MINISTRY OF DEFENCE

JSP 886
DEFENCE LOGISTIC SUPPORT CHAIN MANUAL

VOLUME 7
SUPPORTABILITY ENGINEERING

PART 6
ILS TAILORING

THE MASTER VERSION OF JSP 886 IS PUBLISHED ON THE DEFENCE INTRANET.

FOR TECHNICAL REASONS, EXTERNAL LINKS ON THIS INTERNET VERSION HAVE BEEN REMOVED.

VERSION RECORD		
Version Number	**Version Date**	**Version Description**
1.0	23 Mar 11	Initial Version.
1.1	09 Jan 12	JSP Title Change and Format Update.

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TAILORING POLICY

CONTEXT

1. Tailoring is fundamental to the cost effective application of Integrated Logistic Support (ILS) on a project. It is the process of identifying the range and depth of ILS activities that should be carried out and depends on the scope, size, complexity, life cycle phase and contractual arrangements of any given project. Accurate tailoring will ensure that specific Through Life Support requirements, critical support cost drivers and risks are addressed in a timely and appropriate manner.

2. Tailoring is mandatory for all projects and the methodology and rationale used shall be captured in the Strategy Specific guidance on tailoring of the Supportability Analysis (SA) and is provided in JSP 886 Volume 7.

3. Tailoring can be conducted jointly by the Authority and the Contractor, with agreement from all stakeholders, but the final decision must be made by the Authority.

POLICY

4. It is MOD Policy that Integrated Logistic Support (ILS) will be applied to all product acquisition; this policy is detailed in JSP 886 Volume 7. The policy applies to the acquisition of all products for the MOD including Technology Demonstrator Programmes, major upgrades, software projects, collaborative projects, non-development and off-the-shelf procurement. Tailoring is a fundamental aspect of ILS and it is MOD policy that all equipment acquisition projects shall tailor their ILS activities.

PRECEDENCE AND AUTHORITY

5. The Chief of Defence Materiel (CDM) is the Sponsor for UK MOD ILS policy. ILS development activity is performed on behalf of CDM by Assistant Chief of Defence Staff (Logistics Operations) (ACDS (Log Ops). Responsibility for developing and managing Logistics policy will be delegated by ACDS (Log Ops) through the Defence Logistics Steering Group (DLSG) to the Logistics Policy Working Group (LPWG). The LPWG will in turn delegate responsibility for ILS policy development and maintenance to discrete specialist areas. Responsibility for policy development and maintenance of ILS is delegated to Director Joint Support Chain (DJSC) who exercises this delegated responsibility through the DE&S Head of TLS.

MANDATED REQUIREMENTS

6. Tailoring is not subject specific safety or legislative requirements, however the output of Tailoring is essential in delivering optimised support solutions at minimum Through Life Finance (TLF). The requirement for projects to tailor ILS is promulgated by DE&S Corporate Governance Portal.

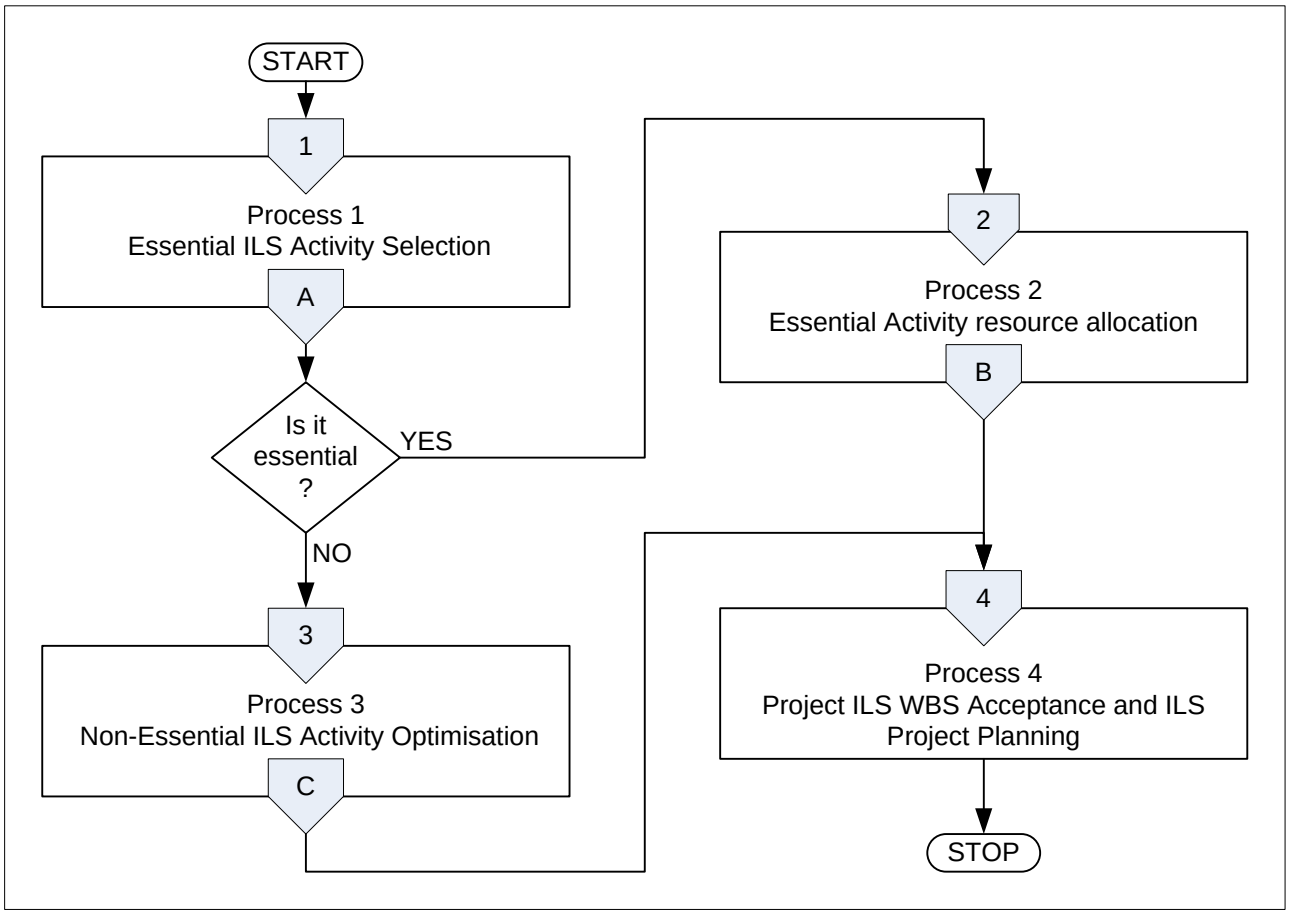
PROCESS

7. Tailoring is an iterative process that applies to all the elements detailed in the generic Work Breakdown Structure (WBS). The major tailoring factors to be considered are outlined below:

Figure 1: Major Tailoring Factors

Factor	Description
ILS Activities	What factors are needed to optimise the ILS disciplines / elements and related elements for the project?
Outputs	What information, deliverables and plans are required to define and meet the support requirements?
Inputs	What information is required to support the analysis?
Resources	What resources are available to perform the ILS activities required by the project in terms of cost, time and manpower
SA Requirement tailoring	What SA Activities are required to ensure all analyses are performed to achieve a supportable product.

