-off techniques used and the scope of the analysis will depend upon both the phase of the project and the system complexity. Trade-offs early in the program will generally be broad in scope. As development progresses, trade-offs are progressively refined and inputs become more specific. The criteria for each evaluation or trade off shall be documented. The baseline information shall be standard throughout the process. The quantitative and qualitative criteria to be used to select the best alternatives shall be documented. Any assumption or constraints pertinent to above factors shall be described.
   2.4. **General.** The following topics shall be covered:
      2.4.1. The appropriate model or relationship chosen or constructed for conducting the evaluation or trade-off analysis shall be identified.
      2.4.2. The support system or system used for the analysis shall be identified, each accompanied by a brief rationale for their use.
   2.5. **Results.** The results shall be described in detail under the categories listed below. For each category, the rationale for the recommendation or rejection of alternatives shall be documented.
      2.5.1. **Maintenance Policy.** An analysis of the maintenance policy to be adopted, based on Level of Repair Analysis (LORA) shall be described for each alternative. Such an analysis shall take into account the

requirements for supply support. A recommendation shall be made of the most acceptable overall maintenance and support concept for the system.

2.5.2. **Manpower and Personnel.** An analysis of the manpower and personnel requirements of each alternative shall be recorded. The evaluation shall include skill specialities, skill levels, and experience that may be required to support the operation and maintenance of the system.

2.5.3. **Training.** The optimum training methods required to implement each alternative shall be discussed and the preferred option identified. Training methods consist of a combination of formal, informal and on-the-job-training.

2.5.4. **Testing Concepts.** Following a description of the alternative available, a recommendation shall be made as to what method of testing is most appropriate to support maintenance actions.

2.5.5. **Comparative analysis.** This section shall identify the supportability problems that occurred with the existing or baseline system and then analyse the proposed support alternatives to see if these problems are surmountable. Shortfalls or critical issues that must be corrected before the new system becomes operational shall be highlighted. The most appropriate alternative shall be identified.

2.5.6. **Energy requirements.** Problem areas that might arise due to changes in cost or availability of energy source shall be identified with respect to each alternative. A preferred solution shall be identified.

2.5.7. **Transportability.** The support option which optimises the use of transportation resources shall be identified.

2.5.8. **Facilities.** The analysis for determining the optimum support system in terms of facilities shall be described and a preferred solution identified.

2.6. **Recommendations.** Having identified the preferred alternatives for each of the categories above, the preferred overall support system shall be identified and justified for the subject system/equipment. This recommendation shall be recorded in the Logistic Information Repository. Follow up action in the light of this reports findings, shall be recommended. Material that has not been addressed in the main body shall not be introduced in this recommendation.

2.7. **Annexes.** Annexes shall be included to provide, as necessary, the detail to support the content, or recommendations of the report. Tables and figures can be included to support textual explanation.

Format and Presentation
ADOBE PDF
Microsoft Office

Allocated Responsibilities
Customer owner - MOD ILS Manager
Supplier Owner – ILS Manager
Customer Assurance SEOC Team Representative
Supplier Assurance Quality Manager

Quality Assurance
Quality method Formal Review
Performance Indicators – Not Specified
Quality check skills required
Customer MOD ILS Level 2 licence
Supplier Not Specified

ILS Product Description	
Product Title Failure Modes Effects and Criticality Analysis (FMECA) Programme Plan	**Product Description Identifier** PD1003-01

Description Synopsis

This Product Description Identifies and describes the contractor's FMECA Programme Plan. This plan describes the specific techniques to be used and tasks to be performed and defines their development and integration into the overall SA programme and other related programmes.

Purpose

The plan provides the MOD with a basis for the review and evaluation of the contractor's proposed FMECA programme and its content, for ensuring contractual compliance and for providing the milestone schedule indicating when FMECA will be initiated and completed. The plan is the basic tool used to establish and execute an effective FMECA programme. When submitted in response to an Invitation to Negotiation (ITN), Request for Tender (RFT) or Statement of Work (SOW), it is used in the source selection process.

Full Description \ Product Composition

This Product Description contains the format, content and preparation instructions for the generation of a FMECA Programme Plan. If there is no data or text requirement in any of the sections or sub-sections, the contractor will enter 'NOT APPLICABLE' and justify the reasons. The FMECA Programme Plan will be updated, as required, during the contract period, under MOD acceptance, based on analysis results, programme schedule modifications or programme decisions. This Product is to be used in conjunction with products described in PD1004-01 FMECA Report.

Detailed Requirements

1. The FMECA Programme Plan shall contain the following:
    - 1.1. Identification of the contractor, contract number and contracting organization.
    - 1.2. Identification and description of the End Item.
    - 1.3. Identification of the contractor's organization structure responsible for performing the FMECA.
    - 1.4. Description of the contractor's procedures for implementing the specified requirements of IEC 60812. The description shall include:
        - 1.4.1. Procedures for creating FMECA
        - 1.4.2. Procedures for updating the FMECA to reflect design changes
        - 1.4.3. Procedures for the use of analysis results to provide design guidance.
    - 1.5. Examples of the contractor's worksheet formats used to organize and document the FMECA.
    - 1.6. Description of processes and analysis assumptions that identify:
        - 1.6.1. The FMECA approach i.e. hardware, functional or combination.
        - 1.6.2. The lowest indenture level to be analyzed.
        - 1.6.3. General statements or failure definitions of what constitutes an item failure in terms of performance criteria and allowable limits.
    - 1.7. If analysis requirements change any processes or analysis assumptions, they shall be identified and documented in the FMECA Report.
    - 1.8. Identification of the indenture level that applies to the system hardware or functional level at which failures are assumed. Unless otherwise specified the contractor shall base the lowest indenture level for analysis on the following :
        - 1.8.1. The lowest level specified in the SA candidate list to assure complete inputs for each SA Candidate
        - 1.8.2. The lowest indenture level at which items are assigned a catastrophic (Category I) or critical (Category II) severity classification category

1.8.3. The specified or intended maintenance and repair levels for items assigned a marginal (Category III) or minor (Category IV) severity classification category. 1.9. Description of the contractor's coding system used for consistent identification of system functions and for tracking failure modes. The coding system shall be based on upon the equipment breakdown structure or other similar uniform numbering system and shall provide complete visibility of each failure mode and its relationship to the system. 1.10. Identification of the data sources used to ascertain failure rates for the FMECA. 1.11. Description of how the results of FMECA will be documented in the Logistics Information Repository.
Format and Presentation ADOBE PDF Microsoft Office
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified

ILS Product Description	
Product Title Failure Modes Effects and Criticality Analysis (FMECA) Report	**Product Description Identifier** PD1004-01
Description Synopsis This Product Description and content instructions generated by the task requirement as specified in the contract. The MOD accepted FMECA Programme Plan forms part of the contract and defines the specific FMECA task requirements.	
Purpose The principal use of the FMECA Report is to advise the MOD of the results of the FMECA programme and for determining contractual compliance.	
Full Description \ Product Composition **Detailed Requirements** 1. The contractor's worksheet package, selected as part of the FMECA Programme Plan, shall form the basis of the FMECA Report. Further information required is as follows: 1.1. Identification of the level of analysis carried out. 1.2. Description of the applicable Design Standard. 1.3. System definition narrative and resultant analysis data. 1.4. Detailed Summary of the results. 1.5. Identification of Failure Mode selection. 1.6. Description of Failure Mode Category List. 1.7. Identification of data sources and techniques used in the analysis. 1.8. Recommendations for updating FMECA to reflect design changes. The FMECA Report documents, in detail, the results of the FMECA plan carried out by the contractor in compliance with advice and guidance given in JSP 886 Volume 7 Part 08-04, or as otherwise specified in the contract. FMECA Reports shall contain, as a minimum, the information detailed below. This product shall be used in conjunction with products described in PD1003-01 FMECA Programme Plan.	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager	
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 1 licence Supplier Not Specified	

ILS Product Description	
Product Title Reliability Centred Maintenance (RCM) Programme Plan	**Product Description Identifier** PD1005-01

Description Synopsis

This Product Description identifies and describes the contractor's RCM Programme Plan. This plan describes the specific techniques to be used and tasks to be performed, and defines their development and integration into the overall SA programme and other related programmes.

