



Logistics for Joint Operations

Joint Doctrine Publication 4-00
Third Edition



JOINT DOCTRINE PUBLICATION 4-00

(3rd Edition)

LOGISTICS FOR JOINT OPERATIONS

Joint Doctrine Publication 4-00 (JDP 4-00) (3rd Edition), dated April 2007,
is promulgated as directed by the Chiefs of Staff



Director General Development, Concepts and Doctrine

CONDITIONS OF RELEASE

1. This information is Crown copyright and the intellectual property rights for this publication belong exclusively to the Ministry of Defence (MOD). No material or information contained in this publication should be reproduced, stored in a retrieval system or transmitted in any form outside MOD establishments except as authorised by both the sponsor and the MOD where appropriate.
2. This information may be subject to privately owned rights.

AUTHORISATION

The Development, Concepts and Doctrine Centre (DCDC) is responsible for publishing Joint Doctrine Publications (JDPs) within a hierarchy of similar publications. Readers wishing to quote JDPs as reference material in other work should confirm with the DCDC Doctrine Editor whether the individual particular publication and amendment state remains authoritative. Comments on factual accuracy or proposals for amendment are welcomed by the Doctrine Editor at:

The Development, Concepts and Doctrine Centre
 Ministry of Defence
 Shrivenham
 SWINDON
 Wiltshire
 SN6 8RF

Telephone number: 01793 314216/7
 Facsimile number: 01793 314232
 E-Mail: publications@dcdc.org.uk

DISTRIBUTION

Distribution of JDPs is managed by DSDC(L) Llangennech, Mwrwg Road, Llangennech, Llanelli, Carmarthenshire, SA14 8YP. Requests for issue of this publication, or amendments to its distribution, should be referred to DSDC(L). All other DCDC publications including a regularly updated CD '*Joint Doctrine Disk*' (containing both JDPs and Allied Joint Publications (AJPs)) can also be demanded from DSDC(L).

Telephone number: 01554 822368
 Facsimile: 01554 822350

All publications (including drafts) are available for viewing/download at Defence Intranet:

<http://defenceintranet.diiweb.r.mil.uk/DefenceIntranet/Library/AtoZ/DevelopmentConceptsAndDoctrineCentrePublications.htm>

PREFACE

1. **Background.** This third edition of Joint Doctrine Publication (JDP) 4-00 '*Logistics for Joint Operations*' builds on principles identified in previous editions. It covers logistics from a Joint perspective, but recognises that a sensible and appropriate combination of logistic assets made available to the Joint Task Force Commander (JTFC) from within the Front Line Commands (FLCs) provides the most efficient and effective support to an operation. Since publication of the second edition, there have been significant changes in the logistic environment. The creation of a Standing Joint Force Logistic Component (SJFLLogC), the development of the Joint Supply Chain (JSC) and the creation of Defence Equipment and Support (DE&S) following the merger of the Defence Logistics Organisation (DLO) and the Defence Procurement Agency (DPA) have perhaps made the greatest impact on logistic support, but developments in a range of other areas have also led to significant doctrinal change. The development of the Coupling Bridge (CB) construct, the increasing use of Contractors in Support of Operations (CSO), the formation of the Defence Supply Chain and Operational Movements (DSCOM) and changes in multinational logistic support are all reflected in this new edition of JDP 4-00.
2. **Purpose.** JDP 4-00 draws together in a single document, the sometimes disparate elements of national and multinational logistics. The purpose of JDP 4-00 is to help both planners and operators recognise the significance, interdependence and influence of Joint and multinational logistics within a multinational campaign. Specific logistic functions such as supply and distribution, medical, infrastructure and a range of other specific services have quite different constraints and procedures. The aim of JDP 4-00 is to demonstrate how the logistic output of all these functions interact and contribute to the delivery of operational logistic support to a deployed force.
3. **Scope.** JDP 4-00 describes logistics at the strategic, operational and tactical levels, outlining why a Joint logistic framework is needed and how it can most effectively be employed. It does not deal with Component level logistics in detail or cover specific logistic functions. The provision of generic templates in the planning chapter provides a logical framework and general headings for further specialist input, rather than detailing every question for consideration. Links to relevant national and multination doctrine publications, and more detailed logistic doctrine are contained in the Reference Publications annex.
4. **Target Audience.** JDP 4-00 is primarily designed for Joint operational staff, particularly J1/J4, JFLLogC staff, Component logistic staff, logistic staff in the FLCs and Defence Equipment and Support (DE&S), medical, infrastructure and personnel support staff. It is the capstone J4 publication and Parts 1, 2 and 3 are particularly relevant to the JTFC. JDP 4-00 is also intended as the primary logistic doctrine

publication for students at the Joint Services Command and Staff College and other training establishments.

5. **Structure.** The JDP is in 6 parts, each with a number of chapters and annexes:

- a. **Part 1 – Fundamentals.** Part 1 contains 3 chapters the first of which sets out the principles and definitions that underpin the logistic procedures covered in the publication. There are 3 environmental annexes to Chapter 1 which set out environmental specific logistic procedures. Chapter 2 covers command and control at the strategic, operational and tactical levels and Chapter 3 covers a range of supporting functions that are relevant to logistics at all stages of an operation.
- b. **Part 2 – Prepare.** Part 2 contains 2 chapters. Chapter 4 covers the Force Generation process and the provision of logistic assets for operations. Chapter 5 covers the logistic planning process including the development of the Sustainability Statement and the Logistic Estimate in detail. It also provides 3 generic templates that can be adapted for specific operations.
- c. **Part 3 – Project.** Part 3 contains 2 chapters. Chapter 6 covers logistic support to deployment. Chapter 7 provides detail on the Reception, Staging, Onward Movement and Integration process.
- d. **Part 4 – Sustain.** Part 4 contains a single chapter, Chapter 8, that covers the sustainment of a deployed force.
- e. **Part 5 – Recover.** Part 5 contains a single chapter, Chapter 9, that covers the redeployment and recuperation of a deployed force.
- f. **Part 6 – Multinational Issues.** Part 6 contains a single chapter, Chapter 10, that covers multinational logistic issues and Host-nation Support.

6. **Lexicon.** Detailed terminology descriptions are contained within the text of the JDP only if they are required for an immediate, full understanding of the subject under discussion. A comprehensive Lexicon is included at the back of the publication.

JOINT LOGISTICS

CONTENTS

Title Page	i
Authorisation and Distribution	ii
Preface	iii
Contents	v
Joint Doctrine Publications	ix
Record of Amendments	x

PART 1 – FUNDAMENTALS

Chapter 1	Introduction	
	Definitions	1-1
	Principles	1-5
	Conduct of Logistic Support to Joint Operations	1-8
	Annex 1A – Maritime Environment	
	Annex 1B – Land Environment	
	Annex 1C – Air Environment	
Chapter 2	Command and Control	
	Logistic Command and Control Framework	2-1
	Joint Task Force Headquarters Logistic Command and Control	2-5
	Joint Force Logistics Component Command and Control	2-9
	Annex 2A – Generic Joint Force Logistics Component Structure	
	Annex 2B – Functions of a Joint Force Logistics Component	
Chapter 3	Enabling Functions	
	Joint Supply Chain	3-1
	Logistic Situational Awareness	3-4
	Force Protection	3-6

PART 2 – PREPARE

Chapter 4	Force Generation	
	Logistic Support to Force Generation	4-1
	Generation of Logistic Force Elements	4-3
	Contractor Support	4-5

Chapter 5	Planning	
	Planning Process	5-1
	Logistic Input to the Planning Process	5-5
	Logistic Estimate and Joint Supply Chain Plan	5-9
	Conduct of the Logistic Estimate	5-11
	Logistic Information Systems Planning	5-15
	Annex 5A – Generic Logistic Annex to CDS Directive	
	Annex 5B – Generic Sustainability Statement	
	Annex 5C – Generic Logistic Estimate Process	
	Appendix 5C1 – Consideration of Factors Aide Memoire	

PART 3 – PROJECT

Chapter 6	Logistic Support to Deployment	
	Mounting	6-1
	Deployment Planning	6-2
	Deployment Execution	6-6
	Coupling Bridge	6-10
Chapter 7	Reception, Staging, Onward Movement & Integration	
	Reception, Staging, Onward Movement & Integration Process	7-1
	Reception, Staging and Onward Movement Capabilities	7-5

PART 4 – SUSTAIN

Chapter 8	Sustain	
	Sustainment Requirement	8-2
	Rehabilitation and Relief in Place	8-5
	Sources of Logistic Support	8-6
	Maintaining Sustainment	8-9

PART 5 – RECOVER

Chapter 9	Redeployment and Recuperation	
	Restoring Combat Power	9-1
	Redeployment	9-2
	Recuperation	9-7

PART 6 – MULTINATIONAL ISSUES

Chapter 10 **Multinational Logistics and Host-Nation Support**

NATO Logistic Support	10-1
NATO Principles	10-3
Multinational Logistic Provision	10-5
Host-Nation Support	10-8

Lexicon

Part 1 – Acronyms and Abbreviations

Part 2 – Terms and Definitions

Reference Publications

(INTENTIONALLY BLANK)

JOINT DOCTRINE PUBLICATIONS

The successful conduct of military operations requires an intellectually rigorous, clearly articulated and empirically-based common framework of understanding that gives advantage to a country's Armed Forces and its likely partners in situations involving confrontation, crisis, conflict and, ultimately, war. This common basis of understanding is provided by doctrine. UK policy states that national doctrine should, as far as is practicable and sensible, be consistent with NATO doctrine, terminology and procedures (except when the UK has elected not to ratify NATO doctrine). However, national doctrine needs to cover those areas not adequately covered by NATO doctrine and, by continuously and rigorously reviewing existing doctrine and operational practice, influence the development of Allied doctrine. This requirement is addressed in Joint Doctrine Publications (JDP).¹

Interim Joint Doctrine Publications (IJDP) are published to meet pressing needs for doctrinal guidance in a timescale that precludes full staffing or endorsement; they are duly caveated to reflect evolving or planned changes in policy, imminent legislation or in anticipation of future lessons. Short-term, urgent requirements for doctrine are published in Joint Doctrine Notes (JDNs). JDNs do not represent an agreed or fully staffed position, but are raised in short order by the Development, Concepts and Doctrine Centre (DCDC) to establish and disseminate current best practice. They also establish the basis for further development and experimentation, and inform operations and exercises.

Details of the Joint Doctrine development process and the associated hierarchy of JDPs are to be found in Defence Instructions and Notices (DINs) and in the Joint Doctrine Development Handbook (JDDH).

¹ Formerly named Joint Warfare Publications (JWPs).