Figure 2: Tailoring Flowchart



KEY PRINCIPLES

8. Tailoring must be applied to all the elements and disciplines of ILS. It is an integral part of ILS Management, with the majority of the tailoring being carried out during the development of the ILS and SA Strategies, but with fine adjustments being made right up to contract award. The MOD ILS Manager (MILSM) will tailor, based on the requirements and the Bidders will tailor, based on a detailed knowledge of their proposed support solution. The final solution will then be subject to contract negotiation and agreement.

9. Four key tailoring activities will be considered:

   a. Identify project essential ILS activities.

   b. Cost analysis and budget allocation to meet essential activity costs.

c. Identification and costing of additional ILS activities in terms of added value against cost.

d. Overall ILS project acceptance. After each tailoring activity, the other areas should be re-visited.

10. The acquisition strategy will influence the amount of ILS that should be undertaken. How will the item be developed? Is it completely new, modified or an existing system? Will we buy just the product, a complete package or lease the system? Considerations which must be addressed in the tailoring process, include:

a. Type of project (Develop Item (DI), Non Development Item (NDI) or Commercial off the Shelf (COTS).

b. Stage of the project/schedule constraints.

c. Cost limitations.

d. Time and resources available.

e. Amount of design freedom involved.

f. Data availability and relevancy.

g. Work already completed on the project.

h. Past experience and historical data on comparable projects.

i. Desired tasks which are non-standard.

j. Estimated return on investment.

11. The MILSM must tailor the ILS activities by considering the amount of design freedom and the availability and applicability of information in all the ILS domains. Efforts should then be concentrated on the areas where most benefit can be achieved. This can be illustrated by considering some of the main ILS activities and the difference between the two poles of DI and COTS. With modern procurements where there will almost inevitably be a mixture of Full Development, Non-Development and COTS, the ideal solution will probably lie between the two extremes, with the cost and complexity of the equipment influencing the decisions.

12. Production of plans and reports are a costly and time-consuming exercise for all concerned. Over-specifying the requirement will lead to the production of valueless reports rather than the completion of useful analysis. The MILSM must strike a balance between having enough tangible evidence of the Contractors work to give confidence in their ability and giving them the freedom to get on with the job.

ASSOCIATED STANDARDS AND GUIDANCE

13. Tailoring is a key discipline to be undertaken in the application of ILS. The following standards apply:

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

b. DEFSTAN 00-60: Integrated Logistic Support

14. **Important Note:** DEFSTAN 00.600 should be applied on all new projects. DEFSTAN 00-60 is a through life standard and projects contracted to it will require its use for at least another 20 years. DEFSTAN 00-60 is cancelled but it will continue to be published on the DEFSTAN website.

OWNERSHIP

15. The policy for Tailoring is sponsored and owned by DES JSC TLS-POL DHd and is subject to ratification by the DLPWG.

a. For Technical Guidance:

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CHAPTER 2: TAILORING GUIDANCE

FOREWORD

1. Improving the quality of support whilst achieving optimized Through Life Finance (TLF) of product ownership are key aims of the MOD. Integrated Logistic Support (ILS) is the chosen methodology to identify and optimize the costs of support.

2. Effective tailoring of ILS acquisition activities, to minimize unnecessary work and duplication of effort is fundamental to the cost-effective application of ILS.

INTRODUCTION

3. New Projects or those judged to be suitably immature are to use the requirements set out in DEFSTAN 00-600 tailored using the procedure below.

4. However should a Contractor declare the use of LSA Tasks and a LSAR to meet DEFSTAN 00-600 SA and Information Management requirements then Volume 7 Part 12 of this JSP may be used to assess the Contractor SA programme and Plan.

5. ILS Tailoring covers the whole, or part, of an ILS programme. This part of JSP 886 provides the detailed tailoring procedure required by DEFSTAN 00-600, on all ILS disciplines and related elements of a project, including, but not necessarily limited by:

a. Supportability Analysis (SA).

b. Reliability and Maintainability (R&M).

c. Technical Data and Documentation.

d. Supply Support.

e. Obsolescence Management.

f. Human Factors.

g. Through Life Finance.

h. Quality Assurance.

i. Support and Test Equipment (S&TE).

j. Training & Training Equipment.

k. Safety.

l. Configuration Management.

m. Transportability.

n. Packaging, Handling, Storage and Transportation (PHS&T).

o. Facilities.

p. Disposal.

q. Software Support.

6. This procedure is intended for use by the MOD ILS Manager (MILSM) and Contractor ILS Manager (CILSM) prior to the start of each stage of a product's life cycle. Initially, the MILSM must tailor a programme to establish project resource requirements. Subsequent iterations of the tailoring process will provide input into the tender documentation, support to negotiations and progress monitoring. The CILSM may then use the same procedure in order to make a logical and innovative response to the MOD, who should make a final tailoring analysis prior to letting the contract.

7. Although not specifically developed for contracting between Prime Contractor and Subcontractor, this procedure could equally be applied in this situation.

8. Tailoring is fundamental to the cost-effective application of ILS. It is the process of identifying the range and depth of ILS and associated ILS discipline/element activities that should be performed during the life of a given project, to obtain the desired objectives and the best return for the effort expended. All Project ILS Requirements, Statements of Work (SOW) and Plans must be reviewed to remove unnecessary duplicated tasks and to optimize the scope of those that remain. Failure to perform this function will result in high costs and inefficient analysis due to unnecessary effort being expended. The credibility of ILS as an integral part of any design or procurement process will be damaged if the ILS effort is viewed as work for works sake.

ILS TAILORING

9. One of the principal aims of ILS is to carry out those tasks which effectively add value. The decision as to which DEFSTAN 00-600 requirements need to be met will have been considered when developing the ILS SOW. The MILSM must now consider how the Contractor will be expected to conduct these activities, and how they will monitor them within the available resources and project timescale. This tailoring will have to be conducted several times; the occasions will include:

a. Before Initial Gate business case submission to establish project resource requirements.

b. Before Main Gate business case submission to confirm project resource requirements.

c. Whilst preparing the Invitation to Tender (ITT) to indicate the MOD requirements to the bidders.

d. During contract negotiations or immediately after award of contract to match the contractor's proposals to project resources.

e. Before In-Service Reviews.

10. The ILS management techniques, levels of monitoring and audits, project organisation and programme schedule will be recorded in the ILS Plan.

APPLICATION OF TAILORING

11. Tailoring must be applied to all the elements and disciplines of ILS. It is an integral part of ILS Management, with the majority of the tailoring being carried out during the development of the ILS Strategy, but with fine adjustments being made right up to contract

award. The MILSM will tailor, based on the perceived requirements and the Bidders will tailor, based on a detailed knowledge of their proposed solution. The final solution will then be subject to contract negotiation and agreement.

12. Tailoring is an iterative process that applies to all the elements detailed in the Generic Work Breakdown Structure (WBS) that will ultimately be included in the ITT. The major factors to be considered are outlined in Figure 3.