Purpose

The principal uses for the plan are to provide the MOD with a basis for review and evaluation of the contractor's proposed RCM programme and its contents, for establishing contractual RCM compliance requirements and for providing the milestone schedule indicating when RCM will be initiated and completed. The plan is the basic tool used to establish and execute an effective RCM programme. When submitted in response to an Invitation to Negotiation (ITN), Request for Tender (RFT) or Statement of Work (SOW), it is used in the source selection process.

Full Description \ Product Composition

This Product Description contains the content and preparation instructions for the data product generated by the provision of a RCM plan and must contain each of the sections listed below. If there is no data or text requirement in any of the sections, the contractor will enter 'NOT APPLICABLE' and justify the reasons. The RCM Programme Plan will be updated as required during the contract period, under MOD acceptance, based on analysis results, programme schedule modifications and programme decisions.

This Product must be used in conjunction with products described in PD1006_01 RCM Report.

Detailed Requirements

1. The RCM Programme Plan shall include the following:
    - 1.1. Identification of the contractor, contract number and the contracting MOD organization.
        - 1.1.1. Identification of the who will be involved with the study and their skills
    - 1.2. Identification and description of the End Item.
    - 1.3. Identification of the 'Operating Context' and boundaries of analysis.
    - 1.4. Examples of how the required information shall be presented including:
        - 1.4.1. Worksheet layout.
        - 1.4.2. Software package utilized.
    - 1.5. The RCM methodology used.
    - 1.6. Description of the coding system used to link the FMECA to RCM task analysis.
    - 1.7. Structurally Significant Item and Functionally Significant Item selection criteria and listing.
    - 1.8. Example of Zonal Plan production.
    - 1.9. Procedures for updating the RCM to reflect design changes.
    - 1.10. Procedures for the use of redesign recommendations to provide design guidance.
    - 1.11. The data sources used to ascertain failure rates and/or failure patterns.

Format and Presentation

ADOBE PDF
Microsoft Office

Allocated Responsibilities

Customer owner - MOD ILS Manager
Supplier Owner – ILS Manager

Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified

ILS Product Description	
Product Title Reliability Centred Maintenance (RCM) Report	**Product Description Identifier** PD1006-01
Description Synopsis This product description contains the format and content instructions generated by the task requirement as specified in the contract. The MOD accepted RCM Programme Plan forms part of the contract and defines the specific RCM task requirements.	
Purpose The principal use of the RCM Report is to advise the MOD of the results of the RCM programme and for determining contractual compliance.	
Full Description \ Product Composition The RCM Report documents, in detail, the results of the RCM analysis carried out by the contractor in compliance with the contract and MOD accepted Maintainability plan. This product is to be used in conjunction with products described in PD1005-01 RCM Programme Plan. **Detailed Requirements** 1. The worksheet selected as part of the RCM Programme Plan shall form the basis of the RCM Report. Further information required will be dependent on the worksheet or software package utilized, and accepted by MOD. 2. The RCM Report shall include: 2.1. The specification of the RCM analysis performed including the RCM methodology used, a description of the End Item, Operating Context and system boundaries. 2.2. A list of all references regarding Policy and warranty obligations together with any examples in which the RCM analysis may challenge Policy. 2.3. Full justification of all task and task frequency recommendations. 2.4. Listing of all outputs generated by the RCM analysis for each item under analysis. 2.5. Recommendations for generation and update of the Preventive Maintenance Plan to reflect current design.	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager	
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified	

ILS Product Description	
Product Title Level Of repair analysis (LORA) Programme Plan	**Product Description Identifier** PD1007-01

Description Synopsis

This product description identifies and describes the contractor LORA Programme Plan and LORA candidate selection criteria. The LORA plan describes the specific techniques to be used and tasks to be performed. It defines their development and integration into the overall SA programme and other related programmes.

Purpose

The principal uses for the LORA Programme Plan are to provide the MOD with a basis for review and evaluation of the contractor's proposed LORA programme and its proposed content, for establishing contractual LORA compliance requirements, and for providing the milestone schedule or study plan schedule. The plan is used to establish and execute an effective LORA programme. When submitted in response to an Invitation to Negotiation (ITN), Request for Tender (RFT) or Statement of Work (SOW), it is used in the source selection process.

Full Description \ Product Composition

This product Description contains the format, content and preparation instructions for a LORA Programme Plan and will contain each of the sections listed below. If there is no data or text requirement in any of the sections or sub-sections, the contractor will enter 'NOT APPLICABLE' and justify the reasons. The plan will be updated as required during the contract period, under MOD acceptance, based on analysis results, programme schedule modifications or programme decisions.

Detailed Requirements

1. The LORA Programme Plan shall include the following:
    - 1.1. Identification and description of the End Item.
    - 1.2. Identification of the contractor preparing the LORA Programme Plan, the MOD organization contracting for the LORA programme, and the contract number.
    - 1.3. Identification of the contractor's internal organization structure performing the LORA.
    - 1.4. The interrelationships of the LORA discipline with other ILS elements and system engineering disciplines.
    - 1.5. The method by which LORA information affecting design is disseminated to equipment designers.
    - 1.6. The criteria used to guide the designers on the advisability of discard-at-failure or reparability recommendations.
    - 1.7. The procedures used for collecting, updating and validating LORA input data and final LORA decisions, including:
        - 1.7.1. Procedures for integration and monitoring implementation of the LORA decisions into the system support requirements and logistic planning.
        - 1.7.2. Procedures for updating inputs to the LORA with data and results from contractor testing, demonstrations, development testing and operational testing.

Note: This product description must be used in conjunction with products described in PD1008-01 LORA Report.

- 1.8. Delineation of the tasks and milestone schedules required to conduct the LORA programme, along with schedule relationships to schedules of other SA programme requirements and associated system engineering activities.
- 1.9. Description of each LORA programme task relationship to other SA programme events and its integration into the SA programme schedule to

ensure that LORA tasks are completed prior to other SA activities requiring LORA results.

1.10. Identification and description of the LORA model(s) to be used for conducting LORA(s) and the class (es) of LORA that will be performed. A LORA model is defined as a computerized, or manual, mathematical model or technique used to compare the relative economics and performance levels of the viable repair or discard options. There are three classes of LORA which include system or end item analysis, sub-system or item analysis and specific aspects of repair analysis.

1.11. A list that identifies the specific items Which make up the End Item under contract for LORA. The list includes items recommended for analysis, items not recommended for analysis and rationale for selection or non-selection. The list will be consistent with the SA configuration system used in the Logistic Information Repository.

1.12. Identification of previous systems, similar to the system under analysis, in conjunction with their support structure and previous LORAs that are to be used to establish the baseline for the support structure constraints on the system under analysis.

