Ministry of Defence

JSP 886
DEFENCE LOGISTICS SUPPORT CHAIN MANUAL

VOLUME 7
SUPPORT ENGINEERING

PART 8.05
TECHNICAL DOCUMENTATION

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CHAPTER 1: TECHNICAL DOCUMENTATION POLICY

CONTEXT

1. This part of JSP886 Volume 7 part 8.05 provides the key points of policy and guidance in the selection of the type and appropriate level of Technical Documentation (TD) for Through Life Support (TLS).

2. Technical Documentation is defined as the information necessary to operate, maintain, repair, support and dispose of equipment throughout its life.

3. The aim of this Chapter is to provide Project Teams with detailed Policy that will ensure they can provide a suite of Technical Documentation for the Platform, Systems or Equipment (PSE) allowing it to be managed, operated and maintained effectively, efficiently and safely. To achieve this aim, the various users of the Technical Documentation including operators, maintainers, managers and contractors, must be able to access the Technical Documentation wherever they, or the equipment, are deployed.

POLICY

4. It is MOD policy, as directed by Director Inventory Management Operating Centre (IMOC) and the Defence Logistics Working Group (DLWG), that:

a. Technical Documentation shall be produced as Electronic Technical Documentation (ETD) and will be available for all equipment to provide technical support from the first usage, allowing it to be operated, managed, maintained and disposed of effectively, efficiently and safely.

b. The output shall be available as close to the point of use as possible.

c. Technical Documentation is to be kept up to date and relevant throughout its life in accordance with the associated Technical Documentation Management Plan (TDMP).

d. Technical Documentation is to be delivered in a structured, coherent and appropriate format accessible to all users, including support contractors, MOD authorities, establishments and deployed units throughout the world.

PRECEDENCE AND AUTHORITY

5. Ownership of Logistics Policy in support of the Logistics Process falls to the Assistant Chief of Defence Staff Logistics Operations (ACDS Log Ops) as Chief of Defence Materiel (CDM) Process Architect. This role is exercised through the DLWG and the Defence Logistics Steering Group (DLSG) reporting up to the Defence Logistics Board (DLB). It is against this governance framework that sponsorship for Technical Documentation policy is delegated to Head of IMOC. Project teams are required to assess and show compliance with key policies and governance as signposted by the Support Solutions Envelope (SSE) that is available on the Acquisition Operating Framework (AOF) web site: AOF SSE

MANDATED REQUIREMENTS

6. To meet the MOD's legal duty of care obligations, it is a requirement that all PSE are provided with accessible, accurate, relevant and up to date Technical Documentation that is valid and safe to use.

IMPLEMENTATION PROCESS

7. The implementation of this policy at PSE level will be developed and promulgated as a TDMP agreed by stakeholders. The TDMP must consider the following:

a. How the contractual obligations to develop and deliver verified and validated Technical Documentation to the required quality, will align with the Project Programme Plan / Integrated Support Plan(ISP) and the schedules contained within it.

b. How the format and disposition of contents for all Technical Documentation deliverables will be defined.

c. The needs of the users, maintainers and managers alongside the capabilities of the current and future support infrastructure.

8. The TDMP is to be coherent with the requirements set out in the AOF and Support Solutions Development Tool (SSDT): AOF SSDT.

9. Project decisions which adhere to, or deviate from MOD Policy will be agreed and promulgated in the TDMP, taking advice from DES IMOC SCP-TD where necessary.

a. The TDMP will ensure that any Technical Documentation deliverables and the hosting Information Systems are matched to technology levels that Technical Documentation stakeholders (particularly User Units) can accept.

b. First and second verification procedures will be defined in the TDMP, ensuring progressive delivery of Technical Documentation is controlled and verified for accuracy by the nominated issuing authority, prior to the first use of the equipment.

10. The TDMP should be produced during the concept phase of the support solution and the progress towards delivery of Technical Documentation monitored against contractual milestones.

SUPPORT MATURITY LEVELS

11. To enable the project to assess maturity of support for Technical Documentation, Support Maturity Levels (SML) are used. Measures of effectiveness and corresponding project risks for each SML are given in Figure 2, Chapter 7 of this document. Project specific measures of effectiveness are to be agreed with the contractor and are to be included in the development and/or support contract.

12. The concept of SML's is explained in JSP 886 Volume 7 Part 2 Chapter 2.

KEY PRINCIPLES

13. Technical Documentation shall be provided in an appropriate format to meet the aims laid out in Paragraph 4, the Technical Documentation Policy.

14. When deciding on the format to deliver the Technical Documentation, consideration should be given to the through life costs. The delivered solution should:

a. Be integrated with Technical Documentation used on similar PSE with the aim of utilising the same hosting solution

b. Fit with existing document structures

c. Fall under existing management arrangements

d. Enable people to be trained in the same way

e. Demonstrate Value for Money (VfM)

15. It is essential that the delivery of Technical Documentation in support of all projects is timely and meets the agreed criteria for Training Readiness Date (TRD), Logistic Support Date (LSD) In-Service Date (ISD), Initial Operating Capability (IOC) or Full Operating Capability (FOC) as appropriate.