Figure 3: Tailoring Factors

Factor	Description
ILS activities	What activities are needed to optimise the ILS disciplines and related elements for the programme?
Outputs	What information, deliverables and plans are required to define and meet the support requirements?
Inputs	What information is required to support the analysis?
Resources	What resources are available to perform the ILS activities required by the project, in terms of Cost, Time, Manpower?

13. Additionally there is the management task associated with integrating and monitoring the various activities.

KEY ACTIVITIES

14. These factors result in four key tailoring activities:

a. Identifying project essential ILS activities.

b. Cost analysis and budget allocation to meet essential activity costs.

c. Identification and costing of additional ILS activities in terms of added value against cost.

d. Overall ILS project acceptance.

After each tailoring activity, the other areas should be re-visited.

FACTORS AFFECTING TAILORING

15. Considerations which must be addressed in the tailoring process, include:

a. Type of project (DI, NDI or COTS).

b. Stage of the project/schedule constraints.

c. Cost limitations.

d. Time and resources available.

e. Amount of design freedom involved.

f. Data availability and relevancy.

g. Work already completed on the project.

h. Past experience and historical data on comparable projects.

i. Desired tasks which are non-standard.

j. Estimated return on investment.

16. Some of these are discussed in more detail below.

ACQUISITION STRATEGY

17. The acquisition strategy will influence the amount of ILS that shall be undertaken. How will the item be developed? Is it completely new, modified or an existing system? Will we buy just the product, a complete package or lease the system?

DEVELOPMENT STRATEGY

18. There are three main routes for the introduction of product/systems to service. These are outlined in Figure 4.

Figure 4: Development Strategy

Strategy	Description
Development Item (DI)	A completely new item developed and designed when existing systems or product cannot meet the Operational Requirements (OR), this is usually referred to as a Development Item (DI). It is designed to meet certain performance specifications. Logistic support requirements must be developed concurrently with the design. An in-depth ILS programme is required to determine and develop the necessary logistic support for the item. Because the design is fluid, there is the greatest amount of freedom for the ILS process to influence the design for supportability as early as possible.
Non Development Item (NDI)	A Non Development Item (NDI) is one that has already been developed and is available and capable of meeting ORs. The research and design stages for the product will be complete and it will not be subject to a development cycle. NDI projects require evaluation of existing data and support concepts to identify areas needing additional analysis and data generation. As there is little or no scope to influence the design of the product, ILS will concentrate on optimising the support solution. An NDI would typically proceed through a condensed procurement process.
Commercial Off The Shelf (COTS)	These are a subset of NDI, where the product has been developed to commercial rather than military standards, with minimal MOD influence on the design. The data to perform other aspects of ILS may not be available from commercial sources. If such information is required it may need to be calculated, predicted or measured on delivered products. This procurement strategy often applies to products that have established, commercial, support packages available, but they may need modifying to meet MOD requirements. Although the ILS process will probably not be able to influence the design, the process may be used to: Evaluate existing data and support concepts to identify areas needing additional data generation and analysis. Select the solution by comparison of the support costs within the through life cost activities.

19. The MILSM must tailor the ILS requirements by considering the amount of design freedom and the availability and applicability of information in all the ILS domains. Efforts should then be concentrated on the areas where most benefit can be achieved. This can be illustrated by considering some of the main ILS activities and the difference between the two poles of DI and COTS. This is shown in Table 3. With modern procurements where there will almost inevitably be a mixture of Full Development, Non-Development and COTS, the ideal solution will probably lie between the two extremes, with the cost and complexity of the product influencing the decisions.

20. Variations on the Prime Contract theme are currently the most common. Even where there is no CLS period the contractor will be expected to fully define and provide the initial

support package. The MOD may mandate that certain support facilities and agencies are used.

Figure 5: ILS Disciplines and Elements against Development Strategy

Element/ Discipline	DI	COTS
Supportability Analysis	Full analysis applied to candidate items – to include full FMECA, LORA, RCM, etc.	Limited application for scope and depth of SA Activities, dependent on options for design/selection influence.
Reliability & Maintainability	Full R&M, including modelling, testing and growth programmes	Very limited monitoring, to ensure that the Manufacturer's predictions are achieved.
Technical Data & Documentation	Full documentation tailored to meet DEFSTAN 00-600 requirements and in accordance with ASD S1000D.	Adaptation of the Manufacturer's documentation to meet specific requirements.
Supply Support	Full spares/support analysis tailored to meet DEFSTAN 00-600 requirements and in accordance with ASD S2000M.	Limited analysis of the Manufacturer's spares/support to meet requirements.
Obsolescence	Full analysis to minimize effects and the development of an obsolescence risk management programme.	Full development of an obsolescence risk management programme.
Human Factors	Full human factors analysis to influence design.	Human factors considered in selection process only. There may also be scope to influence the impact of fitting the product into its surroundings.
Through Life Finance	Full TLF analysis, to influence design.	TLF considered in selection process only.
Quality Assurance	QA requirements will be provided for in the Project Quality Plan.	QA requirements will be provided for in the Project Quality Plan.
Support & Test Equipment	S&TE considerations can influence the design.	Requirement for special S&TE considered as part of selection process.
Training	If Scoping Exercise shows a possible need for training - Full Training Needs Analysis (TNA) – scope to reduce training burden through design influence.	If Scoping Exercise shows a possible need for training - Full TNA, but only limited scope to consider training burden in selection process.
Safety	Full safety analysis, to influence design.	Safety analysis used in the selection process.
Configuration Management	Full CM required of development (including ILS) programme and subsequently delivered system.	CM only required for delivered system.
Transportability	Full transportability analysis, to influence design.	Transportability considered in the selection process.
Packaging, Handling, Storage and Transportation	Full PHS&T analysis, to influence design.	PHS&T considered in the selection process.
Facilities	Full facilities analysis – scope to optimise facilities requirements through design influence.	Full Facilities analysis, but only limited scope to influence facilities requirements during the selection process.
Disposal	Full disposal analysis, to influence design.	Disposal analysis used in the selection process.
Software Support	Full software support analysis, to influence design.	Software supportability analysis used in the selection process.

CONTRACT ARRANGEMENT

21. The three main types of contract are detailed in Figure 6 below.

ACQUISITION STAGES

22. The depth of application of ILS and SA activities are dependent upon the stage of the development programme.

Figure 6: Contract Arrangements

Contract Type	Description
Prime Contract	The MOD purchases the product and provides all support in house. This is now generally only used for minor procurements and repeat buys of existing well supported product.
Prime Contract (CLS)	A single contractor provides the product and support package. This type of arrangement usually includes a period of Contractor Logistic Support (CLS) where the contractor is responsible for support of the system for a number of years. Although the contractor is responsible for initial support the MILSM must be assured that the support system is sound and capable of eventually being taken into MOD control if need be.
PFI/PPP	Private Finance Initiatives (PFI) and Private Public Partnership (PPP) are relatively new arrangements where the contractor buys the complete package and essentially leases it to the MOD. The MILSM must be assured that the contractor has effectively scoped and costed the support package, and that it can interface where necessary with MOD procedures.