1.13. Reasons and justifications for any non-economic considerations that may impact or shall be considered in adjusting decision alternatives derived from the economic considerations.

1.14. The LORA results which will be used to assist in developing or revising system engineering and logistic products or data within the following:

- 1.14.1. Maintenance planning.
- 1.14.2. Maintenance Allocation Chart (MAC).
- 1.14.3. Source, Maintenance and Recoverability (SMR) coding.
- 1.14.4. Provisioning Parts List (PPL).
- 1.14.5. Logistic Information Repository (LIR).
- 1.14.6. Failure Modes, Effects and Criticality Analysis (FMECA).
- 1.14.7. Reliability.
- 1.14.8. Maintainability.
- 1.14.9. Reliability-Centred Maintenance (RCM).

1.15. How the LORA results will be used to influence the equipment design in the following aspects:

- 1.15.1. Modularity.
- 1.15.2. Built-in-test. (BIT).
- 1.15.3. Built-in-test equipment (BITE).
- 1.15.4. Testability.
- 1.15.5. Repair or discard.

1.16. The LORA data required to execute the LORA model(s) and the sources to provide that data (eg MOD, contractors, sub-contractors, vendors, test agencies).

1.17. The sensitivity analysis requirements and proposed ranges of particular data elements to quantify the uncertainty of design and programme characteristics.

Format and Presentation

ADOBE PDF
Microsoft Office

Allocated Responsibilities

Customer owner - MOD ILS Manager
Supplier Owner – ILS Manager
Customer Assurance SEOC Team Representative
Supplier Assurance Quality Manager

Quality Assurance

Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified

ILS Product Description	
Product Title Level Of Repair Analysis (LORA) Report	**Product Description Identifier** PD1008-01

Description Synopsis

This product description contains the format and content instructions generated by the task requirement as specified in the contract. The MOD accepted LORA Programme Plan forms part of the contract and defines the specific LORA task requirements.

Purpose

The principal use of LORA Report is to advise the MOD of the results arising from the contractor LORA tasks and for determining contractual compliance

The LORA Report documents, in detail, the results of the activities set out in the LORA Programme Plan performed by the contractor in compliance with SA Task and as defined in the Contract. The report documents and supports the analysis and subsequent recommendations on the economic, and operational advantages with reference to the following:

a. Repair versus discard at failure.
b. Optimum repair level.
c. Support equipment (including test programme sets, built-in-test equipment, and discrete test equipment).
d. Maintenance facility requirements.
e. Maintenance and supply support life cycle costs.
f. Spare parts provisioning.
g. Specific design alternatives for each of the items undergoing LORA.

This report also documents data input into the LORA model(s) and the sources of the data. Also documented is a baseline output product from the execution of the LORA model(s).

This Product Description shall be used in conjunction with PD1007-01 LORA Programme Plan.

Full Description \ Product Composition

1. The LORA Report shall include the following:
   1.1. A statement of the LORA performed and descriptions of each maintenance alternative, location and operational scenario considered for: test, measurement and diagnostic equipment; maintenance personnel; built-in-test equipments; supply and maintenance facilities.
   1.2. The LORA model(s) used. A LORA model is defined as a computerized, or manual, mathematical model, or technique used to compare the relative economics and performance levels of the viable repair or discard options.
   1.3. The contractor’s level of repair or discard recommendation for each item undergoing LORA. The items subjected to LORA are those listed in the MOD approved LORA Programme Plan. Included is a brief discussion of the compatibility of the LORA recommendations with the operational (both performance and support) and technical (reliability and maintainability design factors) requirements of the system.
   1.4. Any recommended repair or discard level discussion, where cost is irrelevant due to operational and/or support requirements. Also to be explained are the non-economic considerations which may result in a different decision from those based on economic factors.
   1.5. Identification of any economic benefits to be achieved under warranty or any form of contractor support.
   1.6. A listing of the LORA model data elements utilized and numerical values used for each data element in analysing level of repair and discard

alternatives. A reference to the origin of numeric data for each data element is to be included. A description is to be included of the method or methods used for deriving any estimated data. The description, in particular, shall cover the rationale to support the reliability and maintainability values used in the LORA (together with the source for those values) and justification of any derivation or allocation from the required values. Any estimated values are also covered in the sensitivity analysis discussion.

1.7. A definition of the sensitivity analysis performed along with the results. The discussion shall include the identification of the LORA model data elements varied as part of the sensitivity analysis and the specific numerical range used, rationale for that range, and the identification of each numerical value varied which impacts on the contractor LORA recommendation. The discussion of the sensitivity and analysis is intended to qualify the uncertainty of design and characteristics by providing a measure of the validity of the LORA recommendations.

1.8. A definition of the sensitivity of the LORA decisions. This definition is included as part of the sensitivity analysis and shall include the identification of the detrimental aspects of choosing alternatives, other than those selected as optimum when considering economic, non-economic and operational advantages.

1.9. Recommendations for updating any maintenance and logistic support planning factors.

1.10. Identification of any recommendations made for updating planning factors related to maintenance and logistic support based on the LORA. Also discussed are the established operational and readiness requirement limitations and effects that are taken into account when making level of repair and discard recommendations.

1.11. A tabulation of the complete system or equipment items analysed. An explanation of how the reference to the tabulation is to be included if SA is not invoked. Also included are the LORA recommendations resulting from the present analysis along with any previous MOD accepted recommendations or decisions made from past analysis.

1.12. A listing of the outputs generated by the execution of the LORA model(s) for the items under analysis.

1.13. The documentation of the level of repair and discard decisions made by the MOD after the review of the contractor's repair or discard recommendations. The decisions could range from full acceptance to deferral. The decisions documented are to be considered as interim and may change if conditions in the programme change. This section shall be considered as a planning tool. Great care shall be given in determining and documenting the interim level of repair and discard decisions because of the impact and cost associated with planning for a specific maintenance structure which may change. The sensitivity analysis discussion will be used to determine the risks involved in making a level of repair and discard decision.

1.14. A comparison of any similar system/equipment identified and their maintenance structures against the system/equipment under analysis.

1.15. The identification of any constraints that were levied against the similar equipment that influenced the level of repair and discard decisions on those equipments.

1.16. The identification of specific components and assemblies that have established maintenance structures that are to be used by the equipment under analysis.

1.17. An indication and a discussion of how the LORA source data is used for the similar equipment, to include recommendations for updating the logistic

planning factors for the equipment under analysis, based on the LORAs conducted on the similar equipment under review. 1.18. A justification of any recommendations to the equipment designer to influence the design of the system under development. 1.19. Identification of recommended actions by the equipment designer to incorporate the LORA decisions into the system or equipment. 1.20. A description of problems, conclusions, assumptions, exceptions, and actions required.
Format and Presentation ADOBE PDF Microsoft Office
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified

ILS Product Description	
Product Title Technical Documentation Management Plan (TDMP)	**Product Description Identifier** PD2001-01

Description Synopsis

This Product Description identifies and describes the Technical Documentation Management Plan (TDMP). The TDMP shall explain the general procedures, terms, and conditions governing the planning, selection, preparation, and delivery of documentation required for the maintenance, operation, and training support of the equipment.

Purpose

The TDMP is used by the MOD to evaluate, monitor and accept the production of the contractor's technical documentation.