RECORD OF AMENDMENTS

Part 1
Fundamentals



PART 1
Fundamentals

CHAPTER 1 – INTRODUCTION

SECTION I – DEFINITIONS

Logistics¹ is the science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense logistics encompasses those aspects of military operations which deal with:

- Design and development, acquisition, storage, movement, distribution, maintenance, recovery and disposal of materiel.
- Transport of personnel.
- Acquisition or construction, maintenance, operation, and disposition of facilities.
- Acquisition or furnishing of services.
- Medical and health service support.

101. **Military Definition.** Logistics involves a wide range of activities and services required to support operations. Logistics and administration² are closely allied and interdependent; together they are often referred to as ‘Combat Service Support³’ (CSS), responsibility for which is shared by J1 and J4 staff. JDP 4-00 ‘*Logistics for Joint Operations*’ focuses on logistics and should be used in conjunction with other publications as follows:

- a. **Administration.** This publication only covers those administrative activities that directly relate to the operational movement and maintenance of personnel. Detailed coverage of administration is contained in IJWP 1-00 ‘*Joint Operational Personnel Administration*’.
- b. **Medical Support.** The provision of medical support to personnel is a logistic function and is subject to the same principles as other logistic activities. Detailed coverage of medical issues is contained in JDP 4-03 ‘*Medical Support to Joint Operations*’.
- c. **Logistic Enablers.** There are a number of key logistic enablers such as fuel, water and consignment tracking, which are only covered in this publication at the level necessary to enable a J4 staff officer to make informed judgements on logistic requirements and provision. Detailed doctrine for

¹ AAP-6 ‘*NATO Glossary of Terms and Definitions*’.

² The managing and execution of all military matters not included in tactics and strategy. (AAP-6)

³ The support provided to combat forces, primarily in the fields of administration and logistics. (AAP-6)

logistic enablers is contained in JWP 4-01 ‘*Logistic Enablers for Joint Operations*’⁴ for use by those officers holding more specialist appointments.

102. Other Definitions. Logistics was originally a purely military term defined as ‘the activity of organising the movement, equipment and accommodation of troops’. It is now a term in general usage defined as ‘the detailed coordination of a large and complex operation’ and ‘the commercial activity of transporting goods to customers’.⁵ It is important to be aware of this difference in definitions between that applied to the military and that commonly used in the commercial sector. Contractor Support to Operations (CSO) is an increasingly important element of the overall logistic support provided to operations and it is necessary to understand exactly what commercial providers understand by the provision of logistics. CSO is covered in detail at Chapter 4.

103. Restoring Combat Power. The activities involved in restoring, in the broadest sense, the combat power of Force Elements (FE) have been described variously as recovery, recuperation, rehabilitation, reconstitution, regeneration and restoration. Whilst each term has attracted a specific NATO or UK national definition, these have sometimes overlapped or lacked the necessary clarity to distinguish unequivocally between them. A clear distinction should be made between:

- a. The rehabilitation of FE during the course of operations to enable them to resume combat within the Joint Operations Area (JOA).
- b. The redeployment/relocation of FE from the JOA, normally to the UK, this is separate from restoring their combat power, but often a precursor to doing so.
- c. The recuperation of FE following operations in order to re-establish their ‘steady-state’ level of readiness in order to resume other activities, such as training, within the Operational Planning Cycle (OPC).

104. These activities are defined as follows:

- a. **Rehabilitation** is the processing, usually in theatre in a relatively calm area, of units, individuals and equipment recently withdrawn from operations. The processing involves resting units and personnel, restoring equipment and personnel to operational fitness, issuing replacement personnel, supplies and equipment, undertaking training and generally being made ready for re-employment in future operations.⁶

⁴ JWPs 4-01.1 ‘Water’, 4-01.2 ‘Fuel’, 4-01.3 ‘Mounting’, 4-01.4 ‘Operational Feeding’, 4-01.5 ‘Consignment Tracking’, 4-01.6 ‘Air Despatch’ and 4-01.7 ‘Power’.

⁵ All definitions are taken from the Concise Oxford English Dictionary, (11th Edition, 2004).

⁶ Revised Definition.

b. **Redeployment** is the process of preparing and executing the relocation of units, equipment and materiel to a new destination. This may be to a new deployment area or to peacetime locations where recuperation will take place.⁷

c. **Recuperation** is the replacement of resources, including personnel, equipment and materiel, following operational activity in preparation for further operations. It includes the training necessary to restore FE to their normal readiness level (R^x).⁸ Recuperation normally takes place in the Strategic Base as part of the OPC.

Related Logistic Terms

105. **Logistic Support.** The provision of logistics to support operations, and the provision of logistic information to allow commanders to make informed decisions, is usually described as the provision of logistic support. Logistics and logistic support⁹ can, therefore, be regarded as interchangeable terms. The availability of appropriate logistics may influence the Course of Action (CoA) selected by the Force Commander. It is however, the ability to apply the right logistics in a timely manner to meet the prevailing operational need that is paramount. Logistics held in the wrong place or with limited visibility, control and distribution of resources, can severely limit the Force Commander's freedom of action.

106. **Sustainability.** Sustainability is the ability of a force to maintain the necessary level of combat power for the duration required to achieve its objectives.¹⁰ FE consume resources, use logistic services and degrade equipment from the moment they deploy from their Strategic Base. Operational logistic planning will determine the sustainability requirement for an operation; that is the resources, logistic services and equipment support necessary to deploy, conduct in-theatre training, maintain and redeploy the force during the operation.

107. **Integrated Logistics.** The term integrated logistics is used to describe the involvement of external organisations working in partnership with the military to provide logistic support to deployed forces and in the Strategic Base. These organisations include industry, CSO and Other Government Departments (OGDs) and, where appropriate, Host-nation Support (HNS) and multinational logistic support. Greater integration between Defence and Industry is articulated in the Defence Industrial Strategy (DIS),¹¹ covered in paragraph 122.

⁷ Revised definition.

⁸ Revised definition.

⁹ The use of the term 'logistic support' should not be confused with the Army unit title 'Logistic Support Regiments (LSRs)' used by a number of Royal Logistic Corps (RLC) Regiments.

¹⁰ AAP-6.

¹¹ Defence Industrial Strategy Defence White Paper 15 December 2005.

108. Logistic Support to the Operational Planning Cycle. Logistic support to force generation has 2 related aspects. The first is the activity and resources required to train and maintain FE at Readiness States mandated by the Departmental Plan, through Service Plans. The second is the activity and resources required to generate those FE from their normal readiness state to the level required for deployment. FE at readiness is abbreviated to $FE@R^x$ where R^x indicates the readiness level of a particular force element. The transition of a FE from its normal readiness state to the point at which it is ready to deploy is shown as R^X to R^0 , where R^0 indicates a FE ready to deploy. Logistic sustainability is the activity and resources required to sustain those FE from R^0 to Readiness in Theatre (RIT), which includes deployment and in-theatre training, the conduct of operations, rehabilitation and redeployment. Combining the requirements for logistic support to force generation and logistic sustainability produces the Total Logistic Requirement (TLR) shown at Figure 1.1. This is a generic representation of the OPC; variations in the Maritime environment are articulated in Annex 1A.

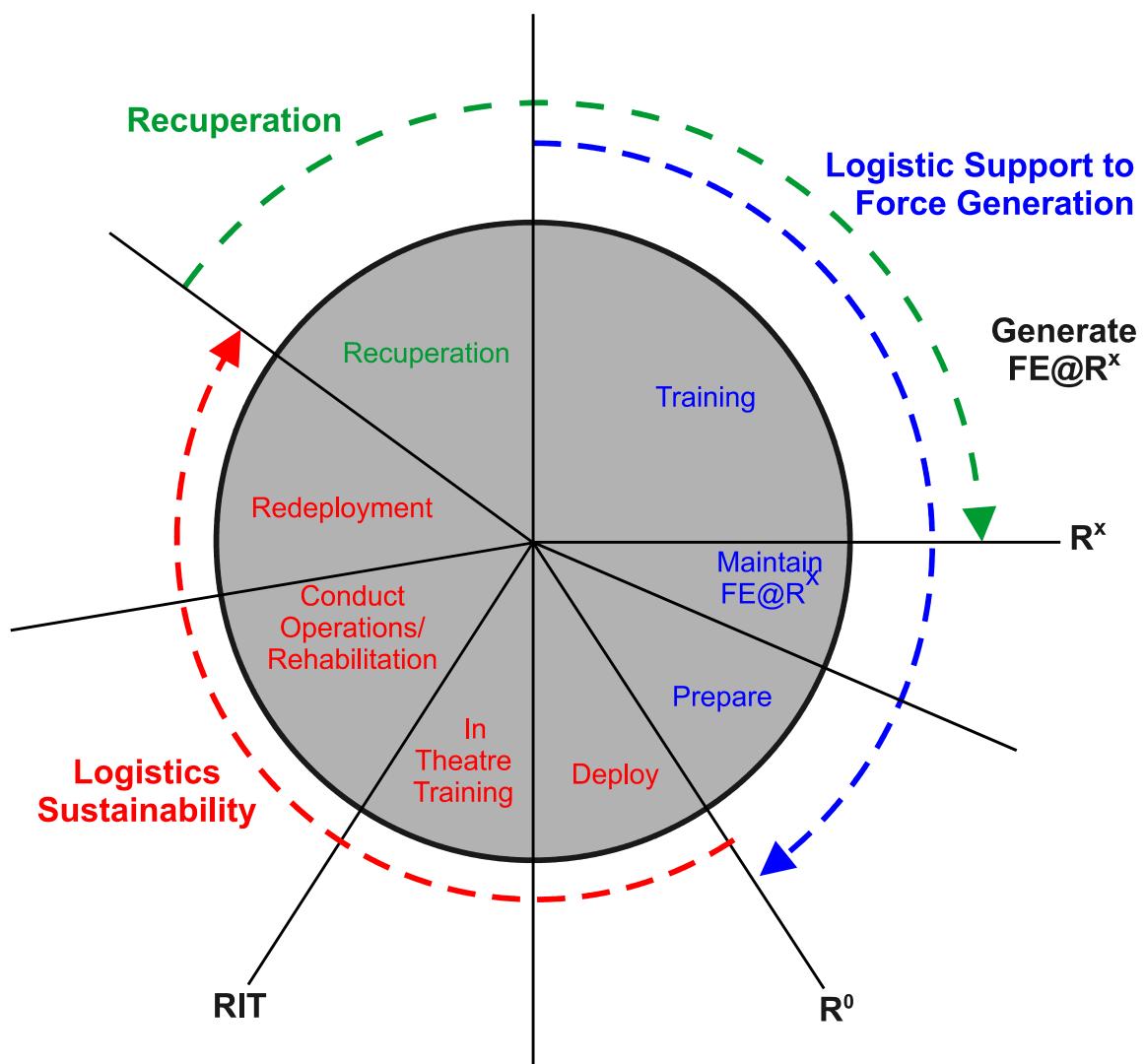


Figure 1.1 – Logistic Support to the Operational Planning Cycle

SECTION II – PRINCIPLES

Principles of Logistics:

- Foresight.
- Efficiency.
- Simplicity.
- Cooperation.
- Agility.