Concept

23. The level of detail at this stage is very limited and the ILS objectives are primarily to influence the design for supportability, establish potential alternative support concepts and to quantify realistic support readiness targets for the system. Sufficient details will be required to provide a TLF forecast for the eventual system.

Assessment

24. The number of design solutions is reduced and more detail is available, ideally to Line Replaceable Unit (LRU) level by the end of Assessment. The ILS and SA objectives are to influence the selection of the design, to ensure that supportability has been considered, and to identify support problems or cost drivers. The aim is to reduce, or eliminate, these areas as much as possible. The probable support infrastructure will be identified, with outline costs. A refined TLF prediction should be produced prior to Demonstration.

Demonstration

25. During the Demonstration Stage, the detailed breakdown is available and the design is fairly stable. The identification of the detailed support requirements can be undertaken. Some design optimisation is still possible but this is limited. The support infrastructure is identified and optimised to ensure it:

a. Complies with the overall platform support concept.

b. Minimises the support requirements (especially unique to type support).

c. Is consistent with the available support infrastructure.

d. Will be available when required.

Manufacture

26. During the Manufacture Stage, the support items are procured and delivered. The objective is to provide cost effective support, when and where required. Care must be taken to ensure that any design changes during manufacture are considered and reflected in the support procurement process. The support during acceptance and hand-over must also be considered.

In-Service

27. The application of ILS and SA to the In-Service stage must ensure that the support provided is adequate and effective. Where necessary the support plans and procedures may need to be modified to eliminate problems, improve performance, or to allow for changes to the design, or environment.

Disposal

28. The application of ILS to the Disposal Stage needs to ensure that the decommissioning of the system and its support infrastructure is undertaken in an effective and timely manner. The Disposal Plan will need to focus on the withdrawal of the support package and its impact on other systems (both In-service and planned). It should be borne in mind that it is difficult to predict future legislation that will apply to a project when it enters the Disposal Stage and therefore what the actual disposal costs will be. In addition, the possible cost of keeping outdated product in-service to prevent a capability gap must be considered.

ILS DOCUMENTS

29. The ILS Product Descriptions (ILSPD) in JSP886 Volume 7 Part 2 of this JSP provides a generic set of documents which address the management aspects of the SA activity. They are for guidance only and should not be taken as completely definitive or used without tailoring.

ILS SOW

30. The Generic WBS outlined in JSP886 Volume 7 Part 2 Annex M, includes a matrix in the Appendix A which provides an indication of those tasks appropriate to the main CADMID stages for typical project procurement strategies (DI, NDI, COTS). The MILSM should use this as an aid to tailor the SOW and CDRL to meet project requirements. The WBS should be tailored in accordance with the Tailoring Procedure in Chapter 3, by examining the activities considered appropriate to the project stage. Appropriate activities should then be selected to meet the specific project requirements to develop the WBS for inclusion in the SOW.

31. The SOW will require amplification to clarify any significant considerations, specific to the project, which must be taken into account.

ILS PLANS

32. Production of plans and progress reports is a costly and time-consuming exercise for all concerned. Over-specifying the requirement will lead to the production of valueless reports rather than the completion of useful analysis. The MILSM must strike a balance between having enough tangible evidence of the contractors' work to give confidence in their ability and giving them the freedom to get on with the job. This is further complicated by the stage payment process where payments are tied to delivered products.

33. The timing of reports is usually fairly self evident, either at the end of the project stage or, if appropriate, at some intermediate point.

34. Plans should generally be requested as follows:

a. Draft Plans with the tender response for work that is to be carried out in that project stage.

b. Outlines with the tender response of plans which will be developed during this project stage for use in the next.

c. Detailed Plans shortly after contract award for work that is to be carried out in that project stage.

d. Draft Plans for the next project phase towards the end of the current stage.

35. The MILSM must understand what is required from the contract, but should allow the Bidders a certain amount of freedom to suggest content and timing of deliverables in response to the ITT.

CHAPTER 3: TAILORING PROCEDURE

INTRODUCTION

1. The ILS Tailoring Procedure is presented as series of flow charts of all the ILS tailoring activities to be carried out by the MILSM/CILSM. In order to aid clarity and understanding, each flowchart is accompanied by explanatory text that expands on the process activity titles.

GLOSSARY

2. Specific terms used in the flow charts and descriptions are described below.

Figure 7: Tailoring Glossary

Essential	Activities that are included in the WBS because they are considered to be indispensable to the satisfactory completion of the given project ILS requirements. Exclusion of an Essential activity from the WBS must be fully justified. Failure to include these activities should be considered to be an unacceptably high risk to the project
Non-essential	Activities that have limited importance to the satisfactory completion of the given project ILS requirements. Non-essential activities on the WBS do not need to be included in project requirements but may be considered for inclusion, if sufficient resources are available. The risk to the project by non-inclusion is minimal.
Not Applicable	Activities excluded from the WBS because they are not required or suitable for the satisfactory completion of the given project ILS requirements. Reasons for all Not Applicable categorisations should be recorded. The risk to the project by non-inclusion of these activities is nil.
Project Constraint	A restriction or limit imposed on the project that may impact on the ILS requirements, e.g. Time, financial cost, manpower.
ILS Constraint	A restriction or limit imposed on the ILS requirements, e.g. Time, financial cost, manpower
Stakeholder	Any one who has a share or an interest that may impact on the development of the project ILS requirements. Essentially comprising of representatives from the topic areas covered within the WBS.
Further Consideration	Additional careful thought and consideration of items on the WBS. It will apply to all activities classed as Non-essential up to the point where they are either included or excluded, dependant on the associated project ILS risk analysis and mitigation.

TAILORING PROCESSES

3. The ILS Tailoring Procedure is broken down into four process areas:

   a. Process 1: Identify Essential ILS requirements.

   b. Process 2: Allocate resources.

   c. Process 3: Optimize Non-essential activity selection.

   d. Process 4: Project WBS acceptance and ILS programme planning.

Risk Analysis

4. The general and underlying mechanics of the procedure are risk analysis techniques and this is the reason why the MILSM/CILSM should have an understanding of such techniques. The difference between pure risk analysis and this ILS tailoring methodology lies in the application where, in normal risk analysis, a high risk requires activity to mitigate. However, high risks to the ILS programme are meant to show that to undertake that particular activity would result in high cost, high resource or high impact on performance, making the activity not a good ILS activity to pursue.

5. In carrying out the ILS Tailoring Procedure, the MILSM and CILSM are encouraged to limit the amount of detail being analysed at any one time. The procedure has to be methodical and easy to apply.

Generic ILS Work Breakdown Structure

6. The Generic ILS WBS documented in Volume 7 Part 2 Annex M of this JSP forms the basis of the whole procedure. This has been developed from a compilation of WBS from each of the Land, Sea and Air work areas and is therefore representative of the ILS activities undertaken by ILS Managers from all environments. The WBS is a dynamic list that must not be considered exhaustive.

7. The WBS has been constructed to allow manual application of the ILS Tailoring Procedure. To do this, the MILSM/CILSM will address each topic in a structured manner. For example, all the activities need to be considered and for each line the MILSM/CILSM will firstly decide if that activity is essential for successful completion of the approval process for the programme.