TECHNICAL DOCUMENTATION DELIVERY

16. MOD Policy directs Projects to produce Technical Documentation as Electronic Technical Documentation (ETD). ETD is defined as documentation that is viewed on screen. The various Technical Documentation deliverables attract different functionality, costs and supportability requirements. The project should select the Technical Documentation deliverable most appropriate to the PSE operational needs, user and interoperability requirements. The Technical Documentation solution must be both practical and cost-effective, especially when compared to the Whole-Life Costs (WLC) of the PSE being procured. The delivered Technical Documentation solution must be change managed.

Compliant Publication

17. There are two options for delivery of ETD which are set out in order of precedence below:

a. Interactive Electronic Technical Publications (IETPs).

b. Portable Document Format (PDF).

Interim Publications

18. The following delivery option for UOR interim publications may be considered:

a. Commercial Off The Shelf (COTS) manuals.

ASSOCIATED STANDARDS AND GUIDANCE

19. The following provides details on the associated standards and guidance currently available to assist with the production and maintenance of Technical Documentation

a. Defence Technical Documentation Guidance: (formally JSP(D) 543)

b. DEFSTAN 00-600: Integrated Logistic Support Requirements for MOD Projects.

c. MAA Regulatory publications: Military Aviation Authority publications.

d. AAP 00-001: Defence Aircrew Documentation Specifications (DADS)

e. 2012DIN04-42: Urgent Operational Requirements Standing Instruction Version 7 (UOR SI V7).

f. 2011DIN04-080: Technical Documentation (TD) in the Urgent Operational Requirement (UOR) environment.

g. S1000D: International specification for technical publications using a common source database.

20. Further information, guidance and special instructions for PDF and IETP can be found on the Support Chain Information Services (SCIS) Intranet page: SCIS: Technical Information Services (TIS)

OWNERSHIP AND POINTS OF CONTACT

21. The policy, processes and procedures described in JSP 886: Defence Logistics Support Chain Manual are owned by ACDS Log Ops.

22. The policy for Technical Documentation is sponsored by Defence Equipment and Support (DES) Inventory Management Operating Centre (IMOC) Support Chain Process (SCP) – Technical Documentation (TD). Technical enquiries should be addressed to:

DES IMOC SCP-TD
Cedar 1b #3148, MOD Abbey Wood, Bristol BS34 8JH
Tel: Mil: 9679 35395 Civ: 03067 935395

23. Information regarding Technical Documentation can be found by visiting:

TLS Technical Documentation (TD).

24. Editorial enquires should be addressed to:

ACDS LOGOPS-JSP886 (MULTIUSER)
Larch 3b, #3206, MOD Abbey Wood, BRISTOL, BS 34 8JH
Tel Mil: 9679 80953 Civ: 03067 980953.

CHAPTER 2: TECHNICAL DOCUMENTATION IN THE CADMID CYCLE

INTRODUCTION

1. This chapter assists Project Teams (PT) to identify the key Technical Documentation requirements at or by the major approval points within the Concept, Assessment, Demonstration, Manufacture, In-service and Disposal (Terminate) (CADMID (T)) cycle.

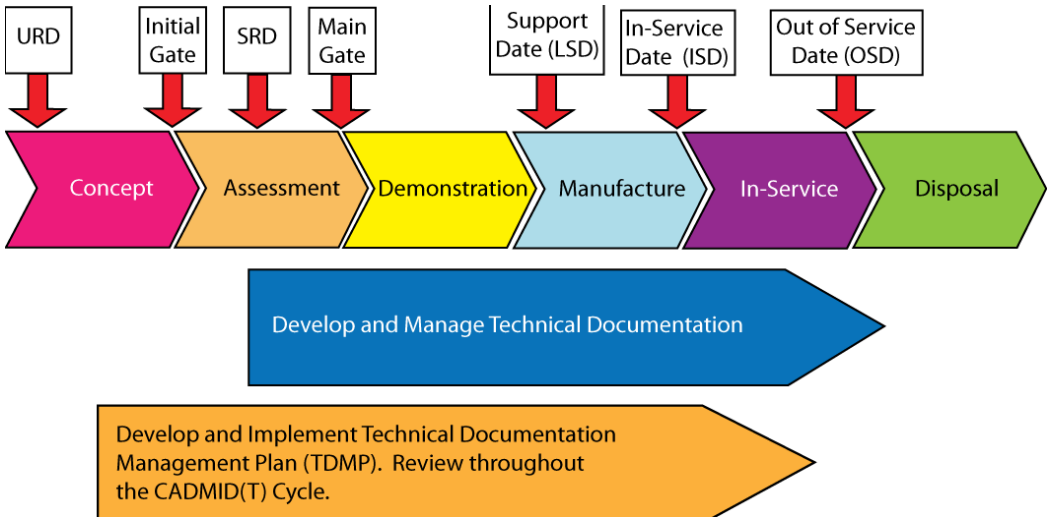
2. The Approving Authorities will expect to see, at the major Decision Points, that a wide range of Acquisition lifecycle Strategies has been considered. The CADMID cycle has two main approval points:

   a. Initial Gate (IG) is the first approval point in the lifecycle. It occurs before any assessment work is undertaken and is considered to be a relatively 'low hurdle'.

   b. Main Gate (MG) occurs after the assessment work has been undertaken and is the major decision point at which the solution is approved. Main Gate approval remains the key investment decision point for Projects, where the risks to successful delivery are considered against the benefit of the proposed solution in meeting an endorsed Defence requirement. Main Gate approval also considers Whole Life Costs across all Defence Lines of Development (DLoD). Crucially, it addresses the support solution as well as the equipment procurement.