109. **Principles of Logistics.** There are 5 broad principles of logistics: foresight efficiency, simplicity, cooperation, and agility.¹² These principles provide guidance to commanders and their logistic staff. Some principles are mutually supporting such as the application of foresight, simplicity and cooperation; however, the application of others such as efficiency and agility in a multinational operation, present potential conflicts. Details of each principle are covered in the following paragraphs.

110. **Foresight.** Logistic foresight is the ability to predict and manage critical logistic constraints to the Commander's freedom of action. Planners, at all levels, should analyse the probable course of future operations and forecast the likely requirement for personnel, materiel, equipment and services. They should also address how the required resources are to be provided and moved into, around and returned from the JOA. Logistic foresight is often an art, rather than a science, and may require the construction of a plan based on limited information. Gaining effective logistic foresight will require:

- a. Close liaison between J3/J5 staffs and J4 staff. Logistic support requirements will often have a direct impact on strategic, operational or tactical activities and logisticians should ensure that future plans are fully integrated with operational intentions.
- b. Logistic planning staff require a detailed understanding of available resources and movement assets, the intended location of deploying FE and anticipated environmental conditions. This will assist in providing the right resources at the right time, in the right place to meet operational requirements.
- c. Access to J2 and J3 information to assist in predicting the outcome of an adversary's manoeuvres and engagements. During operations foresight may

¹² Previously, the requirement to make efficient use of finite resources had been termed economy, but efficiency is a more appropriate term. Similarly agility is a more appropriate term than flexibility as it encompasses the attributes of responsiveness, resilience, acuity and adaptability as well as flexibility. The principle of agility is covered in British Defence Doctrine (BDD).

become increasingly dependent on predicting an opponent's plans rather than determining logistic support requirements solely on those of friendly forces.

111. **Efficiency.** Logistic efficiency involves achieving the maximum level of support for the least logistic effort and making the best use of finite resources, transportation assets and Lines of Communication (LOC). Logistic efficiency will ultimately determine the most appropriate organisational structures and necessary resources to support an operation, in some cases employing alternative, possibly non-military, support arrangements. Logistic efficiency, however, is not the same as commercial efficiency; the required logistic effect may involve duplication and redundancy in order to deliver operational effectiveness. To foster efficiency the development of logistic structures for operations should be based on capability packages. This will provide the opportunity, for smaller scale operations, to integrate the required support capabilities, for any one component into that of other component or Joint structure, rather than deploying complete units with potentially superfluous capabilities.

112. **Cooperation.** Joint and multinational operations require a cooperative approach to logistics from planning to execution. The options for cooperation between components, and between the UK and international partners, will be determined by either the Permanent Joint Headquarters (PJHQ) or the Joint Task Force Commander (JTFC) based on operational planning considerations. There are 4 considerations in promoting cooperation:

- a. **Lead Component Responsibility.** It is a fundamental national principle in the provision of logistic support to Joint operations that services and commodities of common usage across the components should be provided by one for the use of all. This principle should be extended, where possible, to multinational operations.
- b. **Defence Equipment and Support.** Maximum use should be made of support from Defence Equipment and Support (DE&S), through Integrated Project Teams (IPTs), for the provision of common logistic support.
- c. **Visibility of Information.** The assimilation and exchange of relevant information is a prerequisite for cooperation. Information concerning the status of logistic assets is essential for the efficient management and coordination of support to Joint and multinational forces. A logistic information plan, incorporating personnel, equipment and sustainment flows, and resourced with the necessary communications and Information Technology (IT) assets is fundamental to the Joint or multinational planning and execution process and promotes confidence building.

d. **NATO Cooperation.** In addition to the principles of logistics recognised by the UK, NATO recognises a number of additional principles that will guide a NATO Commander in executing his responsibilities for logistics efficiently and effectively. NATO logistic principles¹³ are relevant for all multinational operations and are of value when considering cooperative logistic support for any operation. These are covered in Chapter 10.

113. **Simplicity.** In order to ensure that logistic arrangements are as robust and as readily understood, as possible, they should be simple, both in their concept and execution. Simplicity is enhanced by:

- a. Establishing a robust command and control (C2) framework that provides for delegated authority and allows for mission command in order to enable commanders to resolve logistic complexity.
- b. The use of common logistic processes amongst components, Allies and other organisations. Where systems are incompatible, liaison and user-interfaces should be established to assist.
- c. Maintaining control along the LOC and in the JOA. Logistic commanders should have sufficient overview and control of the relevant support arrangements within the JOA and along the LOC to ensure freedom of action.
- d. Ensuring that future platform/system developments are coherent with the principle of simplicity by the coherent development of logistic support solutions.

114. **Agility.** Logistic agility provides the commander with the ability to respond quickly to the unexpected, maintain sharpness of thought, remain effective under arduous conditions, be flexible in overcoming the unforeseen and adjust rapidly. A balance should be struck between the use of rigid systems and structures, which can meet the requirement for simplicity and assist with cooperative measures and the need for functional agility. Logistic agility is promoted by:

- a. The education of logistics personnel, and those who receive logistic support, to be resourceful and not to rely solely on traditional methods of support.

¹³ NATO logistic principles are covered in full in AJP-4 ‘Allied Joint Doctrine for Logistics’.

- b. The adoption of an holistic approach to the provision of logistic support that makes the optimum use of resources whether using a land LOC, an air-bridge, Joint Sea Basing¹⁴ (JSB) or any combination of the three.
- c. The authority of the logistic commander to change the logistic structure, and the support it provides, as an operation develops. This could involve diverting resources from one component or nation to another, depending on the Joint or multinational commander's priorities, or changing logistic structures and logistic C2 arrangements to best align with the Main Effort
- d. The provision of appropriate equipment and resources.

SECTION III – CONDUCT OF LOGISTIC SUPPORT TO JOINT OPERATIONS

- Joint logistics is achieved through a combination of component and Joint logistic support utilising the most suitable assets for each operation.
- Chief of Defence Materiel (CDM) is the Logistic Process Owner with responsibility for ensuring coherence across the logistic process.
- Operations are almost invariably Joint and multinational. Opportunities for multinational logistic provision should be exploited.
- Coordination of Joint force logistics is enhanced by a number of permanent Joint logistic structures.
- Joint logistics requires unity of effort from the Strategic Base, including industry, across the Coupling Bridge (CB) to supported operational force elements.

Logistic Organisation and Responsibilities

115. **Logistic Process Owner.** CDM owns the logistics process on behalf of the Defence Management Board (DMB)¹⁵ and directs Defence logistic priorities through the Defence Logistic Board (DLB). CDM exercises his authority over the logistics community through a combination of influence, support and, where appropriate, active command, control and coordination. The Chief of Joint Operations (CJO) is responsible for deploying, directing, sustaining and recovering all forces assigned to him by the Chief of Defence Staff (CDS), who will also give him Supported Commander status over elements of logistic activity in the Strategic Base. He is supported by Director General Joint Supply Chain (DG JSC) who acts as the

¹⁴ Joint Sea Basing: 'Use of the sea as a base within Joint Operations in order to contribute to an optimum footprint ashore'. (JDP 0-01)

¹⁵ Following the recommendations of the McKane Study the Defence Logistics Organisation (DLO) and Defence Procurement Agency (DPA) merged in April 2007 as DE&S. CDM has replaced Chief of Defence Logistics (CDL) as the Logistic Process Owner.

operational focus for DE&S and is accountable to CDM for the delivery of materiel and the movement of personnel through the provision of an effective and efficient Joint Supply Chain (JSC).

116. Assistant Chief of Defence Staff. Assistant Chief of Defence Staff (Logistic Operations) (ACDS (Log Ops)) provides strategic planning and logistic support direction for current and contingent operations on behalf of CDS through the Defence Crisis Management Organisation. He develops bilateral and multilateral logistic relationships through staff talks and the relevant working groups of NATO, EU and other international organisations. ACDS (Log Ops):

- a. Contributes to strategic planning for the OPC by conducting a strategic logistic estimate for the Defence Crisis Management Organisation (DCMO) and providing early planning guidance to PJHQ and the Defence Supply Chain Operations and Movements (DSCOM).
- b. Sets out how logistics will meet the challenge of future operations by ensuring that policies issued under the authority of CDM are coherent and consistent with related conceptual, doctrinal and force development work.
- c. Contributes to the definition of high-level logistic requirements throughout the logistic support and sustainability cycle so that resources are allocated appropriately to meet current support needs and provide for sustainability and recuperation requirements.
- d. Provides strategic leadership and coordination of the development of a Defence Logistics Information capability as part of logistic force and capability development.

117. Joint Logistic Structures. Logistic Support to operations is often provided by component logistic FE that have been trained and generated as part of the operational force that they support. The vast majority of in-theatre support is provided by components. Coordination of force logistics is achieved through a number of permanent organisations and by task-organising Joint structures for specific operations:

- a. **Defence Equipment and Support.** The formation of Defence Equipment and Support (DE&S) in April 2007 reinforced the Joint approach to Defence logistics established by the formation of the Defence Logistic Organisation (DLO). DE&S interfaces with the DCMO through ACDS (Log Ops) and provides links through PJHQ into the JOA, to interface with the Joint Force Logistic Component (JFLogC) and Component logistic organisations. The main benefit delivered by the formation of DE&S is the creation of a single organisation that can manage coordinated materiel support to Defence.

DE&S coordinates and combines the provision of supplies and services from the Strategic Base to deployed forces; liaison is therefore required between DE&S through PJHQ, to logistic staff in the JOA

b. **Joint Mounting Cell.** The PJHQ Joint Mounting Cell (JMC) provides a standing Joint focus for the C2, coordination and development of the Operational Mounting Process (OMP). It is covered in detail in Chapter 6.

c. **Defence Supply Chain Operations and Movements.** DSCOM was created in October 2005 to combine the enhanced functions of the original Defence Transport and Movements Agency (DTMA)¹⁶ with those of the Defence Logistics Operations Centre (DLOC). It provides Defence and other authorised users with agreed transport and movements services worldwide. It is operationally focused and the inclusion of the DLOC into the organisation means that DSCOM has formal responsibility for providing the MOD and PJHQ with a single DE&S operational focus for mounting, sustaining, recovery and recuperation from operations.

d. **Defence Medical Services Department and Surgeon General.** The Defence Medical Services Department (DMSD) and the Surgeon General (SG) represent a Joint approach to health and medical support, and maintain the necessary linkages between the provision of military health support and more specialist, long term support from the National Health Service (NHS). The DMSD and SG coordinate policy and commitments to ensure a full spectrum of health and medical support from point of injury, illness or incapacitation through the patient care pathway, which may include treatment in the NHS, culminating in a return to duty or transition to civilian life.¹⁷

e. **Standing Joint Force Logistic Component Headquarters.** The Standing JFLogC (SJFLogC) HQ is under Operational Command (OPCOM) of CJO. It consists of personnel drawn from all 3 Services and is commanded by the Commander Joint Force Logistic Operations (CJFLogO). The HQ is held at Very High Readiness (VHR) to provide a rapidly deployable Logistic C2 node for contingent operations. It will form the core of the JFLogC HQ at Medium Scale, drawing HQ augmentation from an authorised Augmentation Manning List (AML) held by the Defence Augmentation Cell (DAC), and embedded HQ specialists from all 3 Services and the DE&S.¹⁸ In this role, the HQ will provide theatre level logistic support to all forces under the direction of the JTFC.