Full Description \ Product Composition

If there is no data or text requirement in any of the sections or subsections, the contractor will enter 'NOT APPLICABLE' and justify the reasons. The TDMP shall follow the format and content as listed below. It shall detail the timescales for the required deliverable

Detailed Requirements

1. The TDMP shall include as applicable:
    - 1.1. A description of the method for developing documentation.
    - 1.2. The system for utilization of information from SA, operational requirements data, engineering data, operator data and test data.
    - 1.3. Methods for achieving consistent and common use of data.
    - 1.4. Use of standards and specifications.
    - 1.5. How the integration and associated activity, and subcontractors' efforts, are related and controlled.
    - 1.6. Documentation development plan and approval procedures.
    - 1.7. Preliminary documentation development and distribution methods.
    - 1.8. First verification procedures.
    - 1.9. Second verification procedures.
    - 1.10. In-Process Review procedures, controls and schedules.
    - 1.11. System for storage and retrieval of data and method to prevent duplication of data already developed.
    - 1.12. DM preparation and control.
    - 1.13. Method of handling routine and priority changes and supplements.
    - 1.14. Documentation status reporting.
    - 1.15. Control of classified information.
    - 1.16. Methods of incorporating engineering changes, and instructions/information furnished by the MOD, for inclusion in documentation.
    - 1.17. A statement of the method by which a determination will be made in the following areas:
        - 1.17.1. Identification of existing MOD documentation that covers the equipments required by the contractor, or can be made suitable through supplements, changes or revisions.
        - 1.17.2. Identification of existing commercial documentation that covers the referenced equipment or can be made suitable through the preparation of supplements.
        - 1.17.3. Identification of equipments which require new documentation for acceptable support.
    - 1.18. Identification of risks to the successful completion of the documentation effort, particularly those factors not within the control of the technical documentation organization, and associated proposals for risk containment.

1.19. The plan shall include a brief description of the contents of each deliverable or groups of deliverables. These descriptions shall include:
1.19.1. References to specific sections of the applicable specification to indicate the extent of compliance and non-compliance with the requirements.
1.19.2. Any special features or innovations of this documentation programme.
1.19.3. Projected requirements for new presentation techniques based upon peculiarities of equipment configurations and design.
1.20. Procedures used to ensure the schedule for release of documentation recognizes any interrelated document dependencies.
1.21. An indication of the guidance sections that shall be treated as mandatory shall be identified as an annex to the TDMP
2. The TDMP shall detail the timescale for delivery of the following as required:
2.1. Data Modules Requirements List (DMRL) (PD2002-01).
2.2. Final Deliverable (IETP) (PD2003-01).
2.3. Delivered Publications Data Base (DPDB) (PD2004-01).
2.4. Final Publication Data Base (FPDB) (PD2005-01).

Format and Presentation
ADOBE PDF
Microsoft Office

Allocated Responsibilities
Customer owner - ILS Manager
Supplier Owner – ILS Manager
Customer Assurance - SEOC Representative
Supplier Assurance - Quality Manager
MOD SME - DES JSC SCM-EngTLS-TD-AG

Quality Assurance
Quality method Formal Review
Performance Indicators – Not Specified
Quality check skills required
Customer MOD ILS Level 2 licence
Supplier Not Specified

ILS Product Description	
Product Title Data Module Requirements List (DMRL)	**Product Description Identifier** PD2002-01
Description Synopsis This product description identifies and describes the Data Module Requirements List (DMRL). The DMRL forms part of the Technical Document Management Plan (TDMP). The format shall be as detailed at time of contract. The content of the DMRL shall include all Data Modules (DM) required to support the equipment.	
Purpose To identify the detailed content requirements of electronic technical documentation produced in accordance with ASD S1000D.	
Full Description \ Product Composition 1. The information to be presented for each DM shall consist of the following as a minimum: 1.1. DMC (Data Module Code). 1.2. DM title. 1.3. Issue Number. 1.4. Issue Date (This shall be the date the DM was issued). 1.5. QA Status of the DM. 1.6. Classification of the DM. 1.7. Source SA Configuration Identifier. 2. The DMRL shall be delivered to the MOD ILS Manager prior to authoring start and re-issued as necessary prior to scheduled ILS TD working group meetings.	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - ILS Manager Supplier Owner – ILS Manager Customer Assurance - SEOC Representative Supplier Assurance - Quality Manager MOD SME - DES JSC SCM-EngTLS-TD-AG	
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 1 licence Supplier Not Specified	

ILS Product Description	
Product Title Final Deliverable Interactive Electronic Technical Publications (IETP)	**Product Description Identifier** PD2003-01
Description Synopsis This product description identifies and describes the Final Deliverable Interactive Electronic Technical Publication (IETP), which consists of the Final Publication Database (FPDB) with all the necessary links implemented and output formatting instructions incorporated for hosting on the selected viewer/browser.	
Purpose To identify the content and format of Interactive Technical Publications	
Full Description \ Product Composition 1. General. The format and content required for the production of the Final Deliverable IETPs is given in ASD S1000D 2. The type of IETP to be delivered shall be as specified within the contract.	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - ILS Manager Supplier Owner - ILS Manager Customer Assurance – SEOC Representative Supplier Assurance - Quality Manager DES JSC SCM-EngTLS-TD-AG	
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified	

ILS Product Description	
Product Title DELIVERED PUBLICATION DATA BASE (DPDB)	**Product Description Identifier** PD2004-01
Description Synopsis This product description defines a Deliverable Publication Data Base (DPDB). The DPDB is the master database of all Data Modules (DM) that have been created or selected for use in support of a specific equipment or project.	
Purpose The content of the DPDB shall be all DM applicable to the equipment / project and shall comply with the agreed DMRL.	
Full Description \ Product Composition The DPDB shall contain all DM and associated information objects required to maintain, support and operate the contracted equipment. The DPDB shall contain all data modules required and associated information objects to generate both electronic and paper technical publications.	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance –SEOC representative Supplier Assurance - Quality Manager MOD SME - DES JSC SCM-EngTLS-TD-AG	
Quality Assurance Performance Indicators Quality check skills required – ASD S1000D technical knowledge	

ILS Product Description	
Product Title FINAL PUBLICATION DATA BASE (FPDB)	**Product Description Identifier** PD2005-01
Description Synopsis This product description defines a Final Publication Data Base (FPDB).	
Purpose The purpose of the FPDB is to allow a project to take delivery of a fully formatted and populated database where the project select a 3rd party to provide their IETP.	
Full Description \ Product Composition The format of the FPDB is based on the DPDB and the content shall be all selected DM and related information objects from the DPDB that are being utilised for the project. Detailed Requirements 1. The FPDB shall contain all the DM and associated information objects, including all the necessary links defined to allow the production of a final deliverable IETP, required to maintain, support and operate the contracted equipment. 2. The FPDB is based on the DPDB. It shall contain all DM and associated information objects selected for use for a specific equipment / project with all generated links and cross reference hyperlinks defined (as detailed in ASD S1000D).	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance - SEOC Representative Supplier Assurance - Quality Manager MOD SME - DES JSC SCM-EngTLS-TD-AG	
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence / ASD S1000D detailed technical knowledge Supplier Not Specified	

ILS Product Description	
Product Title Supply Support Strategy	**Product Description Identifier** PD3001-01

Description Synopsis
This PD describes a strategy for the ILS element of Supply Support. The SS Strategy

Purpose
For the customer (MOD) to identify their SS requirements for the through-life delivery of Supply Support to the supplier (contractor(s)).

Full Description \ Product Composition
The supply support strategy shall seek to harness innovation and industrial power to facilitate optimised and integrated commercial solutions. However it shall be developed within Key Support Areas (KSAs) of the Support Solutions Envelope (SSE), specifically:

KSA 1 - Logistic Support and Sustainability;
KSA 2 - Supportability Engineering;
KSA 3 – Supply Chain Management;
KSA 4 - Logistic Information.