3. Each phase of the CADMID cycle involves executing agreed plans from the previous phase, reviewing the outcome, planning for the next phase and outline preparation for the remaining phases. A graphical representation of Technical Documentation requirements in the CADMID cycle is shown in Figure 1.

Figure 1: Technical Documentation in the CADMID Cycle



USER REQUIREMENTS DOCUMENT (URD)

4. The PT shall ensure the requirement for Technical Documentation is clearly articulated within the User Requirement Document (URD). Technical Documentation is one of the Integrated Logistics Support (ILS) elements and shall be outlined within the overall Integrated Logistics Support Plan (ILSP). For more detailed information on the Technical Documentation Management see Chapter 3.

5. Where there is uncertainty or clarification is required the PT shall contact the

Technical Documentation team (DES IMOC SCP-TD), who will provide advice and guidance on all aspects of documentation. Detailed information on URD structure and submission and ILS plans can be found on the Acquisition Operating Framework (AOF).

INITIAL GATE (IG)

6. The PT shall provide evidence of the Technical Documentation requirements as detailed in the Support Solution Envelope (SSE), Support Solutions Development Tool found in the AOF SSE SSDT.

7. The PT is responsible for ensuring it has obtained the appropriate evidence and that its Support Solution is compliant with SSE Governing Policy (GP) 2.6. It will be necessary to demonstrate that agreed standards and specifications associated with the Technical Documentation Support Solution have been adhered to. If Specification ASD/AIA S1000D is deemed appropriate for the project then a Data Module Requirements List (DMRL) will be required and a set of Business Rules drawn up.

SYSTEM REQUIREMENTS DOCUMENT (SRD)

8. The PT shall ensure the requirement for Technical Documentation is captured within the SRD. The solution shall comply with the mandated policy as detailed in Chapter 1 of this document. Detailed information on the SRD structure and submission can be found on the Acquisition Operating Framework (AOF).

MAIN GATE (MG)

9. The PT shall provide evidence of the requirements as documented in the SSE Compliance Tool (CT). The PT is responsible for ensuring it has obtained the appropriate evidence and that its Support Solution is compliant with SSE Governing Policy (GP) 2.6. It will be necessary to demonstrate that agreed standards and specifications associated with the Technical Documentation Support Solution have been adhered to.

LOGISTIC SUPPORT DATE (LSD)

10. The PT must ensure that sufficient Technical Documentation is made available to assist LSD. The Technical Documentation must have been approved, via the In-Service Process Review (IPR) process and verified by LSD. The responsibility for 1st verification, sometimes known as validation, lies with the Prime Contractor and is mandatory. First verification is certified by the Contractor for all Military programmes. The 2nd verification process is the responsibility of the PT and, although this is not a mandatory requirement within S1000D, it is advisable that PT's take measures to ensure that the documentation is accurate and safe to use. Further information on validation and verification is available in DEFSTAN 05-123.

IN-SERVICE DATE (ISD)

11. The PT shall provide evidence of the requirements as documented in the SSE Compliance Tool (CT). The PT is responsible for ensuring it has obtained the appropriate evidence and that its Support Solution is compliant with SSE Governing Policy (GP) 2.6.

OUT OF SERVICE DATE (OSD)

12. The PT shall ensure that Technical Documentation disposal is addressed through the Disposal Plan. If equipment is passed to a third party for sale or scrap the PT must ensure

associated Technical Documentation is up to date. The PT shall also consider contacting their respective museum/historic branch to offer Technical Documentation for historical purposes.

CHAPTER 3: TECHNICAL DOCUMENTATION MANAGEMENT

INTRODUCTION

1. The purpose of a Technical Documentation Management is to capture how Technical Documentation will be managed throughout the CADMID cycle. Technical Documentation management is the process of organizing, storing, protecting, and sharing documents. The Management documentation describes how to manage both the hard copy and electronic repositories of documents, details historical information, and provides a consistent approach to the creation, update and format of documents through life.

ORGANISATION AND ROLES AND RESPONSIBILITIESOVERVIEW

2. Within organisations and individual PT's there are certain roles and responsibilities that are vital when Technical Documentation is required to be produced, delivered and managed through life. The following paragraphs describe those roles and associated responsibilities in general terms. It is the PT's responsibility to determine who carries out those functions.

3. Advice should be obtained from the SCIS Team on Technical Documentation to ensure compliance with Logistic Commodities Services policy on the delivery of Logistic and engineering systems.

Technical Documentation Sponsor

4. **Role.** The Publication Sponsor is the declared owner of the publication. Sponsorship rests with the manager of the platform, vehicle or equipment supported by the publication and, accordingly, is vested in the appropriate PT Leader. The role of the Publication Sponsor is fundamental to the effective implementation of current MOD documentation strategies and particularly to the management of ETD across the Service user base.

5. **Responsibility.** The Sponsor carries the responsibility for identifying the business case for the publication, specifying the requirement and overseeing the publication production, distribution and maintenance life cycle, through to disposal. The Sponsor is to maintain a technical point of contact during the production phase of the publication and thereafter until the publication is obsolete. Sponsors shall ensure a suitable review period for publications and prohibit the use of hand written amendments in place of reissuing the amended publication.