¹⁶ Now DSCOM Movements and Operations.

¹⁷ Further detail is contained in JDP 4-03 ‘Medical Support to Joint Operations’. (2nd Edition)

¹⁸ The SJFLogC contributes about 10% of the required manning for a deployed JFLogC on a medium-scale operation.

f. **Task-Organised Logistic Structures.** Operational considerations will determine the scale and capabilities of task-organised logistic structures. Structures will be decided as a result of the logistic estimate carried out prior to deployment. Logistic planners, working alongside operational planners, will have to determine component support needs, identify common logistic tasks that can be conducted by a single organisation in support of all deployed assets and implement a plan to create the necessary task-organised structures. Joint logistic tasks may be time or phase specific, or may be permanently in operation throughout a campaign. Task-organised logistic structures should be sufficiently agile to facilitate reorganisation as operational need dictates.

118. **Environmental Logistic Support.** Whilst logistic support to operations is supported by the Joint logistic structures outlined above, it is underpinned by environmental contributions, specific logistic structures and procedures. These contributions, structures and procedures are covered in the environmental specific annexes to this Chapter.

119. **Logistic Priorities within the Joint Operations Area.** The Joint Task Force Headquarters (JTFHQ) sets overall logistic priorities within the JOA. Prioritisation can include the allocation of resources to a FE or component, the allocation of movement priorities to resources, FE and components and the identification of FE or components that have a priority call on logistic support. Priorities will change over time and during different stages of an operation. Prioritisation is based on operational requirements and its implementation requires logistic staff to have full visibility of all logistic resources looking both backwards towards the Strategic Base and forward to the components, who control their own internal logistic support.

Logistic Support Framework

120. The Logistic Support Framework operates from the Strategic Base forward to Front Line FE and includes the JSC, the CB, Strategic LOC and the Logistic Footprint. The linkages between these various elements of the Support Framework are shown at Figure 1.2.

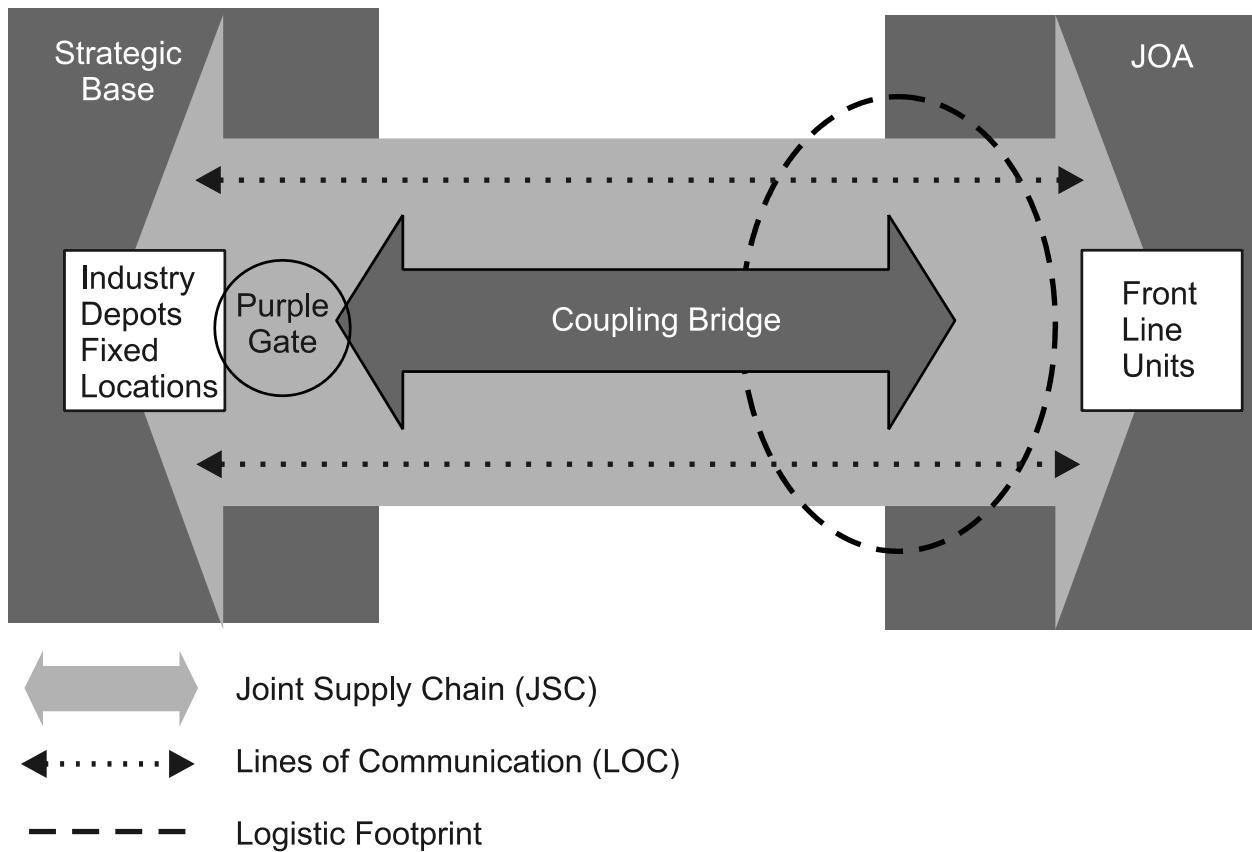


Figure 1.2 - Logistic Support Framework

121. **Strategic Base.** The Strategic Base comprises military assets, industrial capacity both national and international, civilian contractors and NHS hospitals. Military assets may be FE owned by any of the 3 Services or the DE&S. The military logistics system is made up of static depots, repair workshops, naval bases, garrisons and airfields located both within the UK and abroad. All operations regardless of size, nature and duration will be reliant to some degree on industrial and commercial support.

122. **Defence Industrial Strategy.** The DIS is designed to promote a sustainable industrial base that retains in the UK those industrial capabilities, including infrastructure, skills, knowledge and capacity, needed to ensure the appropriate level of industrial support for Defence. The Strategy is structured to take full advantage of the UK industrial capabilities, whilst promoting cooperation with allies, on collaborative projects, and seeking to benefit from the broader international market, where appropriate, to maximise cost-effectiveness to Defence. The DIS seeks to:

- Enable industry to optimise its skills and cost base for national strategic needs.
- Promote a business environment that is attractive to defence companies and investors.

c. Identify key industrial capabilities that are important for Defence to retain in the UK and put in place sustainment strategies where retention of the capability is at risk.

123. Joint Supply Chain. The JSC is the network of nodes comprising resources, activities and distribution options that focus on the rapid flow of materiel, services and information between the Strategic Base and deployed FE in order to generate, sustain and redeploy operational capability. It operates from the factory through base depots across the CB and as far forward as the receiving unit location. It is dependent on integrated logistic information systems, common policies, doctrine, processes and procedures to provide a core enabling capability for Defence, optimised to deliver military effect. The JSC is covered in more detail in Chapter 3, and Chapter 5 includes C2 of the JSC and development of the JSC Plan. The JSC should therefore be considered as an integrated system involving a large number of separate organisations and has both a forward and reverse dimension.

124. Coupling Bridge. The CB describes the series of activities through which FE, equipment and materiel are delivered from the Strategic Base to the JOA, and returned, in accordance with the JTFC's priorities. It involves all the strategic assets, infrastructure and facilities required. CB assets located along the LOC and in the JOA form part of the overall Logistic Footprint and utilise Strategic LOC which may include a Forward Operating Base (FOB). The exact span of the CB will be defined in advance of an operation and will vary between operations and individual phases of operations. Associated with the CB are specific operating requirements, such as facilities, Force Protection (FP) and Communication and Information Systems (CIS), to ensure effective logistic support from the Strategic Base and the JOA.