Responsibility for initial development of the strategy lies with the PT in conjunction with the Programme Support Office. It must be included within the project Through Life Management Plan (TLMP).

SS Deliverables
The Supply Support strategy will detail the project Supply Support procedures(SSPs) and cover the following SS deliverables:

1. Supply Support plan.
2. Design for Supply Support.
3. Delivery of Supply Support.
4. Monitoring and review of Supply Support procedures.

Areas to be addressed in the strategy:

a. **Logistic Support & Sustainability.** The ability to provide logistic support / sustainability to conduct operations (generate, deploy, operate and recover contingent forces) as defined by Defence Planning Assumptions (DPAs).
b. **Engineering and Asset Management.** For safety and engineering purposes certain high value and critical assets are governed by specific policy. Engineering Managed Items (EMIs) are tracked through-life by a unique serial number which has to be recorded on MOD Logs/E&AM IS on receipt of the item. It is important to ensure that EMIs are easily identifiable at point of delivery to ensure the appropriate procedures governing the receipt, storage, maintenance and issue of assets controlled under EMI policy can be implemented. Further information can be found in JSP 886 Volume 7 Part 5.
c. **Material Flow.** The aim of Material flow is the creation of a lean and agile supply chain that offers speed, certainty and low total cost.
d. **Industry and Innovation.** The supply support strategy / solution shall seek to harness innovation and industrial power to facilitate optimised and integrated commercial solutions.
e. **Contractors Support to Operations.** The use of contractors to support operations.
f. **IKM and Logistic C4I.** Requirements for effective Information and Knowledge Management (IKM) and a reliable, secure and coherent approach to Logistic Command, Control, Communications, Computing and Information (C4I), to maximise the availability of logistic information and improve asset visibility and logistic decision making. This seeks to maximise the availability of logistic information, enable asset visibility and improve logistic decision making.
g. **People and Training.** The timely provision, retention and sustainment of the

optimum mix of support personnel, correctly trained and resourced.

h. **Whole Life Costing (WLC) and Cost of Ownership.** The critical examination of the Cost of Ownership of Defence equipment, taking full account of the longer-term implications of acquisition, including operating, training, supporting, sustaining and disposal.

i. **Resource Management.** The management of financial processes in order to ensure optimum utilisation of resources with due regard to propriety, regularity and value for money.

j. **Environment and Safety.** The compliance with appropriate E&S legal, regulatory and policy requirements.

k. **Supply Support Budget.** The Supply Support budget will develop as work on the Key Support Areas progresses and must form an integral part of the Business Case for Initial and Main Gate Submissions. Responsibility for the budget lies with the Programme Board and the PT.

Format and Presentation

ADOBE PDF
Microsoft Office

Allocated Responsibilities

Customer owner - Programme Board Equipment and Logistic Support DLOD owners
Supplier Owner – Project ILSM
Customer Assurance – CIWG/AWG
Supplier Assurance – TLS SEOC SSO

Quality Assurance

Quality method – Formal review
Performance Indicators None Specified
Quality check skills required

ILS Product Description	
Product Title Supply Support Plan	**Product Description Identifier** PD3002-01

Description Synopsis

The Supply Support Plan provides the Supply Support elements of the Integrated Logistic Support Plan (ILSP)

Purpose

The Supply Support Plan is the means by which the supplier (contractor) effectively demonstrates how they will plan, design, deliver and monitor supply support to the customer (PT ILSM).

Full Description \ Product Composition

SUPPLY SUPPORT (SS) PLAN - EXAMPLE OUTLINE

1. Introduction
2. Principles
3. Aim
4. Scope
5. Supply support organisation
6. Departmental responsibilities
7. General strategy, eg Proposed policy or options to be considered including the supply of any spares package
8. Schedule of SS milestones
9. Stakeholder management
10. Monitor and evaluation of through-life SS - Refer to the use of modelling tools to identify the most economic repair parts and spares package needed to support the operation and maintenance of the equipment at all maintenance levels in conjunction with the SA activities
11. Project supply documentation including Illustrated Parts Catalogues and/or Illustrated Spare Parts Lists. Processing of the Maintenance Planning data to identify the spares to be included in the TD.
12. Initial Provisioning (IP) (DEFCON 82) - detailed requirements for:
    a. IP responsibilities - Define the procedures for electronic spares procurement.
    b. IP guidance conferences.
    c. Pre-Assessment Meetings and timescales.
    d. Initial Provisioning List (IPL) compilation -the level of breakdown; the presentation, size and number of IPL; the management and interpretation of specific data elements; and parts data commonality.
    e. The preparation, process, presentation and layout of IPL's.
    f. The preparation, control and distribution of illustrations.
    g. Updating of IP data - the management and administration of updates and corrections.
    h. The generation, format and management of observations.
    i. The structure and format for the electronic data interchange (EDI) (DEFFORM 30).
13. NATO codification - Responsibilities for codification and definition of procedures and processes to be used to identify those that need codification. (DEFCON 117)
14. Order Placement – eProcurement procedures.
15. Re-provisioning/Inventory management & optimisation.
16. Pipeline times - Briefly describe supply support plans for crisis/war.
17. Packaging including the use of Special to Type Containers (STCs) (DEFCON 129).
18. Handling – Mechanical Handling Equipment requirements and transportability.
19. Storage/Shelf life requirements.
20. Transportation.

21. Delivery arrangements. 22. Labelling/Bar Coding (DEFCON 129). 23. Soft Consumables. 24. Health and Safety (Safety Data Sheets in accordance with DEFCON 68 (Supply of Data for Hazardous Articles, Materials And Substances). DEFCON 624 (Use Of Asbestos In Arms, Munitions Or War Materials) must be included in all Invitations To Negotiation (ITNs) 25. Engineering Drawing Provision.
Format and Presentation ADOBE PDF Microsoft Office
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer Assurance – TLS SEOC SSO Supplier Not Specified

ILS Product Description	
Product Title Initial Provisioning Guidance Conference Requirements	**Product Description Identifier** PD3003-01

Description Synopsis

This product description identifies and describes the issues to be addressed at the Initial Provisioning (IP) Guidance Conference.

Purpose

For customer and supplier to agree the contractual requirements to be satisfied prior to any provisioning activity.