8. By using the ILS Tailoring procedure below, in conjunction with the Generic ILS WBS, the ILS Managers within MOD and Industry will be able to work together to compile an accurate and effective (cost, time and performance) ILS programme.

Figure 8: ILS Tailoring Procedure Flowchart

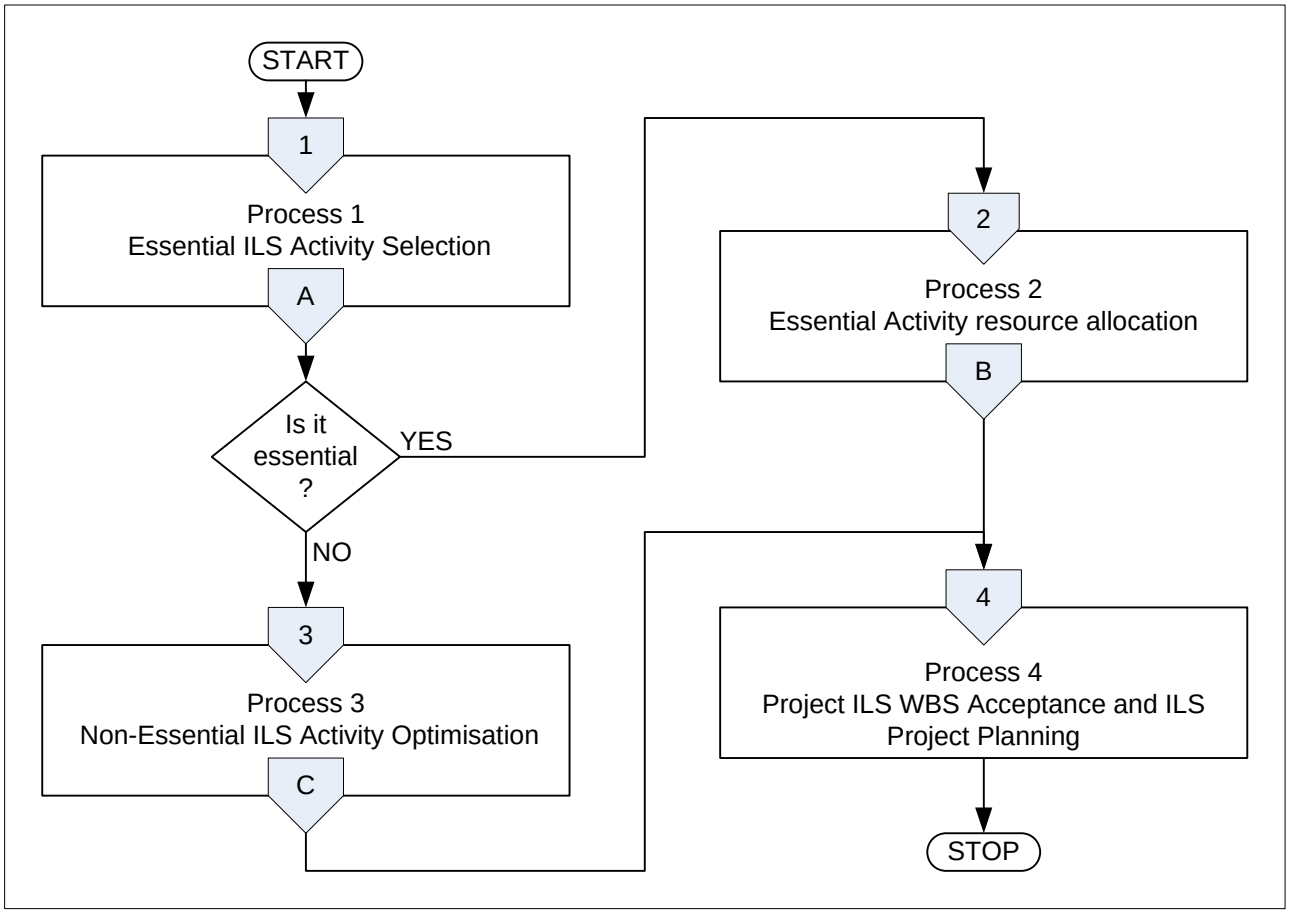

Figure 9: ILS Tailoring Procedure Table

1	**Essential ILS Activity Selection**
The process considers all the activities detailed in the generic WBS and decides which are Essential ILS activities for the Project, under the given Project and Project ILS constraints. All stakeholders should be identified and a subjective assessment made of the impact of other Project activities (e.g. design and production) on the ILS scope of activities. The MOD ILS team will make the first iteration, with subsequent iterations made and agreed with full stakeholder participation.	
2	**Essential Activity Resource Allocation**
The process conducts an affordability analysis for the ILS activities identified as Essential from Process 1. The resources required to complete the tasks are estimated and balanced against those available. Surplus resources are quantified for use as resource constraints for other ILS activities categorised as Non-essential. The impact of an inability to complete the Essential activities within allocated resources MUST be recorded and highlighted to the PTL.	
3	**Non-essential ILS Activity Optimisation**
The process considers the remaining ILS activities from the generic WBS and categorises them as either Not Applicable or Non-essential. Activities categorised as Not Applicable should be archived, along with the decision rationale for each activity. The remaining activities are those considered to be of value to the project, subject to affordability, but not essential for successful Project completion. The activities and combinations of activities should be analysed to decide which give optimum benefit to the project, within the available resource constraints. Those not selected should be archived, along with the decision rationale for each activity.	
4	**Project ILS WBS Acceptance and ILS Programme Planning**
The process completes the production and acceptance of the Project ILS WBS. The project ILS WBS will be in two parts, detailing those activities for completion by the project and those not required. The decision rationale for each activity will be recorded along with activity dependencies, responsibilities and inter relationships with other activities. The tailored Project ILS WBS will be formally approved and used in the production of the Project SOW and ILS Plans.	