6. **Logistic Commodities Services.** Logistic Commodities Services (LCS) publish SCIS Logistic Commodities and Services Guide for sponsors.

Project Team

7. **Role.** The PT has responsibility for the procurement and management of all aspects of the Technical Documentation required. The PT liaises and deals directly with Contractors and other MOD establishments on Technical Documentation delivery requirements as necessary.

8. **Responsibility.** It is the Integrated Logistic Support Manager (ILSM) responsibility, within the PT, to authorise publication tasks and determine the acceptability of the final delivered materiel, in accordance with the contracted specification(s) and the Technical Documentation policy mandated in Chapter 1.

TECHNICAL DOCUMENTATION MANAGEMENT PLAN

Purpose

9. The purpose of the Technical Documentation Management Plan (TDMP) is to outline the methods that will be used to identify, produce and maintain the Technical Documentation for the PSE. All the Technical Documentation activities and responsibilities will be detailed in the TDMP.

Scope

10. The scope of the TDMP is to show how the Project Technical Documentation team will create, supply and manage the Technical Documentation deliverable to the Authority. This shall also include full identification of the equipment and services that the plan applies to.

Project Details

11. This shall be a short description of the project that the plan refers to and the nature of the intended support solution. The main areas will provide:

a. The name of the Project.

b. A brief overview of the Project

c. A description of the Support Solution. This will include information that will aid the assessment of the TDMP in relation to the overarching Support Solution.

Project Stakeholders

12. Stakeholders are those individuals, groups or organisations who have an interest or stake in a particular project.

Statement of Requirements

13. The Statement of Requirements identifies the key requirements for the project outlining the Authority's Specification and the Contractor's Statement of Work (SoW) for Technical Documentation. It shall contain information relating to the description, operation and maintenance. The requirement must be aligned with current Technical Documentation Policy as laid down in Chapter 1.

Proposal for Technical Documentation

14. The Proposal describes the range and format of information to be supplied. This will include a description of the general Technical Documentation process and a breakdown of the preparation process. If the deliverable is to be in IETP format then development of a DMRL and the implementation of S1000D Business Rules (BR) will be required. In addition how the DMRL & BR's link to the Logistic Support Analysis Record (LSAR) and Parts list will need to be included. There is also a requirement for a breakdown of the production process, including generation of data modules or manuals and validation/sign off procedures.

Delivery

15. The requirement must be aligned with current Technical Documentation Policy as laid down in Chapter 1 and provide a description of the final delivery process, including any final

review / up issue procedures and the delivery schedule. Chapter 4 of this document provides further details on Delivery.

Quality Management System

16. This will provide relevant information on the Quality Management System in force and include a breakdown of the associated Quality Assurance processes.

Status Reporting/Amendments

17. This will specify how any updates are planned relating to data module issue states, control version numbering, and report on the overall process status. This section will also identify and detail how any changes or updates to the documentation are managed.

Risk Management

18. This section will detail how Technical Documentation related risks are managed.

Security

19. This will include a breakdown of material classification and how the classified data will be managed. Consideration shall be given for handling of Export Controlled information, particularly International Traffic in Arms Regulations (ITAR) constraints, during the production of Technical Documentation and for subsequent distribution. Due consideration of the security instructions covered by JSP 440: Defence Manual of Security should be applied.

CHAPTER 4: TECHNICAL DOCUMENTATION DELIVERY

INTRODUCTION

1. An effective and efficient Delivery system for Technical Documentation is vital to enable the flow of information to be controlled and maintained to ensure that Technical Documentation information is accurate, up to date and meets the support requirements of the PSE whilst it is at all stages of the CADMID cycle.

IDENTIFICATION OF THE SUPPORT AND PROVISIONING OF TD

2. It is MOD policy to deliver ETD as close to the point of use as is practically possible. Therefore the identification of support and provisioning to enable this is vital to the success of the project. It is also very important to consider the current Technical Documentation policy requirements as specified in Chapter 1.

TECHNICAL DOCUMENTATION DELIVERY OPTIONS

3. The delivery options of compliant publications are described in Chapter 1. The following Paragraphs provide additional information on these options.

Interactive Electronic Technical Publications (IETP)

4. IETP is one of the deliverables for Electronic Documentation. From a DEFSTAN 00-600 perspective, this requirement can be fulfilled by IETP in SGML, XML, HTML and PDF format. It should, however, be noted that PDF deliverables do not necessarily fulfil the entire IETP requirements as defined in DEFSTAN 00-600.

5. trilogi View (tV) is the corporate IETP viewer accredited for use on DII. Delivery of any alternative Technical Documentation solution must first get approval from both DES IMOC SCP-TD and the DES IMOC SCIS Programme.

6. When a PT elects to have their Technical Publications delivered in IETP format they must ensure that:

a. Data Modules which make up the IETP are constructed using the ASD S1000D Specification.

b. Business Rules (BR) are developed, in agreement with the Design Organisation that will provide the infrastructure to deliver, manage and update the Technical Documentation.

c. The IETP is developed to be viewed using the MOD DII accredited viewer.

Portable Document Format (PDF)

7. PDF is a digital format for representing documents. PDF files may be created natively in PDF form, converted from other electronic formats or digitized from paper, microform, or other hard copy format. Much of this information must be kept for substantial lengths of time; some must be kept permanently. These PDF files must remain useable and accessible across multiple generations of technology. By itself, PDF does not necessarily ensure that the visual appearance of the content accurately reflects any original source material used to create the conforming file; eg the process used to create a conforming file might substitute fonts, reflow text, down sample images or use lossy compression.