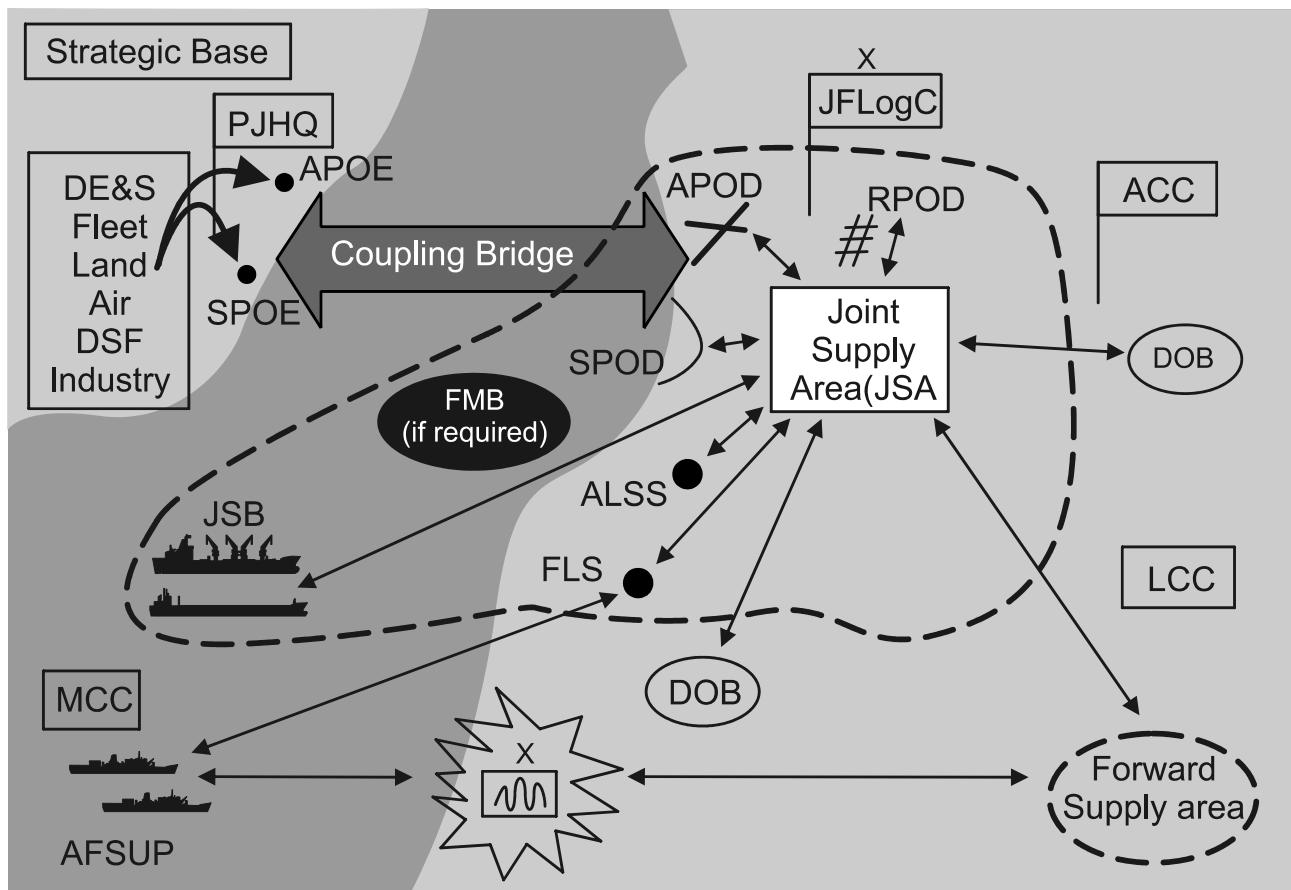
125. Strategic Lines of Communication. Strategic LOC are the designated routes, and associated C2 nodes, that support the deployment, sustainment and redeployment of FE. LOC operate in both directions and are used to move personnel, equipment and materiel into and out of the JOA. This includes the roulement of personnel, returning casualties for treatment and returning unserviceable stocks for replacement or refurbishment back to the Strategic Base. Strategic LOC are Joint and operate as one of the CB activities into the JOA and may operate beyond the CB as far forward to the Components as is feasible and efficient; they may also operate back to depots and industry in the Strategic Base. LOC are vulnerable and need both maintenance and protection, which can require significant effort and resources. In the Strategic Base, a significant number of military and commercial suppliers could be involved in meeting operational demands. Their activities need to be coordinated in order to optimise LOC use and, therefore, CB effectiveness. It will not always be possible to expand LOC capacity by additional commercial contracts; therefore, available capacity should be optimised by the Joint prioritisation of personnel, equipment and materiel movement, based on the JTFC's requirements.

126. **Logistic Footprint.** The logistic footprint describes the impact of logistic activity in the JOA. It identifies the utilisation of real estate and the consumption of resources, including manpower, equipment, infrastructure, supplies and HNS that logistic activity in support of an operation will require. It also includes those resources that are deployed along LOC, where they are required for logistic activity, and any liability for additional FP assets.

Logistic Deployment

127. **Joint Logistics.** Forces on operations require logistic support to be delivered at the right time and in the right place. The logistic challenge is to accurately determine the support that each FE requires and to identify the ‘right’ time and place for its delivery. Once the requirement is identified, logistic support should be delivered as efficiently as possible. UK logistic support to operations, even when operating within a coalition, is based on Joint logistics, the coordinated mutual logistic support of 2 or more Services. Logistic activities in the Strategic Base and across the CB, together with initial reception activities in Theatre, are conducted on an entirely Joint basis. The CB is covered in detail in Chapter 6. The JFLogC will invariably control Reception, Staging and Onward Movement (RSOM) and will also influence activities along the CB working with the Maritime, Land and Air Component Commanders to ensure FE are effectively supported. In Joint operations, a Joint logistic plan will always be put in place. A combination of Joint and Component logistic support is designed to bring efficiency and speed to the logistic support process by employing all available logistic assets to support operations.

128. An outline schematic of Joint logistic support to operations is shown at Figure 1.3.



A/SPOE	Air/Sea Port of Embarkation	A/R/SPOD	Air/Rail/Sea Port of Disembarkation
FMB	Forward Mounting Base	ALSS	Advance Logistic Support Site
JSB	Joint Sea Base	FLS	Forward Logistic Site
AFSUP	Afloat Support	DOB	Deployed Operating Base

Figure 1.3 – Joint Logistic Support to Operations

129. **Multinational Logistics.** Future UK operations will almost certainly be Joint and multinational and, although Joint logistics is central to the UK's logistic doctrine, this is not always the case with likely coalition partners. A decision to pursue multinational logistic arrangements should, therefore, make good operational sense and will be entirely dependent on the operational situation. Multinational arrangements for contingent operations are invariably complex and need to be agreed well in advance of an operation. These arrangements may take the form of:

- Logistic Role Specialisation, where one country provides a particular service or commodity for the whole force.
- The appointment of a Logistic Lead Nation (LLN), which provides the logistic support framework for the whole force.
- Contributions to Multinational Integrated Logistic Units (MILUs).

d. Other bilateral agreements.

NATO logistic doctrine provides an effective basis for multinational logistic cooperation, though this may not have universal application in other *ad-hoc*, non-NATO coalitions. Multinational logistic issues are covered in Chapter 10.

130. **Contractor Support to Operations.** CSO is an increasingly important element in the overall provision of logistic support to operations. Contractors are involved in a progressively wider range of roles and functions resulting from a smaller military force, the outsourcing of some logistic functions and the introduction into service of highly technical weapon and equipment systems. CSO covers all forms of contractor support replacing what was previously known as Contractors on Deployed Operations (CONDO). CSO encompasses CONDO, Contractor Logistic Support (CLS), where in-service equipment is maintained under contract with the equipment provider, and the use of contractors through the PJHQ Contractor Logistic (CONLOG) contract, where a range of services can be provided from a long term commercial contract.¹⁹

¹⁹ This is discussed further in Chapter 4, Sect III; details of legal status, protection and support etc are also covered in JSP 567 ‘*Contractors on Deployed Operations*’.

ANNEX 1A – MARITIME ENVIRONMENT

1A1. Introduction. The Maritime environment follows all of the basic principles of logistics set out in the main part of this publication and adheres to the doctrine and regulations set out in Joint Doctrine Publications (JDPs), Joint Service Publications (JSPs) and other relevant publications. However, there are characteristics of maritime logistics, which are unique to the environment that can, in turn, generate freedoms and constraints to the Joint force. This Annex highlights the key logistic issues and the interactions between the Maritime Component Commander's (MCC's) Group Logistics Coordinator (GLC) and the Joint Force Logistic Component (JFLLogC) staff.

1A2. Maritime Operational Readiness Cycle. The Maritime Operational Readiness Cycle (ORC) is implemented in the same manner as the generic Operational Planning Cycle (OPC) described in Chapter 1. However, there are elements of the ORC exclusive to the Maritime environment. Defence Equipment and Support (DE & S) and Commander-in-Chief Fleet (CINCFLEET) carry out the generation and mounting of maritime forces from R? to Rx and it is this Readiness Profile that is normally held in peacetime. Although Force Elements (FE) are maintained at readiness, if required for a specific operation FE can be readily deployed, with preparation and mission-focused training being conducted during the deployment phase. This ability to conduct concurrent activity invariably ensures that Maritime FE do not require In-Theatre Training and are available to conduct operations immediately on arrival in the Joint Operations Area (JOA). It should be recognised, however, that some FE, such as a Landing Force (LF), may prefer In-Theatre Training for acclimatisation when the environment is particularly hostile. On completion of operations (R0+), FE can be directed to a suitable port for a period of rehabilitation prior to being made available for further operations. Such operations may be within the current JOA, at another geographical location, under different Operational Control (OPCON), at a different intensity or a different type of mission. On completion of any further operations, Maritime FE will be directed to transit to the UK during which FE will also remain available for contingency operations. On return to the UK, FE will undertake a period of recuperation prior to commencing Force Generation and Training. The Maritime ORC is shown at Figure 1A.1.