Full Description \ Product Composition

1. Essentiality of data elements are determined and agreed together with the requirement and frequency of messages; and most importantly of all the content of the Interchange Agreement is finalised. The requirements for testing must be agreed. For example the following aspects must be determined:
   1.1. The level of testing: at the interface or at database level.
   1.2. The responsibility for the production of test data.
   1.3. The method to be adopted for the evaluation of the results of testing.
2. Agreement must be reached on maintenance concepts and support policies and timescales for undertaking the IP programme. The main outputs will be an agreed IP programme and completed IP Guidance Document.
3. The format and content required for the production of the results will be in the form of minutes which will be used to formulate the IP Guidance Document (PD3003-02)

Detailed Requirements

1. The IP Guidance Conference will be jointly chaired by the PT ILSM, or nominated representative, and the contractor's ILS manager, or nominated representative.
2. The conference will be called by the MOD at a date and time agreed with the contractor.
3. The conference shall be held at the contractor's premises where suitable conference facilities shall be provided. The minutes shall be prepared in accordance with PD3003-01, as specified.
4. The conference format and agenda shall cover a list of topics which shall be developed and tailored to suit individual project requirements. The following shall normally be included in the agenda:
   4.1. Confirmation and explanation of the contractor's approach to IP in order to reflect the developing maintenance concept and support policy.
   4.2. Establishment of the level of IP presentation required.
   4.3. Outline for the IP programme.
   4.4. Timescales for the IP programme.
   4.5. Requirement for advance part-number orientated Initial Provisioning Lists (IPL).
   4.6. Customer's support parameters on which all spares recommendations shall be based.
   4.7. Parts data commonality.
   4.8. Concurrent ordering of production, and spare, line replaceable items, together with any procedures to be followed.
   4.9. Deviations from the IP process as defined in JSP 886.
   4.10. Codification requirements.
   4.11. Identification of applicable data elements, agreement on their interpretation, and allocation of appropriate codes to be used in the project.
   4.12. Implementation of appropriate Interchange Agreements.
   4.13. Contractor's and customer's IT systems to be used in the IP process, and

confirmation of their availability and timescales predicated by the IP Programme Plan. 4.14. Parameters for a test programme for data exchange. 4.15. Procedure for handling observations. 4.16. Procedure for the placement of IP orders. 4.17. Requirement for an IP guidance document. 4.18. Production and delivery of illustrated parts documentation. 4.19. Arrangements for the conduct of pre-assessment meetings. 4.20. Implications of any arrangements for contractor support on the IP process. 5. The discussions at the IP Guidance Conference shall be conducted 'without prejudice' and shall not affect the rights and liabilities of the parties to the contract.
Format and Presentation ADOBE PDF Microsoft Office
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified

ILS Product Description	
Product Title Initial Provisioning Guidance Document	**Product Description Identifier** PD3003-02

Description Synopsis

The results of the IP Guidance Conferences will be incorporated into a formal Guidance Document which will provide details of the requirements for agreement between MOD and contractor. The IP process and supporting procedures may be tailored on a project specific basis and requirements agreed between the customer and contractor.

Purpose

The IP Guidance Document will define the detailed methods by which the initial spares support requirements are identified, listed and presented to the MOD ILSM. Within IP, options exist for selection of data elements and the use of messages. The Guidance Document will formally list the topics discussed at the Guidance Conference and will provide a record of the agreements reached.

Full Description \ Product Composition

1. The following are topics which need to be covered by the IP Guidance Document:
   - 1.1. Long Lead-Time Items - Part Number Orientated Initial Provisioning Data Presentations (PNOIPD). The Customer and the contractor must agree at the start of a project what constitutes a Long Lead Time. Items whose manufacturing lead time exceed this period will be the subject of a PNOIPD IPL presentation.
   - 1.2. Size of IPL. Any IP project numbering system that provides a high degree of flexibility in handling the large amounts of data flows will be acceptable. Any such system shall take into account:
     - a. Each Catalogue Sequence Number (CSN)-orientated IPL shall contain a maximum of 5000 lines, unless otherwise identified in the Supply Support Plan.
     - b. An IPL may consist of a number of IP Project Numbers (IPPN).
     - c. An IPPN shall be discrete to the contractor holding the relevant system design responsibility.
     - d. For individual equipment, the content of a single IPPN presentation shall relate to the content of the Illustrated Parts Catalogue (IPC) for that equipment.
     - e. Timescales. If the timescales for the conduct of the IP Programme vary from those published, revised flow charts will be provided by the Customer in the Supply Support Plan. eg, the need for the deferment of spares quantification modelling or order placement.
   - 1.3. Illustrations. The medium by which illustrations shall be provided to support Draft and Master IPL will be stated in the Supply Support Plan.
   - 1.4. Pre-Assessment Meetings (PAM). The PAM is a meeting, normally chaired by the Customer, at which the Customer and the contractor can agree all outstanding observations and the content of the formal IPL. The outcome of the PAM is the Master IPL. Each PAM shall not exceed 5 working days.

Note: Determination of the quantities of spares to be procured involves the following business processes:

- a. Identification of Items for Codification:
  - (1) Codification.
  - (2) Transfer of Item data to MOD Supply System Base Inventory System (BIS).
  - (3) Identification of Items for inclusion in Technical Documentation.
  - (4) Cooperate with Technical Documentation to ensure appropriate

standards are met. (5) Identification of Items for Initial Provisioning (IP). (6) Iterative determination of range and scale of spares; including appropriate modelling. (7) Screening against existing Defence Inventory to prevent duplication of supply. (8) Procurement of IP and transfer of Contract data to Supply System. (9) Transfer of unique asset identification data to MOD asset management system for Engineering Managed Items.
Format and Presentation ADOBE PDF Microsoft Office
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified

ILS Product Description	
Product Title Initial Provisioning List (IPL)	**Product Description Identifier** PD3003-03

Description Synopsis

There may be numerous iterations of an IPL. The ASD S2000M process has the potential for a Draft, Formal and Master IPL. The process will be agreed between the MOD and contractor at the IP Guidance Conference before the IP programme commences.

Purpose

The IPL is the means by which the supplier (contractor) identifies lists and presents the recommended spares and S&TE required to support the equipment/platform for the Initial Support Period to the customer (MOD ILSM).

Full Description \ Product Composition

1. The IPL will contain categories of spares scaling requirements for consideration and include:
   a. Initial outfit of spares for operational support
   b. Initial outfit of spares for depot support
   c. Installation and setting to work spares
   d. Spares for support and test equipment
   e. Whole life buys
2. Draft IPL. After the first compilation of data the contractor provides the Draft IPL (preferably by electronic means) to the Customer. The Customer must review the contents of the Draft and make observations as required to the contractor. The Draft IPL is also used to initiate the NATO Codification process. contractor to issue, PT-ILSM to review.
3. Formal IPL. On receipt of the Customer's observations, the contractor will amend his database whenever he accepts the Customers observations. Additionally, the contractor will also incorporate the results of the codification process and will prepare the Formal IPL for presentation and consideration at the Pre-assessment Meeting.
4. Pre-assessment Meeting (PAM). PAMs are normally held at the Manufacturer's works, where he is required to make the equipment and engineering drawings available for inspection. The outcome of the PAM will be a set of agreed changes to the Formal IPL which will be incorporated into the Contractors database and issued as the Formal IPL. Formal IPL are normally produced in hardcopy. The contractor is responsible. The purposes of the PAM is to:
   a. Familiarise the Customer with the equipment to be supported.
   b. Review the Customer's observations on the IP Data and to agree any actions necessary.
   c. Review any NATO codification queries.
   d. Allocate any outstanding codes, including Customer-supplied codes.
   e. Approve the IP data.
5. Master IPL. The Master IPL is the final version of the provisioning documentation agreed by the Pre-Assessment meeting. It is used by the Customer to establish his Provisioning and Ordering Processes. The contractor is responsible.
   a. Data Elements required in the IPL
   b. Manufacturers Part Number
   c. Manufacturer
   d. NSN (if already codified)
   e. Short item name
   f. Unit of Issue
   g. Pre packed quantity
   h. Materiel Accounting Classification Code (Provided by DE&S PT)

i. Recommended base quantity
j. Recommended deployed quantity
k. Engineer Managed Item Indicator
l. Periodic maintenance indicator
m. Pre-issue inspection indicator
n. Shelf Life Indicator
o. Packaging level indicator
p. STC indicator
q. Storage requirements
r. Calibration indicator
s. Capital spare indicator
t. Hazardous item indictor
u. Electrostatic item indicator
v. Estimated Item Price
w. Lifetime buy recommendations
x. Quality Assurance documentation indicator

6. Output. The main output of IP will be orders placed for the initial spares and S&TE as agreed on the final agreed IPL during the manufacture phase to be delivered to the customer prior to Logistic Support Date (LSD). Spares and S&TE may be required for installation, trials and setting to work prior to LSD.