Figure 10: Process 1 - Essential ILS Activity Selection Flowchart

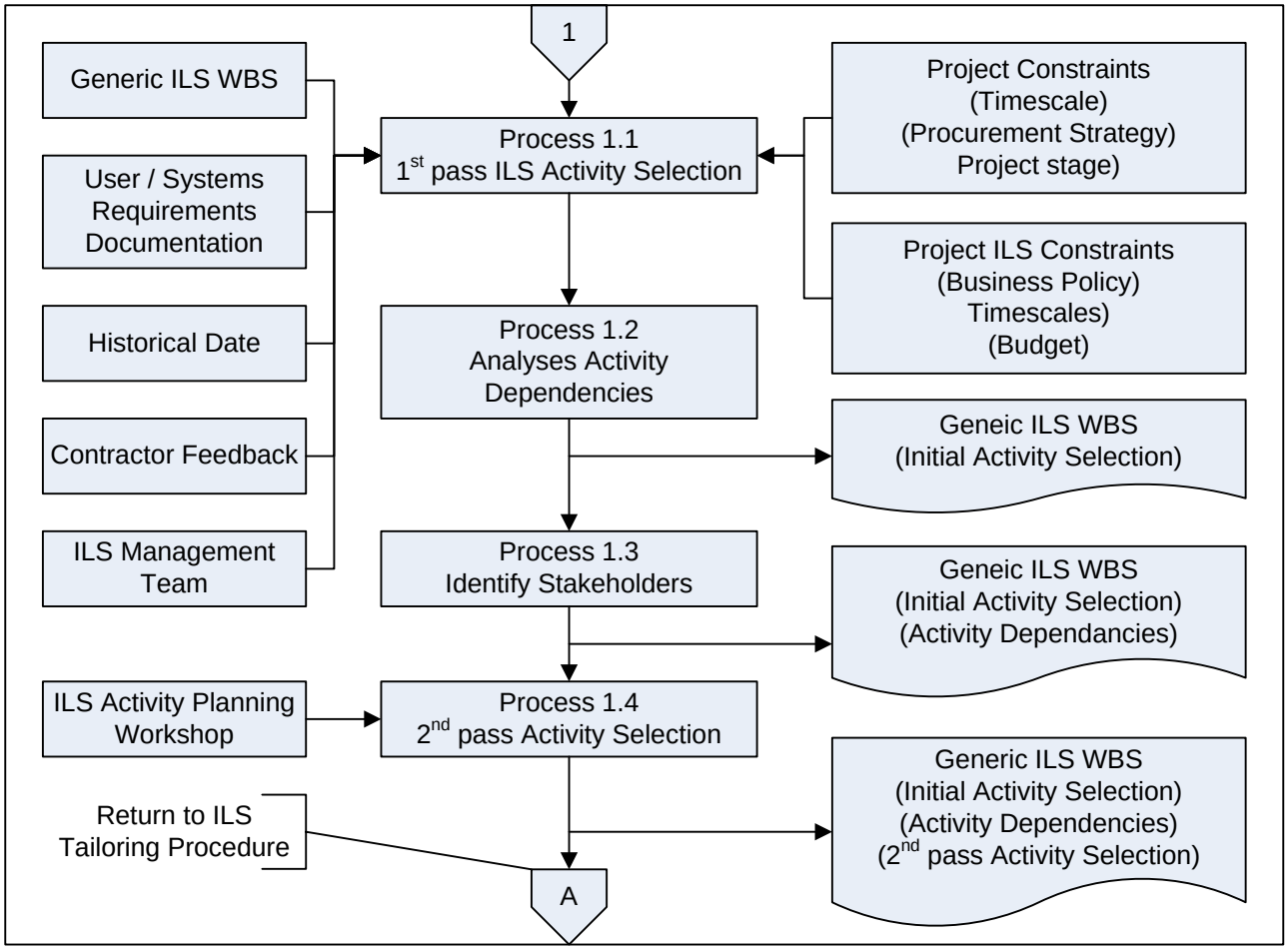

Figure 11: Process 1 - Essential ILS Activity Selection

1	**Essential ILS Activity Selection**
The process considers all the activities detailed in the generic WBS and decides which are Essential ILS activities for the Project, under the given Project and Project ILS constraints. All stakeholders should be identified and a subjective assessment made of the impact of other Project activities (e.g. design and production) on the ILS scope of activities. The MOD ILS team will make the first iteration, with subsequent iterations made and agreed with full stakeholder participation.	
1.1	**First Pass ILS Activity Selection**
The ILS Management team will categorise all activities on the generic WBS as Not Applicable Essential or Non-essential, in accordance with the Project Constraints and ILS Constraint, Reasons for all Not Applicable categorisations should be detailed, together with reasons for other categorisations, where required.	
1.2	**Analyse Activity Dependencies**
The activities identified in the first pass as Essential and Non-essential activities from the Generic WBS should be examined and their dependant and related activities shown (where relevant) against WBS activities. Where dependencies to activities identified as Not Applicable are shown, the activity categorisation should be reviewed. The tailoring task can then recognise instantly the implications of not doing a particular activity.	
1.3	**Identify Stakeholders**
For each applicable WBS Activity identify all stakeholders (both input and output). The stakeholders identified should be marked against each applicable WBS Activity. They will remain with the WBS activities and be translated to the contractual output documents.	
1.4	**Second Pass Activity Selection**
The MILSM will convene an ILS activity-planning workshop consisting of all Stakeholders, to consider the categories allocated by the first pass categorisation and agree or amend the allocations. Reasons for changes to the original categorisation should be recorded.	