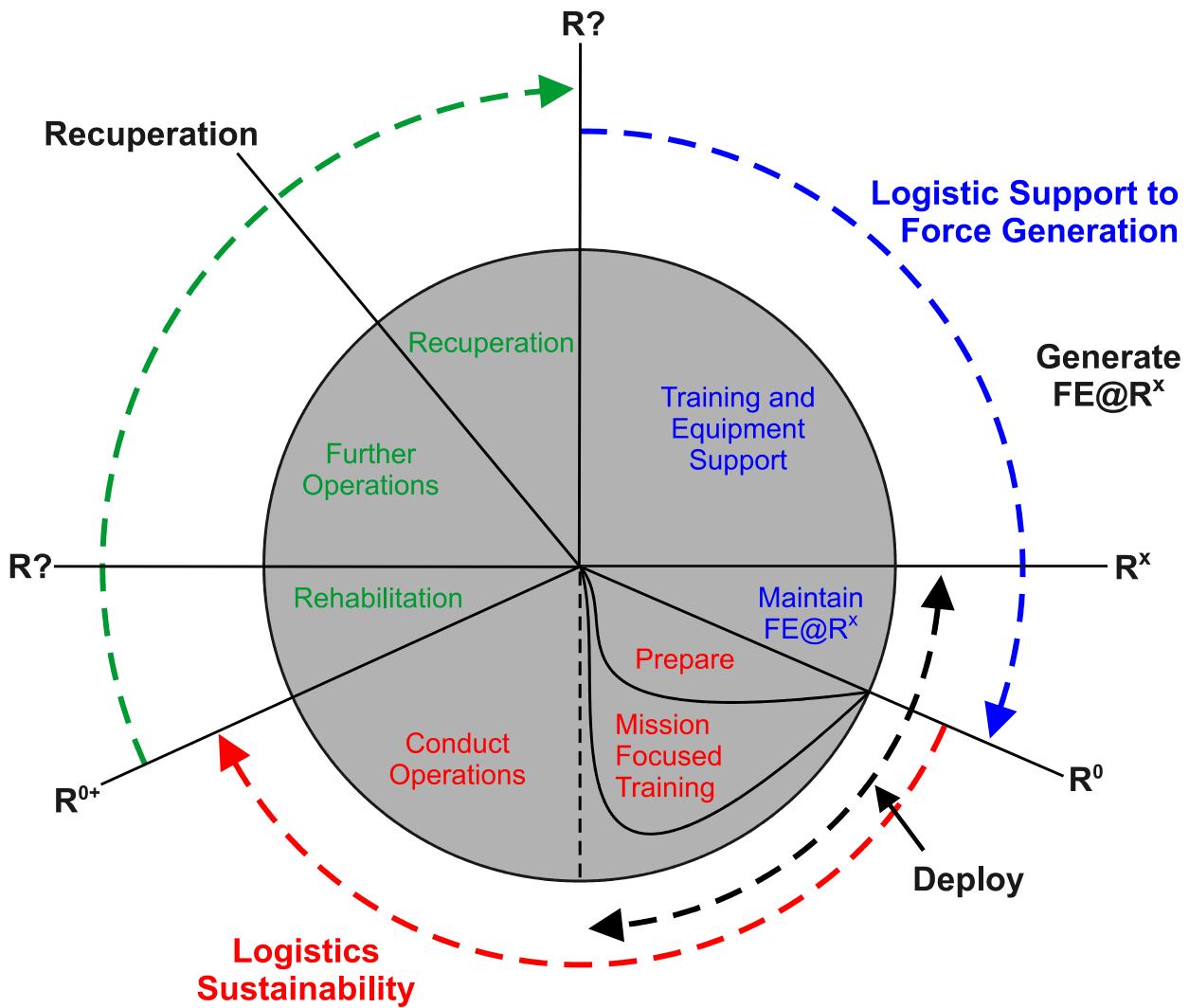


Figure 1A.1 - Maritime Operational Readiness Cycle

1A3. **Maritime Logistic Support.** Defence Planning Assumptions (DPAs) state that RN units and their Afloat Support (AFSUP) represented by Royal Fleet Auxiliary (RFA) FE should be self-sufficient for 28 days on arrival in theatre. The basic principle of Maritime logistics is the use of overall Task Group (TG) sustainment to provide organic solutions to logistic requirements. While FE have their own sustainability capability such as food, stores and ammunition held within the hull, this is supplemented by TG sustainment held within AFSUP platforms. The movement of sustainability between RFAs, the 'warehouse' and combat FE, the end of the Joint Supply Chain (JSC), is achieved through Replenishment At Sea direct between vessels and by helicopter. In common with other Components, high priority stores not held organically are demanded from the Strategic Base and forwarded to the platform using the JSC via the Coupling Bridge (CB). Maritime Logistic Support also encompasses the operational stocks and support elements of the Amphibious Task Group (ATG). While these stocks are allocated to the MCC for use, they may be of utility to other

Components through the commonality of items between a LF and Land Component Command (LCC) FE.

1A4. Types of Support. Maritime FE access 3 levels of support in order to achieve the sustainability needed to meet operational requirements:

- a. **Organic.** Organic support is that logistic support contained within warships and RFA Support Shipping.
- b. **Host-Nation Support.** In common with the other Components, and where appropriate, the Maritime Component will utilise Host-nation Support (HNS) for services such as port facilities, accommodation, transport, food and water.
- c. **Re-supply.** Re-supply is that support required to replace the expenditure of the Classes of Supply not held organically or available through HNS. Due to the limited availability of air and sealift assets, and the fact that Maritime units generally operate over a wide area, this type of logistic support is the most challenging. In order to meet Joint force integration and prioritisation requirements Maritime force logisticians will require direct support from the JFLogC.

1A5. Task Group Logistics. At Task Group (TG) level, the coordination of Maritime logistics is the responsibility of the GLC. The GLC's main role is to ensure the maximum effective support to the MCC's contribution to an operation. In order to maintain a clear picture of the logistic capability within the TG, TG FE provide sustainability information to the GLC including provisions endurance, fuel, ammunition holdings, stores, personnel, Operational Defects (OPDEFs) and any other pertinent information that may affect their Operational Capability (OC). This information, refined and coordinated by the GLC into standard Reports and Returns, is also used to inform the JFLogC of any issues that will require coordination between the 2 Components and to provide an overall assessment of sustainability within the Maritime environment to the JTFC. This information set forms the Maritime contribution to the Recognised Theatre Logistics Picture (RLTP) and, when shared with the JFLogC, can assist in agile and efficient use of stocks. For example, stocks of Operational Ration Packs (ORP) or ammunition held to support a LF could be transferred ashore at the request of the JFLogC to support another Component based on the JTFC's priorities.

1A6. Forward Logistic Sites. During operations, it is often necessary to generate Maritime support sites ashore that can receive, store and arrange the movement of Personnel, Mail and Cargo (PMC) to and from Maritime FE. Prior to a Maritime force deploying into theatre, Permanent Joint Headquarters (PJHQ) and CINCFLEET will determine the requirement for Forward Logistic Site (FLS) support. Where

appropriate, one or more FLSs may be established in the JOA; the location, size and available facilities will dependent on the operational requirement. The FLS is the final point on land where PMC is held prior to being transferred to a ship. The movement of all PMC entering and leaving theatre will normally be conducted through a Port of Disembarkation (POD), although it may be more effective for PMC to be delivered directly to the FLS. FLS staff report the PMC held to the GLC and liaise as necessary to move the items to meet an appropriate movement asset, usually a Helicopter Delivery Service (HDS) or a ship undertaking the Delivery Boy (DELBOY) service, both generated by the GLC. In the JOA, there will be a requirement to transport maritime PMC to the FLS for onward movement to Maritime assets. As FLS teams are unlikely to have air assets directly under their tasking authority, movement, by air or road, will require the use of assets under the control of the JFLogC and will be dependent upon the distance and security situation. Close coordination between the GLC, FLS staff and JFLogC movements staff will be required in order to move PMC to the right place with the right priority to meet operational tasking. If a FLS is established within the JOA, its location ashore makes it difficult for the GLC (at sea) to provide it with life support and Force Protection (FP). Consequently, a FLS is normally under the OPCON of the JFLogC and Tactical Control (TACON) of the GLC.

1A7. Afloat Support Platforms. The principal role of the RFA, a UK MOD civilian manned, Government owned support organisation within CINCFLEET, is to sustain and support Maritime forces at and from the sea. The RFA currently consists of 12 vessels with direct AFSUP roles and a further 5 specialist amphibious ships, which integrate with warships to form the ATG. The latter platforms provide direct support to a LF, or act as part of a Forward Mounting Base (FMB) to a LF that could be operating some distance away. It should be noted that RFA fuel tankers carry F76 – Marine Fuel and F44 – Aviation Fuel. F44 is the single fuel for Royal Marines (RM) ashore and may be used in place of, or freely mixed with, F34 as part of a theatre single fuel policy. The following vessels may provide support to other Components ashore and are of particular interest to the JFLogC.

a. **Primary Casualty Receiving Facility.** The Primary Casualty Receiving Facility (PCRF), RFA ARGUS, is a Role 3 medical capability with 4 operating tables and 100 beds – 70 low dependency, 20 high dependency and 10 intensive care. The equipment is maintained at high readiness, with the medical team held at R4 to embark. Once medical personnel are embarked, the capability is immediately ready to accept casualties.

b. **Amphibious Task Group.** Some of the shipping within the ATG possesses a limited capability for the maintenance and repair of LF vehicles. If required, and dependent upon the situation, this facility could be utilised to assist in the maintenance and repair of vehicles supporting LCC FE.

c. **Landing Platform Helicopter.** A Landing Platform Helicopter (LPH) such as HMS OCEAN or HMS ARK ROYAL/ILLUSTRIUS, when operating as LPHs, have the capability to conduct onboard maintenance and repair of helicopters. This may offer an opportunity to maintain helicopters supporting components ashore, but will be dependent on the availability of particular aircraft spares. The use of these facilities, therefore, depends on the commonality of the types of helicopters allocated to the onboard Tailored Air Group (TAG) and those deployed ashore, and requires consideration when conducting the logistic estimate.

d. **Forward Repair Ship.** The Forward Repair Ship (FRS), RFA DILIGENCE, conducts Operational Maintenance and Repair (OMAR) within the JOA. Emergency and routine maintenance for FE is carried out in its onboard workshop facility. The technical facilities on board may offer options for maintenance or repair of equipment used by other Components in certain circumstances.

1A8. **Operational Defect.** The ability of a Maritime force to meet the JTFC's operational aims is linked, in part, to the availability of equipment and weapons systems. A single defect in a Maritime platform can have a disproportionate effect on the JTFC's ability to deliver effect. A defect on an aircraft carrier's propulsion system may mean that it is unable to launch any aircraft, or a defective submarine communication's mast may mean that a missile strike has to be cancelled. One of the key roles for the GLC is the monitoring of availability and the resolution of defects that arise. Any defect will be considered against the impact on the OC of a FE, TG or force and, if necessary an Operational Defect (OPDEF) report will be raised. The Table 1A.2 shows the State Codes and Reason for Defect used to allow the prioritisation of OPDEFs based on their category and impact on OC. This system is similar to the State system used by Fleet Air Arm, RAF and Army Air Corps engineers when describing an aircraft State with regard to stores or engineering issues. Urgent OPDEFs may require assistance from the JFLogC for urgent stores movement or technical assistance from contractors.

State Code		Reason for Defect	
(a)		(b)	
A	Major Capability Inoperative	1	Immediate rectification required to meet a ship's commitments/programme. Repair will be ship's primary aim and will override existing programme intentions.
B	Major Capability Significantly Degraded	2	Rectification required as soon as possible to the meet ship's commitments or programme. Repair will be pursued within existing programme.
C	All other OPDEFs	3	Rectification not required until next programmed base port period. Arrangements will be made for repair action during next programmed base port period.

Table 1A.2 - Royal Navy Defect and Defect Repair Categories

1A9. Host-Nation Support. Maritime FE are self sustaining for 28 days after arrival in theatre, however during an operation HNS or In-Country Resources (ICR) will be required at some level in order to support the Maritime Component. HNS requirements for the Maritime Component are similar to those of the other components such as basing and storage facilities and transport, however, there are also some unique requirements that fall to HNS including berths, port pilot, tugs, cranes, gangways, alongside power supplies and garbage and waste oil/fuel disposal. The supply of materiel such as food, including fresh provisions, water, fuel, ammunition, spares, medical assistance, the movement of RN personnel and FP assistance will also be required. If available in theatre, the RN Port Agency contractor can provide port services and may assist the JFLogC in the provision of services both to the MCC and other components.

1A10. Defence Equipment and Support Deployable Units. The Maritime Component may also be supported by certain Defence Equipment and Support (DE&S) deployable units; these include Mine Counter Measures Vessel Forward Support Units, Marine Salvage Units and Mobile Aircraft Salvage Units. These may be either afloat or ashore as the operational situation dictates.

1A11. Medical Support. The Maritime Component is supported by a medical organisation ranging from first aid to definitive specialised care as the patient is evacuated. For Medical Evacuation (MEDEVAC), the Maritime Component will rely on support from the JFLogC in order to on-move casualties from the Advanced Logistic Support Site (ALSS) or FLS back to the UK or to HNS for Role 4 treatment. The use of organic helicopters or even the PCRF will allow Maritime casualties to be moved to a point from which they can be integrated into the JFLogC run casualty system. Clinical capabilities available within the Maritime Component are as follows:

- a. **Role 1.** The First Aid Team and primary medical care personnel integral to any warship or RFA meet the Role 1 requirement of Primary medical care, First Aid, initial resuscitation and Triage.
- b. **Role 2.** The Role 2 function of austere secondary medical care including life and limb saving surgery but with little or no specialist nursing care, may be found in major war vessels such as a CVS, LPH, LPD or LSD(A).
- c. **Role 3.** The Role 3 function of In-Theatre specialist secondary care including specialist surgery and nursing care is found on the PCRF. The PCRF has the capacity to stabilise and hold casualties until fit to be evacuated out of theatre.