Organisations need to ensure that a conforming file is an accurate representation of the original source material.

8. PDF is a file format used to represent documents in a manner independent of application software, hardware and operating systems. Each PDF file encapsulates a complete description of a fixed-layout flat document, including text, fonts, graphics and other information needed to display it.

9. PDF also provides a mechanism for representing electronic documents in a manner that preserves their visual appearance over time, independent of the tools and systems used for creating, storing or rendering the files.

10. PDF files can be created from Word documents, web based content, converted from other electronic formats or digitized from paper.

11. MOD Corporate hosting solution for the PDF delivery method can be obtained from the SCIS Technical Information Services Team .

12. Design Repository Technical Documentation On Line (DR TDOL) is the repository for Technical Information managed by SCIS and provides a tool for the configuration management hosting and viewing of technical publications in PDF format.

13. TDOL is the preferred system for viewing all Joint Service Publications (JSP) and is accessible through DII.

Commercial off the Shelf (COTS) Manuals

14. Commercial off the Shelf (COTS) manuals provide a quick temporary solution to offer Technical Documentation information when speed is of the essence. This is generally considered the minimum acceptable for Urgent Operational Requirements (UORs) but not for conventional Technical Documentation procurement. In essence front cover and preliminary material is added to commercial publications to obtain a recognised reference number, enabling them to be effectively controlled.

15. These are normally readily available Manufacturers Publications that are suitable for issue without amendment.

16. COTS manuals can be an acceptable Technical Documentation delivery solution but only for the Urgent Operational Requirement (UOR) arena. Use of COTS manuals outside of UOR must be fully costed, justified and be authorised.

17. Where COTS manuals are considered should be given to whether there is likely to be any amendment action in the future and the likely implications on support and associated costs.

Deployed Technical Documentation

18. The hardware and infrastructure needed to deploy platform Technical Documentation is the responsibility of the PT and must be integrated with current and future operational logistic IT policy and requirements.

19. Project Teams must obtain approval from DES IMOC SCP-TD and DES IMOC SCIS to ensure that no stovepipe solutions add burden to the Logistics Support Committee (LSC).

CHAPTER 5: URGENT OPERATIONAL REQUIREMENT (UOR)

1. The UOR process enables rapid procurement to address equipment capability shortfalls that have arisen as a result of current or imminent operations. Under this process the procurement of new or additional equipment (or the enhancement of existing capability) occurs more quickly than the 'normal' equipment acquisition cycle. The Technical Documentation Support Solution must be available to the User to safely operate, maintain and repair equipment in Theatre.

SCOPE

2. This section is applicable to all PT's and Front Line Commands (FLC's) and gives specific guidance on Technical Documentation procurement and management for UORs.

PROJECT TEAM (PT) RESPONSIBILITIES

3. To meet the MODs legal duty of care obligations, it is a requirement that all equipments are provided with accessible, accurate, up to date and relevant Technical Documentation from the date that MOD takes responsibility for their operation.

4. It is the responsibility of the PT to manage the distribution of Technical Documentation to meet this aim, or to ensure this role is discharged on their behalf by a competent contractor and / or other appropriate arrangements.

5. The UOR process is defined in 2010DIN04-195. It includes PT responsibilities in relation to engagement with organisations such as Permanent Joint Headquarters (PJHQ) and SCIS.

POLICY FOR INTERIM TECHNICAL DOCUMENTATION FOR UOR EQUIPMENT IN THE OPERATIONAL ENVIRONMENT

6. As a minimum Technical Documentation must be delivered in electronic format, via DR TDOL if more sophisticated arrangements have not been made. The following paragraphs provide policy and supporting advice when providing interim Technical Documentation in the form of Commercial off the Shelf (COTS) manuals for UOR equipment.

7. Configuration Control must be adopted in line with the current in theatre Equipment Care Inspection (ECI) assurance process.

8. There are two options for PTs to consider for producing and delivering Technical Documentation to theatre:

   a. Interim Publication.

   b. Compliant Publication.

Option 1 - Interim Publications

9. Interim Publications may be chosen under the following circumstances:

   a. When time is of paramount importance and producing publications under any other option would cause a delay to the deployment of the equipment.

b. For short-term deployments, ie less than 12 months. Upon returning from theatre / operations the Interim Publication must be cancelled.

10. The PT will raise an appropriate task on the Design Organisation (DO) to provide Interim Publications in support of the UOR, clearly outlining the User requirements. It is acceptable to use Original Equipment Manufacturer (OEM) or other COTS data, providing it is legible and appropriate for use in the operational environment. Photographs, snapshots of engineering drawings or Computer Aided Design (CAD) models may be used in lieu of fully compliant line drawings.

11. The Interim Publications will be in electronic format. Hard copy requirements will be met, and managed, via a printing facility in theatre. Technical Documentation must clearly be identified with a Technical Documentation reference number.

12. Although this is an interim solution the DO will ensure normal requirements for authentication in the form of Certificates of Conformance (CofC) are adhered to.

13. Publications provided under these arrangements are strictly to provide an interim solution in the short term; development work should continue to provide a coherent suite of compliant documents that must be made available once they are matured.