Figure 12: Process 2 - Essential Activity Resource Allocation Flowchart

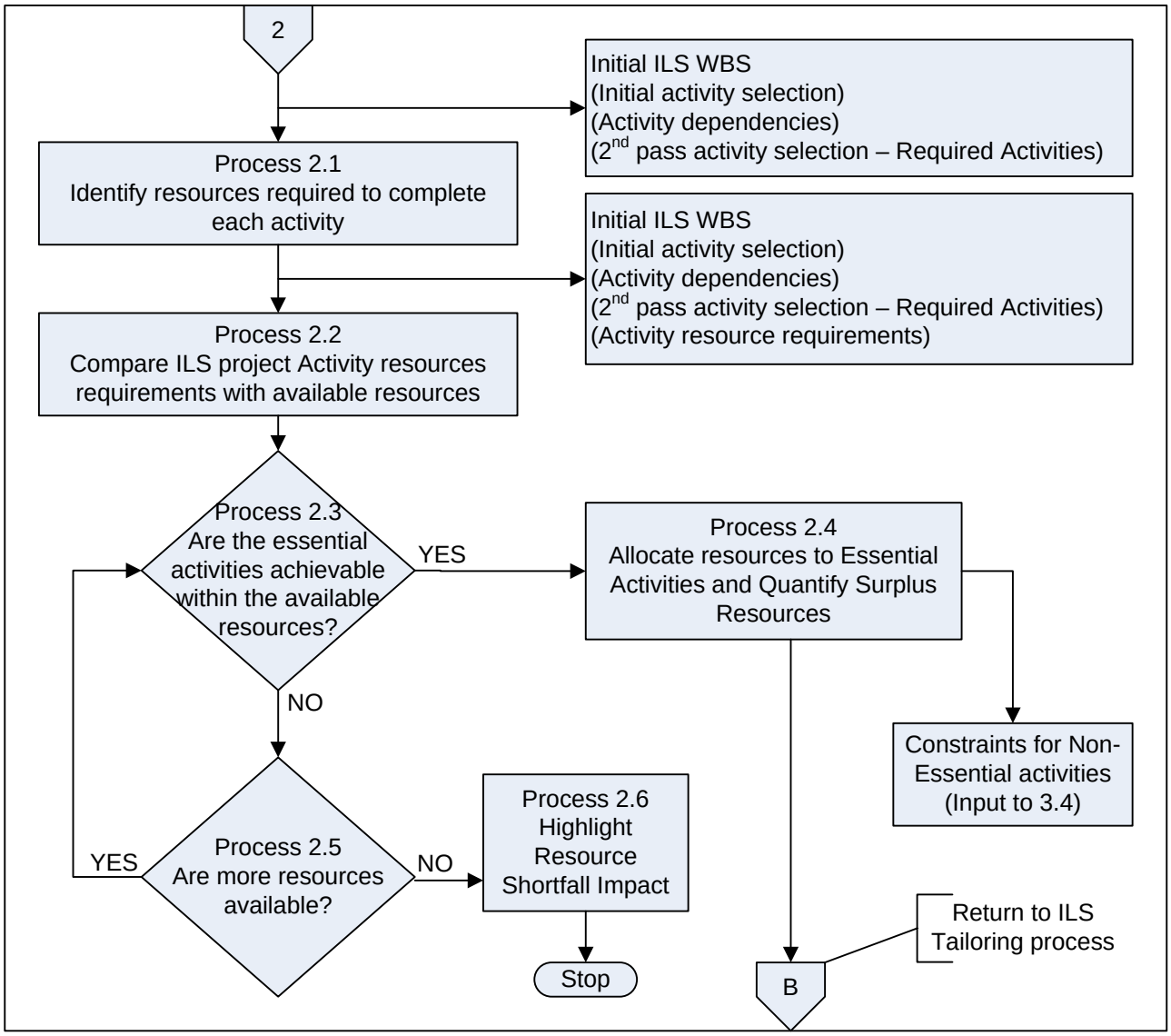

Figure 13: Process 2 - Essential Activity Resource Allocation

2	**Essential Activity Resource Allocation**
The process conducts an affordability analysis for the ILS activities identified as Essential from Process 1. The resources required to complete the tasks are estimated and balanced against those available. Surplus resources are quantified for use as resource constraints for other ILS activities categorised as Non-essential. The impact of an inability to complete the Essential activities within allocated resources MUST be recorded and highlighted to the PTL	
2.1	**Identify Resources Required To Complete Each Activity**
The ILS Management team will identify the estimated resources required to perform the activity. Lead responsibilities for each activity (i.e. Industry/MOD) need to be addressed.	
2.2	**Compare ILS Project Activity Resource Requirements With Available Resources**
Compare Project ILS activity resource requirements with available resources.	
2.3	**Are The Essential Activities Achievable Within The Available Resources?**
Can Project afford the Essential activities in terms of cost, time and manpower, with the resources available?	
2.4	**Allocate Resources To Essential Activities And Quantify Surplus Resources.**
The stakeholder team will allocate the estimated resources required to perform the activity. The balance of available resources will be quantified and used as a constraint for the Nonessential activities. (Constraint input to process 3.4)	
2.5	**Are More Resources Available?**
The availability of more resources to complete the Essential activities should be pursued. If additional resources are available and allocated to the Project, the affordability elements of the process from 2.2 – 2.5 are re-iterated.	

2.6	Highlight Resource Shortfall Impact
Develop impact statement and inform the PTL that the minimum requirements for the ILS Programme cannot be achieved within the available resources allocated.	

Figure 14: Process 3 - Non-Essential ILS Activity Optimisation Flowchart

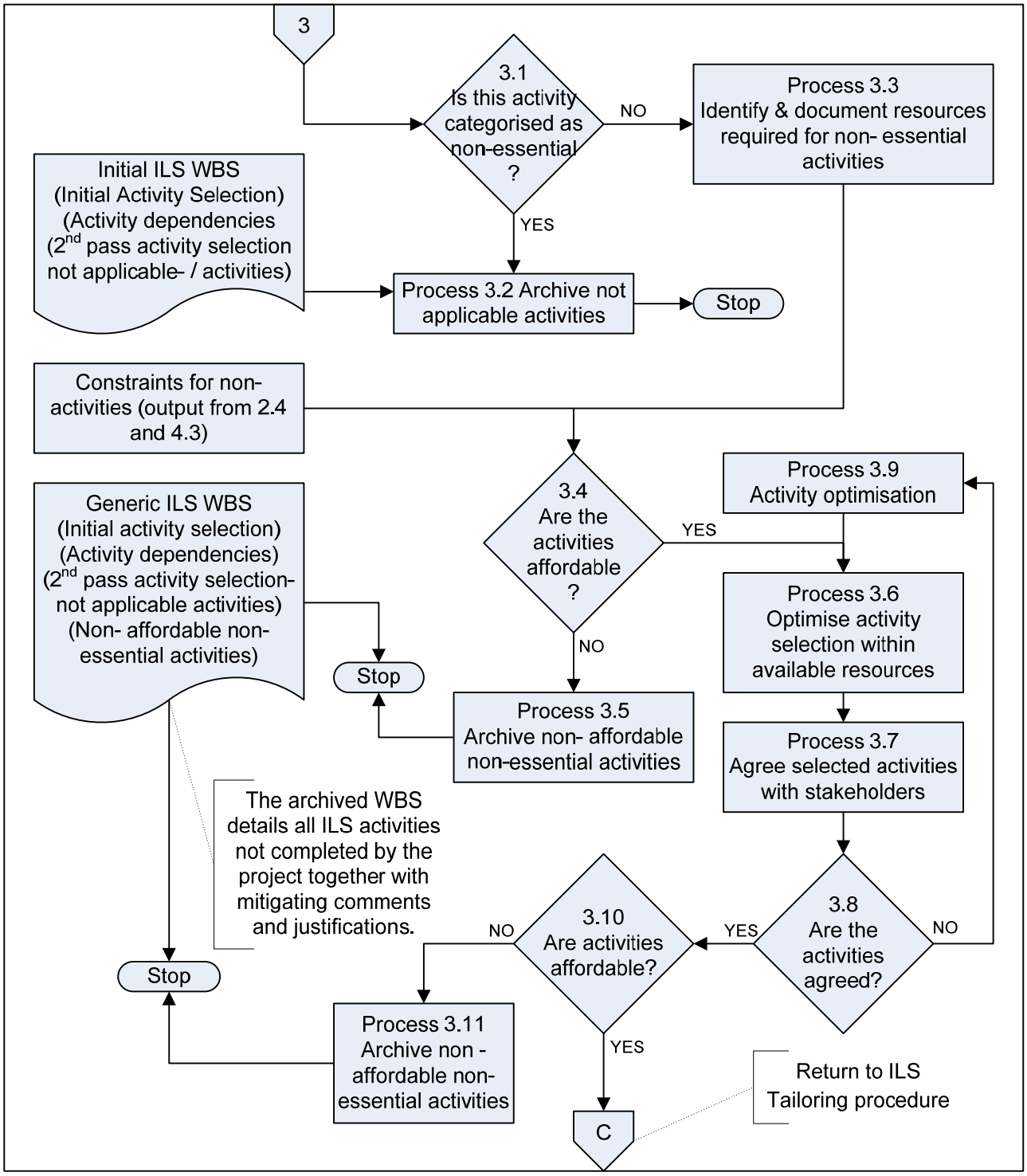

Figure 15: Process 3 - Non-Essential ILS Activity Optimisation

3	Non-essential ILS Activity Optimisation
The process considers the remaining ILS activities from the generic WBS and categorises them as either Not Applicable or Non-essential Activities. Not applicable should be archived, along with the decision rationale for each activity. The remaining activities are those considered to be of value to the project, subject to affordability, but not essential for successful project completion. The activities and combinations of activities should be analysed to decide which give optimum benefit to the project, within the available resource constraints. Those not selected should be archived, along with the decision rationale for each activity.	