1A12. Joint Sea Basing. Joint Sea Basing (JSB) is an option to complement expeditionary operations by providing land effect from the sea. JSB is not restricted to logistics, but may include strike, command and control (C2), Close Air Support (CAS) and fires. Logistically, the use of properly loaded ships, RFA or commercially chartered, to support other Components may assist in issues such as FP, the environmental impact on stocks and even the Joint Desired Order of Arrival (JDOA), where capability held in the Maritime force could allow earlier movement of FE that might otherwise have had to await lift assets. Use of the JSB for logistic support will be determined by the logistic estimate process and will involve a high level of coordination between the Maritime Component and the JFLogC. The JSB can be used to provide C2 facilities for HQ JFLogC.

1A13. References. Further details on Maritime Logistics can be found in:

- a. **BR 2002** '*Maritime Operational Logistics*'.
- b. **CB 2002** '*Naval Manual of Logistics for Operations*'.

(INTENTIONALLY BLANK)

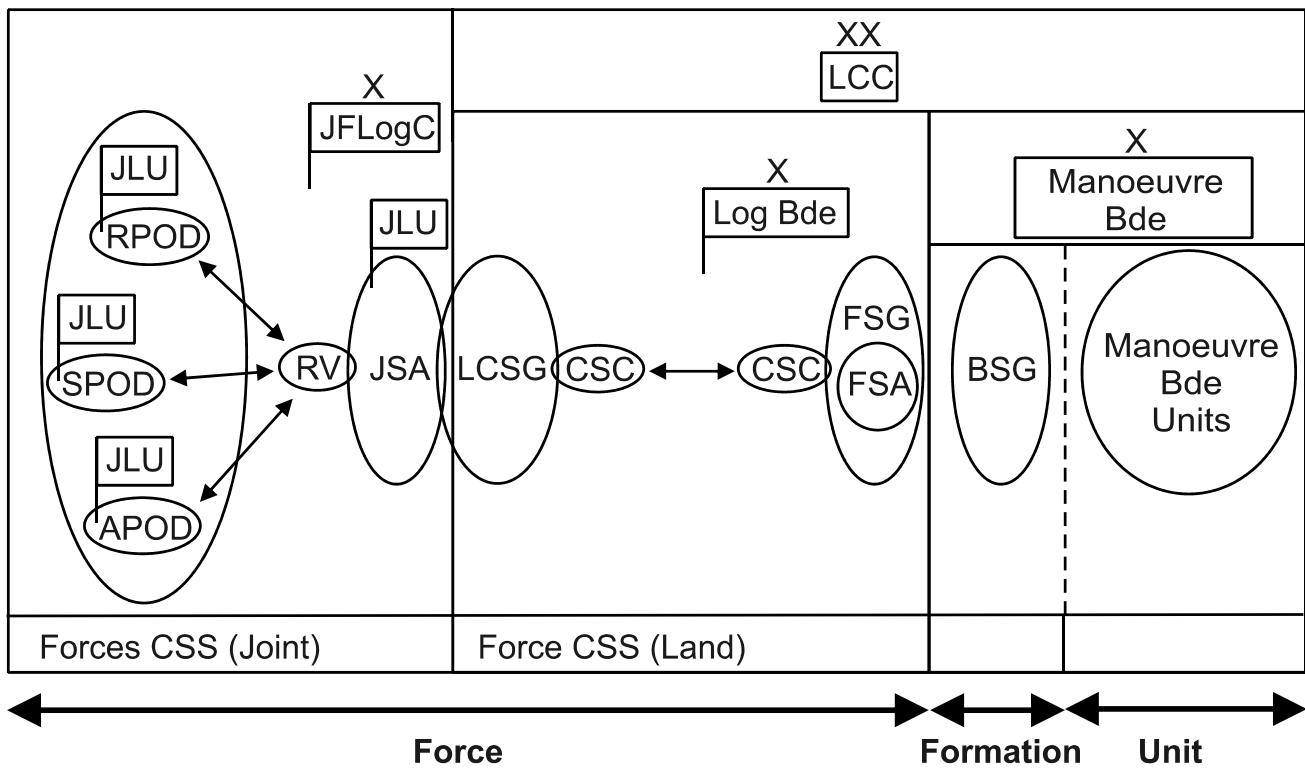
ANNEX 1B – LAND ENVIRONMENT

1B1. Introduction. The logistic assumptions made in this annex are specifically based on a Medium-scale Non-Enduring (MS NE) scenario as this offers the complexity required to depict the deployment of the full range of Land logistic capabilities.

1B2. Combat Service Support. Within the Land environment Combat Service Support (CSS)¹ is provided at Unit, Formation and Force level² by affiliated logistic and administrative FE. CSS is divided between Force CSS (Land), delivered primarily by Logistic Brigades, and Force CSS (Joint) delivered by the Joint Force Logistic Component (JFLogC). Force CSS (Land) operates primarily between the Joint Supply Area (JSA) and Forward Supply Area (FSA). It is based around a number of key logistic nodes, which provide the framework, and at times the real estate, from where logistic and administrative support is provided. The number of such nodes is minimised in order to reduce Force Protection (FP) requirements, and may be modular in nature depending on the level of threat. Figure 1B.1 shows a generic laydown of the principal Land logistic nodes in a Joint Operations Area (JOA).

¹ The support provided to combat forces, primarily in the fields of administration and logistics. (AAP-6).

² Formally 1st, 2nd and 3rd line respectively.



JLU	Joint Logistics Unit	LCSG	Land Component Support Group
RPOD	Rail Port of Disembarkation	CSC	Convoy Support Centre
SPOD	Sea Port of Disembarkation	FSG	Forward Support Group
APOD	Air Port of Disembarkation	FSA	Forward Supply Area
JFLogC	Joint Force Logistic Component	BSG	Brigade Support Group
JSA	Joint Supply Area		

Figure 1B.1 - Generic Land Logistic Laydown at Medium Scale

1B3. Context. CSS is delivered in the JOA at different intensities during the key Deploy, Sustain and Recover phases of an operation. The use of these distinct phases should not create the impression of linear changes of operational focus, but highlight the different contexts in which logistic activity occurs. This shapes a number of critical issues. Deployment is most likely to occur in a relatively secure environment with attendant influences on the structures, Command and Control (C2) and posture of logistic capability. During Sustainment, which may run concurrently with Deployment, the nature of the logistic environment is very different; it may be dispersed, non-permissive or undertaken in arduous conditions. CSS that is provided during Sustainment of a formation conducting high-intensity operations and manoeuvring around a dispersed battlefield is very different to CSS provided as part of the theatre-enabling effort. Training, structures and C2 need to reflect this. It is not sufficient to assume that arrangements made for one phase are necessarily suitable for another. Equally, during Recovery, the operational context may have altered significantly and, therefore, the logistic requirement will reflect the changed circumstances.

1B4. Force Package. The CSS force package will be tailored to meet the demands of the specific operation. The requirement for a JFLogC on a particular operation will be dependent on a range of factors including the need for cross-component coordination, geography, complexity and span of command. Some operations may be sufficiently logically demanding to require the deployment of a JFLogC and a Logistic Brigade. Given the finite number of Land logistic FE from which to populate both formations, the concurrent deployment of both a JFLogC and a Logistic Brigade is particularly challenging in terms of force preparation, generation and C2.

1B5. Force Combat Service Support (Joint). Based on the generic laydown shown at Figure 1B.1, Force CSS (Joint) includes a significant contribution from Land logistic FE. The Sea, Air and Rail Points of Disembarkation (S/A/R PODs) and JSA require key Land enablers in order to function effectively. A number of these will be placed under command of the JFLogC for the duration of the operation, such as a Port Task Group at the SPOD, the Consignment Visibility Troop at the APOD and some movement control, supply and distribution capabilities. Other Land FE will reinforce the JFLogC only for peak or surge activity, in accordance with the Joint Task Force Commander's (JTFC's) priorities. This principle is shown in Figure 1B.2 and offers an appropriate level of dedicated support to the JFLogC, whilst minimising the disruption to other Components and retaining the integrity of Land CSS. The key nodes under command of the JFLogC are the SPOD, APOD, RPOD and JSA, each of which will be run by a Joint Logistic Unit (JLU) C2 node, and within which Land FE will be represented in accordance with the operational requirement.

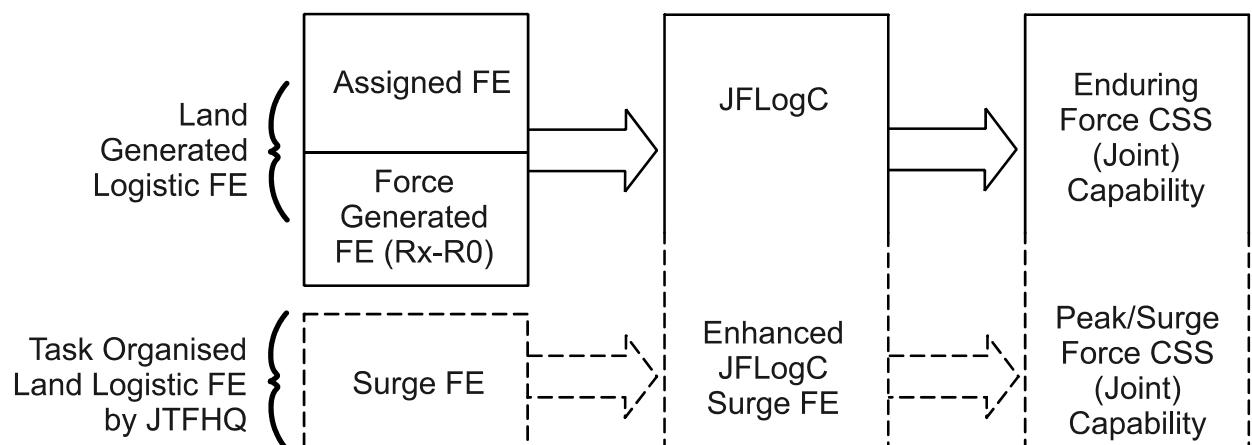


Figure 1B.2 - Generation of JFLogC capability

1B6. Force Combat Service Support (Land). Significant nodes in the delivery of Force CSS (Land) are the Land Component Support Group (LCSG) and, if required, the Forward Support Group (FSG), shown in Figure 1B.1. These nodes provide a functional and geographical focus for Land logistic FE under command of the Logistic Brigade. The LCSG will act as the interface between activities conducted in support of the Joint Task Force (JTF) and those activities specifically in support of the Land

Component. The LCSG will contain the capabilities needed to support and move personnel, equipment and materiel into and out of the Land Component's Area of Operations (AO). Some operations will require the creation of a FSG to support a long Land LOC, thereby creating a static logistic node from which capabilities can be staged, surged or located to support the tactical battle. The FSG is likely to contain a FSA, in which sufficient stock will be held under command of a Logistic Brigade Supply Regiment to provide the Land Component Commander (LCC) with logistic flexibility. Forward of the FSG, the Brigade Support Group (BSG) will provide integral formation level CSS to the Manoeuvre Brigade, holding 3 x Daily Consumption Rate (DCR), with a further 3 x DCR held at unit level.