Format and Presentation
ADOBE PDF
Microsoft Office

Allocated Responsibilities
Customer owner - MOD ILS Manager
Supplier Owner – ILS Manager
Customer Assurance SEOC Team Representative
Supplier Assurance Quality Manager

Quality Assurance
Quality method Formal Review
Performance Indicators – Not Specified
Quality check skills required
Customer MOD ILS Level 2 licence
Supplier Not Specified

ILS Product Description	
Product Title NATO Codification	**Product Description Identifier** PD3004-01

Description Synopsis

NATO Codification uniquely allocates a NATO Stock Number (NSN) to an Item of Supply. This function can only be carried out in the UK by the UKNCB or an official licensed agent of the UKNCB.

Purpose

It is Defence policy that all Items of Supply procured by PTs or by Industrial partners under contractor Logistic Support (CLS) arrangements that are to be demanded, managed or tracked using Log IS within the JSC must be NATO codified.

Full Description \ Product Composition

1. NATO Codification is a disciplined process of Identification, Classification, Naming and Unique Numbering of stores by which all Items of Supply can be identified and recorded in a uniform manner.
2. The selection of items requiring codification is generally based on the Initial Provisioning List (IPL). To do this the MTo ensure that the contractor has procedures in place to obtain all relevant obtain all relevant identifying Part/Standard numbers and source data from OEMs in accordance with DEFCON 117.
    a. To ensure that the contractor has procedures in place to supply UK NCB with the source data. The contractor may wish to :
        (1). Consider employing, or contracting, codification knowledge and experience from an contract cataloguer certified by the UKNCB
        (2). Liaise with UK NCB to ensure they meet UK NCB's requirements and communicate any codification relevant messages.
3. NATO Item Identification. NATO item identification comprises the minimum amount of information required to establish positively what an item is and how it differs from similar items. Item identification consists of the following basic elements:
    a. The Item Name. Two types of Item Name are used in codification:
        (1). Approved Item Name. The Approved Item Name (AIN) is selected and carefully delimited to designate a family of Items of Supply with similar characteristics mostly determined by a definition.
        (2). Non-Approved Item Name. The Non-Approved Item Name (Non-AIN) may be a part name given to an item of production by a manufacturer or an official NATO agency according to professional practice when an AIN is not available.
    b. The NATO Stock Number. The NATO Stock Number (NSN) comprises a unique 13-digit NSN composed of:
        (1). A 4 digit NATO Supply Classification Code (NSC), and
        (2). A 9 digit NATO Item Identification Number (NIIN) comprising:
            (a) A 2-digit National Codification Bureau Nation Code (NC) identifies the nation allocating the NSN.
            (b) A 7-digit Item Identification Number (IIN), which is unique within each nation.
            (c) The NSC is dynamic and can change; however, the last nine digits (NIIN) are unique and will never change.
    c. Characteristic Data. A statement of the necessary supporting characteristic data pertaining to an item, according to the applicable Item Identification Guide, such as length, width, height, material, colour, surface treatment etc recorded in a uniform manner, required to differentiate the item from similar items

4. Item Of Supply Information System (Isis) Database. Data records on all items assigned a UK NSN, or items codified by foreign codification bureau in which the UK has registered interest, are held by UKNCB on the Item of Supply Information System (ISIS) database. “UK interest must be registered on all Foreign NSNs, through UK NCB. Only NSNs registered through UK NCB can be introduced to a BIS”. 5. Supply Management Data. Data gathered upon initial creation (including subsequent amendments to NSNs) are currently conveyed to Service Supply or Inventory Managers by means of an electronic output from ISIS to the relevant BIS. Provision of a minimum mandated data set enable automatic item introduction on SS3, CRISP, or SCCS. Creation of eSMD is the only means through which NSN Item Data Records can be introduced on the 3 main BIS”
Format and Presentation ADOBE PDF Microsoft Office
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 1 licence Supplier Not Specified

ILS Product Description	
Product Title Illustrated Parts Catalogue	**Product Description Identifier** PD3005-01
Description Synopsis An Illustrated parts Catalogue is a component breakdown to the level of repair,, containing text and illustrations. Each chapter is concerned with a major component and is further subdivided.	
Purpose	
Full Description \ Product Composition IPC will be delivered as part of the IETP (i.e. i.a.w. ASD S1000D)	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager	
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 1 licence Supplier Not Specified	

ILS Product Description	
Product Title Re-Provisioning Plan	**Product Description Identifier** PD3006-01

Description Synopsis

MOD materiel accounting policy mandates that PTs must have a plan for re-provisioning in the form of an Inventory Plan.

Purpose

To ensure the right items are available in the right place at the right time for the user. To ensure that the Defence inventory is optimised and cost effective in order to provide value for money.

Full Description \ Product Composition

SECTION HEADINGS IN THE INVENTORY PLAN

GENERAL

1. **Introduction and Scope.** This field must detail the specific platform / equipment / commodity group responsible for the Inventory Plan covering their range to support SSE compliance within Governing Principles (GP) 3.3 and 3.5.
2. **Governance. Involvement of FLCs.** This field must demonstrate the relationship the PT has with the relevant FLC and how the needs of the FLC are reflected in the plan i.e. through reflecting outputs required within the JBAs.
3. **IM Planning Review Process & Integration with the TLMP.** It is anticipated that PTs will undertake regular reviews and consult with FLCs as deemed appropriate to meet business needs.
4. **Performance Management.** This field must detail of how the PT manages its performance, the reporting regime in place, the KPIs that are in use and any targets for continuous improvement agreed with the FLCs.
5. **Roles and Responsibilities.** This field must contain details of the organisational structure supporting the current and future inventory management business model and the roles ascribed. In particular the role of Inventory Planner and Supply Chain Management SME shall be detailed.

FINANCIAL MANAGEMENT

6. **NAO Requirements.** The major NAO requirements including Accounting Assurance, Segregation of Inventory, Stock Financial Position and Financial Statement are detailed below:
    a. **Accounting Assurance.** This field must describe what accounting systems and arrangements are in place for all MOD owned inventory supported by either, Traditional / CLS / CfA / CfC contracts.
    b. **Segregation of Inventory.** This field must detail what segmentation strategies exist within the PTs inventory where the support is via CLS / CfA/ CfC contracts
    c. **Stock Financial Provision.** This field must specify the value, the method of calculation and assumptions made by a PT when generating the Stock Financial Provision figure.
    d. **Financial Statement.** This field must include the tables below, which are to be populated from the most recent Planning Round (PR) information input to provide an overview of the PTs financial position, procurement plans, disposal plans and user consumption.
7. **Total Inventory Value (£M).** Reflects the Opening Balance (on 1 Apr) on Inventory Holdings Both Net Book Value (NBV) and Gross Book Value (GBV) are shown and are broken down by category (Capital Spares, RMC and where applicable, Guided Weapons, Missiles & Bombs (GWMB) as supporting information).
8. **Forecast of JSCS Inventory Activity and Cost.** Under CDMs direction JSCS and D Fin are introducing a charging system by which PTs will be charged for the

services provided by JSCS including receipts, storage, maintenance, issues and distribution.