3.1	**Is the Activity Categorised as Non-essential?**
The ILS Management team will consider the Generic WBS activities not categorised as Essential and decide on their further categorisation as either Non-essential or Not Applicable. During the analysis, the dependencies highlighted in process 1.1 should be considered.	
3.2	**Archive Not Applicable Activities.**
All Generic WBS activities categorised as not applicable should be archived along with reasons and mitigating comments and justifications.	
3.3	**Identify and Document the Resources Required for Non-essential Activities**
The ILS Management team will identify the estimated resources required to perform the Further Consideration activities. N.B. Resources include cost, time and manpower. Lead responsibilities for each activity (i.e. Industry/MOD) need to be addressed.	
3.4	**Are the Activities Affordable?**
The cost of doing each Non-essential activity is to be compared to the available surplus resources.	
3.5	**Archive Non-affordable Non-essential Activities**
Individual activities whose resource requirements exceed those available should be archived along with reasons and mitigating comments and justifications.	
3.6	**Optimise Activity Selection Within Available Resources**
The ILS Management team will evaluate the possible benefits of undertaking each activity, in comparison with the required and available resources and the allocated priority levels.	
3.7	**Agree Selected Activities with Stakeholders**
The Stakeholders will consider the final selection of affordable activities previously categorised by the ILS Management team as Non-essential.	
3.8	**Are the Activities Agreed?**
Stakeholders to verify ILS Management team selection of affordable Non-essential activities.	
3.9	**Review Activity Optimisation**
Iterative review of Non-essential activities to reach consensus of opinion between all Stakeholders.	
3.10	**Are the Activities Affordable?**
The Non-essential activities that have not been selected should be archived along with reasons, mitigating comments and justifications.	
3.11	**Archive Non-affordable Non-essential activities**
Activities identified as being Non-affordable Non-essential should be archived in the WBS together with the decision rationale.	

Figure 16: Process 4 - Project ILS WBS Acceptance Flowchart

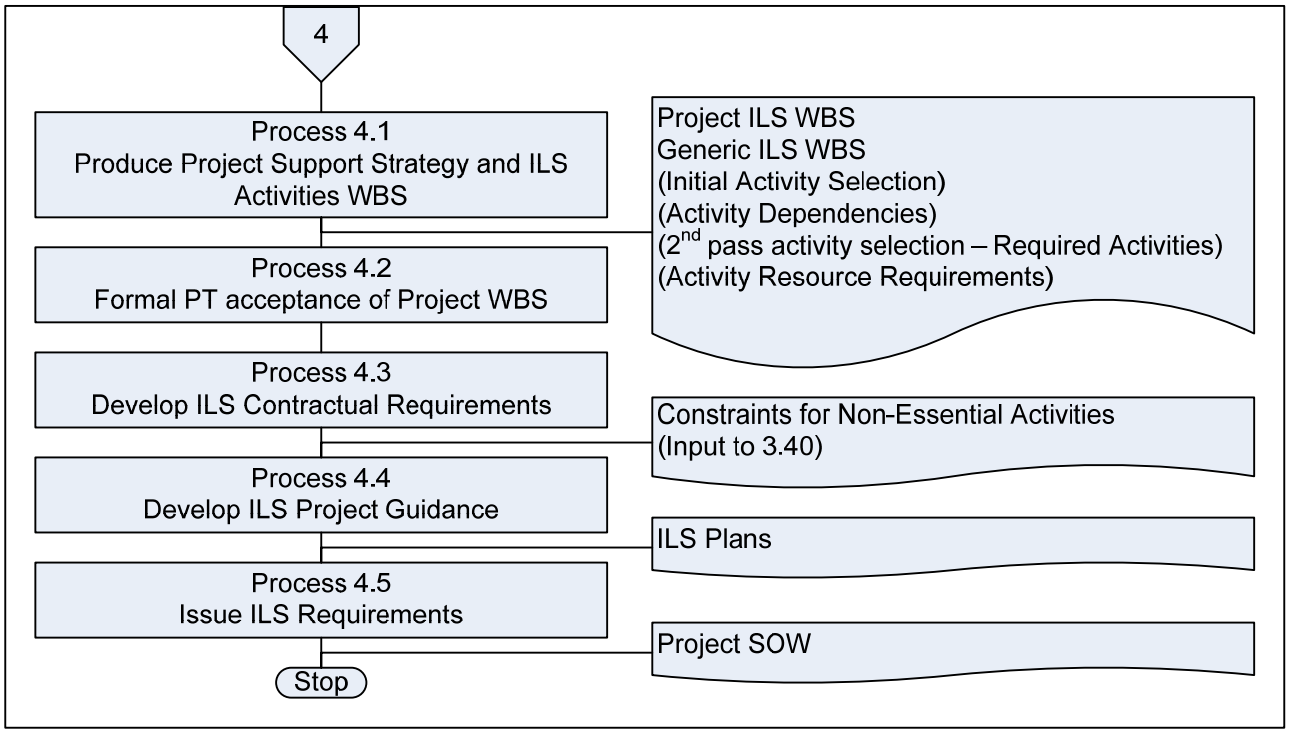

Figure 17: Process 4 - Project ILS WBS Acceptance

4	**Project ILS WBS Acceptance**
The process completes the production and acceptance of the Project ILS WBS. The project ILS WBS will be in two parts, detailing those activities for completion by the project and those not required. The decision rationale for each activity will be detailed along with activity dependencies, responsibilities and inter relationships with other activities. The tailored Project ILS WBS will be formally approved and used in the production of the Project SOW and ILS Plans.	
4.1	**Produce Project Support Strategy And ILS Activities WBS**
The Generic ILS WBS will have been updated at all stages of the tailoring procedure, consolidating all ILS activity information. The output will be a project specific WBS in two parts – those activities to be undertaken by the project and those not. The former will be a project WBS detailing the estimated cost and resource allocation of each activity, its relationship and dependencies to other activities, stakeholder responsibilities, and the decision making process behind its inclusion. The second part will be a WBS archive detailing all the activities not selected along with the reasons, justifications and mitigating comments to support these decisions. This information is to be recorded within the project history.	
4.2	**Formal PT Acceptance Of Project WBS**
The PTL formally agrees and accepts the planned Project ILS WBS.	
4.3	**Develop ILS Contractual Requirements**
The ILS Manager delivers the ILS requirements, including the process and format for data capture and storage, ready for issue to Contractors/Subcontractors using the ILS activity information recorded in the Project ILS WBS.	
4.4	**Develop ILS Project Guidance**
The ILS Manager should use the information recorded against each ILS activity on the ILS WBS and in the SOW and produce project specific ILS guidance and documentation in the form of ILS Plans as appropriate. The plans will cover all ILS activities and SA activities agreed for inclusion within the project.	
4.5	**Issue ILS Requirements**
The ILS Manager makes ILS requirements available for issue to Contractors/Subcontractors using the ILS Activity information recorded in Process 4.2. These requirements are issued in the form of the ILS Work Breakdown Structure and ILS Statement of Work	