Option 2 – Compliant Publication

14. Option 2 should be chosen under the following circumstances:

a. When there is sufficient time to produce publications compliant with current policy, in accordance with the relevant standards and specifications, without delaying deployment, and:

b. When a deployment is expected to last for more than 12 months.

c. If the equipment is expected to be brought into the core equipment programme, irrespective of deployment duration.

d. When Option 1 has been utilised and it is subsequently decided to extend the deployment beyond 12 months.

15. The PT will raise a task on the DO to provide Compliant Publications in support of the UOR, clearly outlining the User requirements in line with normal procedures or contractual arrangements.

16. The DO shall provide a CofC for the Compliant Publication which confirms and certifies that all the information contained within the Technical Documentation is accurate, safe in application and suitable for its intended purpose as defined in the contract.

Delivery

17. Advice should be obtained on the delivery of the Technical Documentation Support Solution from IMOC SCIS Support Chain Information Services, Logistic Network Enabled Capability Programme).

CHAPTER 6: CONTRACTING FOR TECHNICAL DOCUMENTATION

INTRODUCTION

1. This Chapter provides PT's with appropriate information and access to relevant supporting Standards and Guidance that will ensure that requirements for contracting for Technical Documentation are met.

2. Technical Documentation is a product of intellectual effort, and a framework of legal rights known as Intellectual Property Rights (IPR), protects them.

3. The key principles of contracting for Technical Documentation are therefore:

   a. To satisfy the Policy requirements defined in JSP 886, Volume 7, Part 8.05, Chapter 1. The preferred method of delivery is ETD, IETP's to ASD S1000D standard.

   b. To ensure that the MOD has certain rights of use, such as copying and distributing the Technical Documentation for any UK Government purpose (except the purpose of manufacturing equipment).

   c. To prevent unauthorised disclosure of the Technical Documentation delivered to MOD under a contract.

COMMERCIAL CONSIDERATIONS

Statement of Requirements (SOR)

4. Typically, after consultation with the relevant Subject Matter Experts (SME), the MOD ILSM will produce a set of requirements for work and Technical Documentation deliverables that are recorded in an ILS SOR and its associated Contract Document Requirements List (CDRL). The Commercial Officer must ensure that the requirements of the SOR are included within the Invitation to Tender (ITT) documentation, either by referring to the SOR within the draft contract or extracting the requirements into the main body of the document. In response to the SOR, the bidder will be expected to produce a Statement of Work (SOW).

Bidders' Response to Invitations to Tender (ITT's)

5. The bidders must document how they will meet the Technical Documentation requirements, and if not, document any deviation from the requirements. If conformance with the requirement is not considered necessary its impact must be subject to risk analysis by the MOD project officers.

6. It is a legal obligation for MOD to ensure the equal treatment of all bidders. Therefore, PT's will most likely have to share any agreed deviations from the SOR simultaneously with all bidders.

The Contract

7. A contract is a legally binding agreement between two or more parties. Whatever the form or value of the contract involved, only those MOD employees with specific written authority to do so are empowered to sign and commit the department. Those who choose to ignore this principle are likely to face disciplinary action and personal liability.

8. Before discussing any business with industry prior to the award of a contract always use the term; "Without Commitment" and if discussing any business with a contractor once a contract is in place always use: "Without Prejudice". For more information, visit the Commercial Awareness Guide on the MOD Commercial Intranet Page.

Terms and Conditions

9. It is standard practice for MOD contracts to include the following clause when contracting for Technical Documentation:

"The Contractor shall ensure that the Authority has the right to copy, amend, extend or have copied, amended or extended any Technical Documentation delivered under the Contract or any part thereof including any such part when incorporated in any amended or extended version of such Technical Documentation, and to circulate, use or have used said Technical Documentation including any amended or extended version and any copies thereof for any United Kingdom Government purpose but not for the purpose of manufacturing equipment to which the Technical Documentation relates".

However, it is important to determine which specific IPR conditions are applicable. For more information, see the IPR Conditions topic on the Commercial Toolkit.

10. **DEFCON 531.** Disclosure of Information is mandatory for inclusion in all contracts. It sets out mutual obligations and exceptions for MOD and contractors in respect of information disclosed to one another.

Project Considerations

11. It is essential that when Projects are considering the Technical Documentation element of their Contract that In-Service support, upkeep and amendments are included. The contract for Technical Documentation is to include the amendment and maintenance of the Technical Documentation as well as the delivery and introduction to service.

Safety First

12. Technical Documentation needs to be accessible to all users, it must be accurate, relevant, up to date and safe to use. PT's must consider what infrastructure is available and whether it needs to work in a Shared Data Environment (SDE). The End User's access to the information is also a major consideration due to the following:

a. Will the SDE integrate with the current MOD infrastructure and / or Deployed Environment?

b. Will the End User be working in a hazardous environment?

c. Is it necessary for the End User to be located close to weapons / munitions and be subject to Explosives Maintenance Regulations or Electro Magnetic Pulse considerations?

13. Projects also need to consider how the Technical Documentation shall be delivered and whether the Contractor will have access to all operator / maintainer information. This has been driven by Intellectual Property Rights (IPR) and International Traffic in Arms Regulations (ITAR). Chief Information Officer Note 1/2012, MOSS file saving policy for caveat, descriptor and ITAR information provides further details..