9. **Disposal Plan (£M GBV of Disposals).** This reflects the target level of disposals for the current financial year, the actual level achieved and the target level of disposals for the next financial year (as shown within the Planning Round and other financial submissions

OPTIMISATION

10. **Analysis and Modelling.** It must detail what segments of the inventory have been analysed/ modelled and give a clear indication of the quality and the depth of that Inventory Analysis utilised to support and justify the level of inventory. In providing the necessary details, the plan shall address the following:
    a. **Ranging and Scaling Activity.** How was or will this activity be sourced? In-house, through SCM-SCO or through a commercial contractor?
    b. What Optimisation Tools and Methodologies have been or will be applied to the Subject Inventory? This might range from simple engineering judgement, single item modelling through to Multi-Indenture Multi-Echelon (MIME) modelling analysis.
    c. When was the Analysis Undertaken or last Reviewed and what was its Purpose? The PT shall detail the date and designated key point on the CADMID cycle when analysis occurred or is planned to occur next?
    d. What approach is evident to the Management of Repairables / Reverse Supply Chain Pipeline Time? (RSCPT). The PT shall details how repairables are being managed, reviewed and optimised in relation to Initial Provisioning (IP) and Re-provisioning (RP) and what measures a PT has in place to improve the performance of its repairables within the inventory.
    e. Are there any reasons that legitimately impede further inventory optimisation? Such as Inventory level influences such as CLS / IOS / CfA / CfC, current or future, whereby inventory has yet to pass to the contractor, or is being held on balance sheet until consumed or reviewed by the contractor for disposal.
11. **Segmentation.** This section must detail what work has been done to segment the inventory to understand key business drivers in terms of value, volume and frequency. Areas of segmentation can include:
    a. **Codification of the Inventory.** This field must detail the PTs mandated requirement to meet single item ownership policy and for all items entering the JSC to be NATO Codified which is a key enabler for handling and tracking inventory through the JSC in support of operations.
    b. **Management Controls.** Management controls, bans, restrictions and referrals, if not properly managed and, processed within SPC transaction times and reviewed periodically for relevance, can have a detrimental effect on the Supply Chain's ability to deliver within set targets.
    c. **Obsolescence.** The plan must articulate a PT's in-service item obsolescence management strategy.
    d. **Special Inventory Holdings.** Requirements to hold Operational Stocks, Force Generation, Sustainment Inventory (War Reserves, Priming Equipment Packs and Deployable Spares Packs).
    e. **Earmarked Inventory.** Inventory that has earmarking against a specific programme (eg repair, a specific task, a modification programme incorporating planned in service obsolescence).
    f. **Reserved Inventory.** Inventory subject to Memoranda of Understanding (MOU) (eg where other countries are involved and also some CLS / IOS / CfA / CfC arrangements, etc).
    g. **'Life of Type' Procurement.** Only 'Life of Type' quantities expected to be consumed within the Out of Service Date.

h. **Suffix Stock.** Air Operating Centre PTs are to articulate when the last Suffix Stock review has taken place, the number of items, the value of inventory involved and the percentage breakdown for retained, task for repair and inventory identified for disposal.

i. **Non Conforming Receipts (NCRs).** PTs are to articulate the processes in place within their control that ensure that no NCRs are outstanding over the OC / JSCS agreed timescale of 12working days.

12. **Disposal Plan.** As part of Through Life Management Planning a PT must have a Disposal Plan covering planned obsolescence, equipment and materiel out of service management.
13. **Data Availability to Support Inventory Analysis.** It must detail the PTs data management strategy irrespective of the support solution selected and must include its availability, source, method of transfer across Information Systems and the level of confidence in the integrity of raw data to support Inventory Analysis, supply, engineering and financial accounts.
14. **Risks And Assumptions.** This field must detail the planning assumptions used in the creation and maintenance of the Inventory plan together with highlighting areas of risk and how these will be mitigated.

Format and Presentation
ADOBE PDF
Microsoft Office

Allocated Responsibilities
Customer owner - MOD ILS Manager
Supplier Owner – ILS Manager
Customer Assurance SEOC Team Representative
Supplier Assurance Quality Manager

Quality Assurance
Quality method Formal Review
Performance Indicators – Not Specified
Quality check skills required
Customer MOD ILS Level 2 licence
Supplier Not Specified

ILS Product Description	
Product Title Supportability Case	**Product Description Identifier** PD4001-01
Description Synopsis The supportability case is a reasoned auditable argument created to support the contention that a defined system will satisfy the support requirements of a project.	
Purpose To provide auditable evidence that support requirements have been adequately addressed.	
Full Description \ Product Composition 1. The Supportability Case is defined as: “A reasoned, auditable argument created to support the contention that a defined system will satisfy the Support requirements of a Project”. Starting with the initial statement of requirement, it will subsequently include identified perceived and actual risks, strategies and an Evidence Framework referring to associated and supporting information, including Support related evidence and data from design activities, trials, etc., through to In-Service and field data as appropriate and also record any changes. 2. The supportability case is a top-level control document that will be updated periodically through the issue of Supportability Case Reports linked to an Evidence Framework. 3. The Supportability Case is, therefore, a progressively expanding body of evidence whose currency and relevance shall be maintained in order to inform the Through Life Management decisions for the Project. The supportability case will contain or provide a link to a configuration controlled set of supportability requirements for a product. 4. The supportability case reference one or more supportability case reports that will contain the following: a. Supportability requirement under scrutiny and success criteria. b. Identified SA process outputs that address the requirements. c. Any Assumptions necessary due to the incomplete nature of the SA. 5. Evidence or preferably links to configuration controlled outputs of the SA process that provide evidence the SA requirements are being met.	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager	
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 2 licence Supplier Not Specified	

ILS Product Description	
Product Title Supportability Case Report PD	**Product Description Identifier** PD4002-01
Description Synopsis Supportability Case Reports are periodic updates to the Supportability Case (usually at predetermined points in the programme as agreed in the Evidence Framework. They report on the evidence, arguments and conclusions drawn from work since the last report provide an assessment of overall Support related achievement/progress and a review and evaluation of the ILS Strategy and Plan	
Purpose To update the supportability Case. The Supportability Case is defined as: "A reasoned, auditable argument created to support the contention that a defined system will satisfy the Support requirements of a Project". Starting with the initial statement of requirement, it will subsequently include identified perceived and actual risks, strategies and an Evidence Framework referring to associated and supporting information, including Support related evidence and data from design activities, trials, etc., through to In-Service and field data as appropriate and also record any changes.	
Full Description \ Product Composition Relationships links to other supportability case reports; Supportability requirements addressed listing; Supportability risk addressed listing; Evidence of requirement fulfilment; Supportability related Project milestone status; Product deliverables addressed during this report; Process deliverables addressed during this report; Links to external configuration controlled ILS products fulfilling requirements; Evidence of risk avoidance; Links to external configuration controlled ILS products implementing risk avoidance; Evidence of risk mitigation; Links to external configuration controlled ILS products implementing risk mitigation; SA Tasks addressed during this report; ILS elements addressed during this report; ILS task/Element maturity summary analysis; Proposed activities over next period	
Format and Presentation ADOBE PDF Microsoft Office	
Allocated Responsibilities Customer owner - MOD ILS Manager Supplier Owner – ILS Manager Customer Assurance SEOC Team Representative Supplier Assurance Quality Manager	
Quality Assurance Quality method Formal Review Performance Indicators – Not Specified Quality check skills required Customer MOD ILS Level 1 licence Supplier Not Specified	