Use Study

14. The Use Study is provided to external parties including potential bidders and contractors as guidance on the intended in-service use and of interpreting the MOD requirements. It also provides the data that MOD must supply to the contractor so that they can carry out their tasks (although it must not constrain innovation). The Use Study is not a contractual document. The Use Study contains information (as applicable) on:

a. The intended use of the product to be procured.

b. A description of the system to be replaced.

c. The proposed support strategy envisaged and any constraints arising from the existing support infrastructure.

d. Manpower and available skills.

e. Identifies existing and future resources that could be utilised for the support of the product.

Concept of Use (CONUSE)

15. A CONUSE describes the way in which specific equipment is to be used in a range of operations or scenarios. It is normally produced in the development phase. The Use Study and the CONUSE are synonymous and only one document shall be in existence within a Project. For projects that have not been generated against the current policy and do not have a CONUSE then the ILSM must generate a Use Study.

16. DEFSTAN 00-600 requires the Use Study / CONUSE to be updated through life and be revisited if the acquisition lifecycle is reiterated for mid life upgrades.

Government Furnished Assets (GFA)

17. GFA is a term used to describe MOD owned assets supplied to industry in support of MOD contracts. Generically, materiel on loan to industry is known as Government Furnished Equipment (GFE). GFE is a sub-category of GFA. It is essential that all GFA issued to contractors be clearly defined in the contract, including IETP viewing software.

ILS Plan

18. Development of the support concept starts at the beginning of a project's life when initiated by the ILS plan. The ILS Plan (ILSP) describes the MOD approach to ILS, based on Defence Standard 00-600, tailored to meet the requirements of a project. The Plan is provided to external parties including potential bidders and contractors to provide guidance in interpreting the MOD requirements detailed in the Statement of Work (SOW).

Statement of Work (SOW)

19. The SOW identifies the MOD requirements. The ILSP is to be included within the SOW, which is the contractual document for the Project.

Technical Documentation Management Plan (TDMP)

20. The TDMP will outline the methods that will be used to identify, produce and maintain the Technical Documentation for the PSE and will show how the Project will create, supply

and manage the Technical Documentation deliverables. Chapter 3 provides information on TDMP.

Technical Documentation Business Rules

21. Projects should produce and maintain through life, a comprehensive set of BR's that define how their data is constructed and constrained / standardised.

Technical Documentation Test Script

22. For IETP's to ASD S1000D, Projects should produce and maintain through life, a comprehensive Test Script that covers all mandatory and optional S1000D constructs used.

Deliverables

23. It is vital that there is an effective delivery system for Technical Documentation to enable the flow of information to be controlled and maintained to ensure that Technical Documentation is accurate, up to date and meets the support requirements. Technical Documentation management and delivery information can be found in Chapter 4.

Verification and Validation of Electronic Technical Documentation

24. First verification is a contractor obligation and is sometimes known as validation and is a mandatory key aspect activity on all technical documentation. On completion, the Data Module (DM) will be promoted to a quality assurance status of first verified. MOD will not accept DM's that have not been verified.

25. Second verification is an optional activity carried out by the customer and ensures fitness for purpose. This activity can be performed at the same time as first verification through agreement with the contractor.

Hosting and Distribution

26. PT's should seek guidance from SCIS and DES IMOC SCP-TD to ensure that stovepipe solutions (ie stand-alone solutions, where the application does not integrate, or share data or resources with other applications) are not introduced to the Logistics Commodities and Services LCS and Front Line Commands (FLC's) Systems.

27. LCS Forms and publications team based at Bicester provide services for the receipt; storage and distribution of MOD registered Forms and Publications. Other government departments, foreign governments, contractors and private individuals may also be customers.

ASSOCIATED STANDARDS / GUIDANCE OR SUPPORTING INFORMATION REQUIREMENTS

Standards and Specifications

28. The following documents provide access to the associated standards currently available to assist with contracting for Technical Documentation:

a. **DEFSTAN 00-600:** is the current standard for Requirements for MOD Projects for those contracting for ILS deliverables.

b. **DEFSTAN 00-60:** is the legacy standard for those concerned with contracting for ILS deliverables. This standard should not be used for new projects, but may be used for updates to existing projects that were originally contracted to DEF-Stan 00-60.

c. **DEF-Stan 13-99:** is the requirements for DGM Project Team Munitions Technical Publications.

d. **ASD S1000D: i**s the International Specification for Technical Publications using a common source database.

Guidance / Supporting Information

29. The following documents provide access to the associated guidance currently available to assist with contracting for Technical Documentation:

a. Defence Technical Documentation Guidance (formally JSP (D) 543): Provides Technical Documentation Guidance.

b. JSP 886 Volume 7, Part 2: Is the Integrated Logistics Support (ILS) Management.

c. Military Aviation Authority (MAA) Regulations. Details the Requirements on contractors for the provision of aircrew publications.

d. JSP 886, Volume 7 Part 2 Annex B: Contains the ILS Product Descriptions

e. DEFCONS.

f. Framework Agreement for Technical Support (FATS), Useful FATS documents.

Commercial Toolkit

30. Commercial guidance for the UK MOD Defence Acquisition community is detailed within the Acquisition Operating Framework, Commercial Toolkit.

More Effecting Contracting (MEC)

31. MEC is an acquisition initiative that seeks to promote the application of good practice using proven project management tools to both de-risk programmes and prevent either MOD or suppliers becoming over committed. It has particular relevance where there is a technology risk.

CHAPTER 7 - SUPPORT MATURITY LEVELS

INTRODUCTION

1. The maturity of the PSE Technical Information and Documentation management can be assessed during the life cycle of a project using the 9 Support Maturity Levels (SML) which are defined, along with suggested milestones, in Volume 7 Part 2 Chapter 2.

2. To enable the project to assess maturity against the success criteria, the measure of effectiveness for each SML detailed in the table at Figure 2 is to be agreed with the Contractor and included in the development or support contract.

ULTIMATE SUCCESS CRITERIA

Technical Information

3. There is evidence to show how the design of the capability has been certified and how the certification will be maintained.

4. The elements of the technical information that are applicable to the Support Solution have been identified.

5. Updates to those elements are advised, implemented, controlled and integrated as an element of the capability, eg by means of the Configuration Management Plan.

Technical Documentation

6. The range and hierarchy of Technical Documentation and the intended user is defined and agreed e.g. operators, maintainers, procurers etc.

7. The Technical Documentation is aligned with the agreed assumed skill levels and is coherent with the wider Support Solution.

8. The Technical Documentation deliverable has been certified as safe for use by the intended user.

9. The formal standard and formats which the Technical Documentation will be delivered to is defined, tailored and agreed appropriate to the contract. Relevant Business Rule Exchange (BREX) requirements have been identified.

10. A programme for Technical Documentation delivery and acceptance that supports the entry into service requirement has been produced and agreed.

11. The process for publishing and maintaining the Technical Documentation suite is defined and agreed, ie how it will be updated and controlled through life to ensure coherence with the Support Solution and system as a whole.

12. The methodology for ensuring alignment with the Training, Maintenance Policy, and Spares Provisioning etc is defined and agreed.

13. Evidence of progress in line with the programme for the delivery and validation of the Technical Documentation can be provided.

14. The methodology for hosting of Technical Documentation and how they will be made

accessible to the various users is defined.

15. A feedback mechanism/process to allow stakeholders to suggest amendments to Technical Documentation is defined and agreed.

16. The contribution Technical Documentation activity makes in the context of the overall capability is understood.

17. The cost of providing Technical Documentation is understood and actions have been taken to minimise it.

18. The joint process for endorsement of the Technical Documentation is agreed.

Figure 2: Technical Documentation Support Maturity Levels (SML)

Support Maturity Level	Measure Of Effectiveness	Risk if not in place
1	Review of the URD and Use Study to identify TID related requirements and constraints.	Technical information and documentation requirements will not be identified
2	Where requested by Customer, a draft Technical Document Management Plan (TDMP) may be produced at this stage. Otherwise, Technical Publications (TP) activities will be briefly described in the draft ISP. The strategy for TID delivery and management is defined. TPs requirements should have been flown down to Suppliers. The TDMP should link to the associated Engineering plan(s) controlling the Technical Information (TI).	Contractual Technical information and documentation requirements will not be identified
3	Depending of the nature of the programme, either a dedicated TDMP may be produced or TPs activities may be fully described in the ISP. Options for the delivery mechanism of TID have to be defined in sufficient details to allow trade-off decisions. Depending on the nature of the programme, Business Rules (for Data Modules exchange) and an initial DMRL may be established. Some existing Technical Documentation may be collected from Suppliers.	Contractual Technical information and documentation will not reflect the current product design. Delivery options may not be available from the current IS architecture.
4	Depending of the nature of the programme, updated TDMP or TPs section in ISP to reflect any changes in the ILS programme or the overall programme. The TDMP (or TPs section in ISP) is in a mature state for the D&M phase and only minor amendments are expected. More TPs from Suppliers and initial Maintenance Task Descriptives from Supportability Analysis may be available. Depending of the nature of the programme, Business Rules may have	Contractual Technical information and documentation will not reflect the product design Product maintenance will not be effective Technical information will not be available, accurate or up to date

	been firmed-up and an interim DMRL provides a more detailed structure. CDR Design Data Pack available and under configuration control (System Engineering Responsibility).	
5	Sufficient TPs have been produced and reviews carried out by the Customer. A Demo may have occurred to validate the content of the TPs.	Contractual Technical information and documentation will not reflect the product design Product maintenance will not be effective Technical information will not be available, accurate or up to date
6	Sufficient TID should be delivered to the Customer to support 1st defined Use. Any changes identified during the validation of the Support Solution should have been included.	Contractual Technical information and documentation will not reflect the product design Technical information will not be available, accurate or up to date
7	Depending of the nature of the programme, updated TDMP or TPs section in the ISP reflects the Support Solution. The TID will be maintained in line with the Support Solution.	Contractual Technical information and documentation will not be reviewed for relevance, accuracy or reflecting the product and support design
8	The TDMP (or TPs section in the ISP) has been updated to reflect the revised Support Solution. The TID will be maintained in line with the revised Support Solution.	Contractual Technical information and documentation will not be up to date or accurate Maintenance tasks may not be carried out which could result in reduction or loss of capability
9	Identification of TPs that need to be either removed from the Documentation Repository, to be converted or to be retained will be covered in the Disposal Plan (managed by the ISP).	The information and data collated throughout the life of the product will not be available for lessons learnt