1B7. Combat Service Support Functions. Logistic Support, which includes Equipment Support (ES), Medical Support and Engineering Support, together with Provost Support are the key pillars of CSS.

a. **Logistic Support.** Logistic Support to both the Joint Logistic and Land Components includes a range of logistic activities, but primarily the execution of the in-theatre Joint Supply Chain (JSC) in accordance with overall priorities, and Logistic Support Services such as postal and courier, food services and the Expeditionary Forces Institute (EFI). In order to deliver these capabilities, Land FE may be required to support all Components at different times during the operation, but will remain primarily under command of the Logistic Brigade.

(1) **Equipment Support.** ES includes scheduled servicing of vehicles, inspections, recovery, repair and modification, and this is usually undertaken through the provision of an ES Battalion under command of the Logistic Brigade. Land ES capability will also be required to support the execution of a wide range of ES tasks that come under the responsibility of the JFLLogC. These include:

- (a) Modification and Urgent Operational Requirement (UOR) fitting.
- (b) Coordination of ES to equipments common across Components (although this may be delegated to the most appropriate Component).
- (c) Coordination and integration of ES Host-nation Support (HNS) and Contractor Support to Operations (CSO).
- (d) ES to FE during deployment.
- (e) ES to the JFLLogC and Reception, Staging and Onward Movement (RSOM) enablers.

Support to manoeuvre units, formation support to Logistic Brigade dependencies and the lack of any integral ES support in the JFLogC will all produce competing demands on scarce resources. ES will, therefore, be allocated through an affiliation matrix according to engineering requirements and geographical proximity.

(2) **Medical Support.** The full spectrum of Medical Support, Primary Health Care (PHC), Pre-Hospital Emergency Care (PHEC) and Secondary Health Care (SHC), must be available to all personnel as soon as possible after they enter theatre. Some of this may be delivered through HNS or facilitated by an increased level of aero-medical support. Additional support from other Components may be required to provide medical support to the RSOM process in order to assist with anticipated early entry Disease and Non-Battle Injuries (DNBIs). On a MS operation, the JFLogC will normally command a 100 bed Role 3 field hospital with integral Role 1 capability. In addition to the 100 bed hospital, it can be anticipated that as part of the medical laydown, a Brigade Medical Regiment will deploy with the Logistic Brigade, although parts of its capability may be accelerated into theatre to support the JFLogC. Logistic Brigade medical assets will provide support throughout the Land AO. A second field hospital, Role 2 Enhanced, will invariably be required in or around the FSG in order to meet clinical timelines. A second Brigade Medical Regiment will provide direct support to the Manoeuvre Brigade.

(3) **Engineering Support.** The Joint Force Engineer (JF Engr) will command engineers in the JTF and set priorities at the highest level. JF Engr staff and FE, with the possible inclusion of a military construction force, are likely to be one of the first theatre enablers to deploy. Engineering Support is divided between Force and Combat Support. Force Support Engineering encompasses the deliberate, longer-term preparation for, and support to, ongoing or future operations as well as those military engineering tasks associated with sustaining the JTF throughout all stages of an operation.³ It includes engineer tasks such as airfield development, camp construction and infrastructure engineering, any of which could require assets to deploy before the JFLogC. The term Combat Support Engineering encompasses those military engineer tasks associated with direct support to current operations. These 2 terms should not be considered as rigid stovepipes, but broad categories of military engineering activity. Main effort for the JF Engr will shift between operational phases according to the priorities of the JTFC;

³ AJP-3.12 ‘Allied Doctrine for Joint Engineering’.

however, C2 of the engineer assets in theatre will always be determined by the JF Engr.

b. Provost Support. Provost Support at MS comprises a Royal Military Police (RMP) Regiment with 3 x Provost Companies containing Special Investigations Branch (SIB) and Military Provost Staff (MPS) personnel. Affiliated Provost Companies will support the JFLogC, Logistic Brigade and Manoeuvre Brigade and the respective HQs will have embedded Brigade Provost Cells. Key tasks will be regulatory in nature including investigative policing and custodial tasks, but may extend to the oversight and mentoring of indigenous police, border and customs personnel, as part of Security Sector Reform (SSR).

1B8. Command and Control. CSS to the JTF requires a robust but flexible C2 relationship between the FE of the Logistic Brigade and the JFLogC. There are a finite number of resources, and while the force generation model at Figure 1B.2 may help to alleviate some of the capability gaps, task organisation of critical logistic capabilities across Components is an accepted operational inevitability. This is particularly true for the JFLogC, which has very few integral capabilities, yet is likely to be the supported Component during the crucial Deployment phase of an operation and will command those logistic assets necessary to execute its tasks. During other phases of the operation, FE are likely to be returned to their normal affiliations, based on the JTFC's priorities. The use of different command states for different operational or tactical phases offers a solution to the problem of competition for scarce logistic assets. It allows the JTFC to balance the requirement of the JFLogC to execute its enduring Joint responsibilities using permanently assigned FE, against the need to ensure that the Land Component remains logically agile and adequately supported.

1B9. Joint Supply Chain. The concurrent deployment of both the JFLogC and Logistic Brigade will rely heavily on the logistic expertise contained in the 2 x Logistic Brigade Supply Regiments and will, therefore, require some rationalisation of resources.

a. Joint Supply Area. In order to avoid unnecessary duplication, all Component supply areas are consolidated within one, albeit modular, JSA that could include Joint Sea Basing (JSB).⁴ The JSA will normally hold up to 22 x DCR⁵ although a proportion of this may be moved forward to the FSA to provide greater assurance and flexibility to the LCC. The JSA will be commanded by the JFLogC through a JLU, a C2 node of Regimental size.

⁴ There is potential for JSB to reduce the burden on the Land Logistic Brigade Supply Regiment by holding, for example, a pre-configured Force Priming Equipment Pack (PEP). The JSA would therefore extend across the littoral interface as shown in Chapter 1.

⁵ This is a planning assumption that will vary with the operational requirement.

b. **Forward Supply Area.** An FSA may be established to support the activities of the Land Component and will be deployed when the operational and environmental complexity demands it. The primary role of the FSA is to allow the Logistic Brigade Commander to support the Manoeuvre Brigade using the Brigade Logistic Support Regiment in the BSG. The FSA will hold an appropriate level of DCR to reduce reliance on the JSA and to increase flexibility for the LCC. Assets from the LCSG are responsible for creating an efficient link between the FSA and the JSA, and appropriate support to other FE affiliated to the Logistic Brigade.

(INTENTIONALLY BLANK)

ANNEX 1C – AIR ENVIRONMENT

1C1. Headquarters Air Command Planning and Operational Tasking. Within Headquarters Air Command (HQ AIR), the Contingency Action Group (CAG) is the organisation responsible for converting the Permanent Joint Headquarters (PJHQ) Statement of Requirement (SOR) into deployed Air Force Elements (FE), including Expeditionary Air Wings (EAWS) and Groups (EAGs). For deliberately planned operations (Ops), A5 will lead the planning process and chair the CAG, drawing upon staff from the A1 – A9 Divisions, the Group HQs, Joint Force Air Component (JFAC) HQ, A4 Ops and Subject Matter Experts (SMEs) as required. To ensure the earliest consideration of logistic planning factors, there is a permanent logistics SME presence within A5 Ops. As the planning for a deliberate operation approaches the execution phase, ownership of both the Operational Plan (OPLAN) and the CAG process passes to A3. All contingency operations are led by A3 through the CAG process. The CAG will determine broad composition of the Air contribution to an operation and provide guidance to A4 Ops for the subsequent scoping, tasking, mounting, sustainment and redeployment of the Air Component's contribution.

1C2. Expeditionary Air Wings and Groups. Expeditionary Air Operations are now based upon the establishment of 9 EAWS at the RAF's UK Main Operating Bases (MOBs). Four principal benefits derive from the Expeditionary Air Wing concept:

- a. A more inclusive formation identity on deployed operation.
- b. A more cohesive and trained formation.
- c. Delivery of a more focused operational effect from the outset of any deployment.
- d. A broader understanding of air power capability.

1C3. Each EAW comprises the MOB command structure and the enabling and supporting logistical functions to support the MOB in its flying task. In peacetime an EAW is made up of 2 elements - the command and control (C2) and MOB Support Functions, supported as necessary by Air Combat Support Units (ACSUs) and Air Combat Service Support Units (ACSSUs). ACSU/ACSSUs are FE that provide support to training across all EAWS whilst remaining independent of any specific wing, indeed, they may not be located on the EAW MOB. In addition the FE at Readiness (FE@R) squadrons do not form part of the EAW when at the home MOB. EAW training draws together these elements, including the FE@R from within a MOB Commander's Area of Responsibility (AOR) and for which he has C2 authority.

1C4. Deployed Expeditionary Air Wings. When activated for deployment, the deployed EAW comprises the C2, the Deployment Operating Base (DOB)/Airport of

Disembarkation (APOD) FE to provide the support operational capability, ACSUs/ACSSUs and FE@R, which are assigned to the DOB/APOD as dictated by the nature of the operation. EAWs provide the FE to run the APOD and its functions; the Joint Force Logistic Component (JFLogC) is responsible to the Joint Task Force Commander (JTFC) for the operation of APODs. The EAW's peacetime MOB FE@R may be included within the DOB/APOD structure, but this will not necessarily be the case; FE@R will be tasked via the deployed Joint Force Air Component (JFAC)/Commander Air Operations Centre (CAOC) Air C2. Therefore, any FE@R, ACSU and ACSSUs can be assigned to the DOB/APOD as necessary, whilst adopting the deployed EAWs overarching identity. When activated for deployment, an EAW will detach from the MOB, establish its operational capability at a deployed location, retain its identity and all attached personnel, including squadrons and ACSU/ACSSUs, become members of the deployed wing. Should the deployment become an enduring operation it is likely that the EAW Commander would hand over responsibility to a new command team, at which point the EAW personnel would be replaced in a staged process in accordance with the Departmental Warning Roster (DWR). When declared enduring, a deployed EAW adopts a 900 series identification number. An Expeditionary Air Group (EAG) may be formed when more than one EAW deploys and the requirement for an overarching formation is identified, which would include HQ organisations. The Home and deployed EAW constructs are shown at Figure 1C.1.

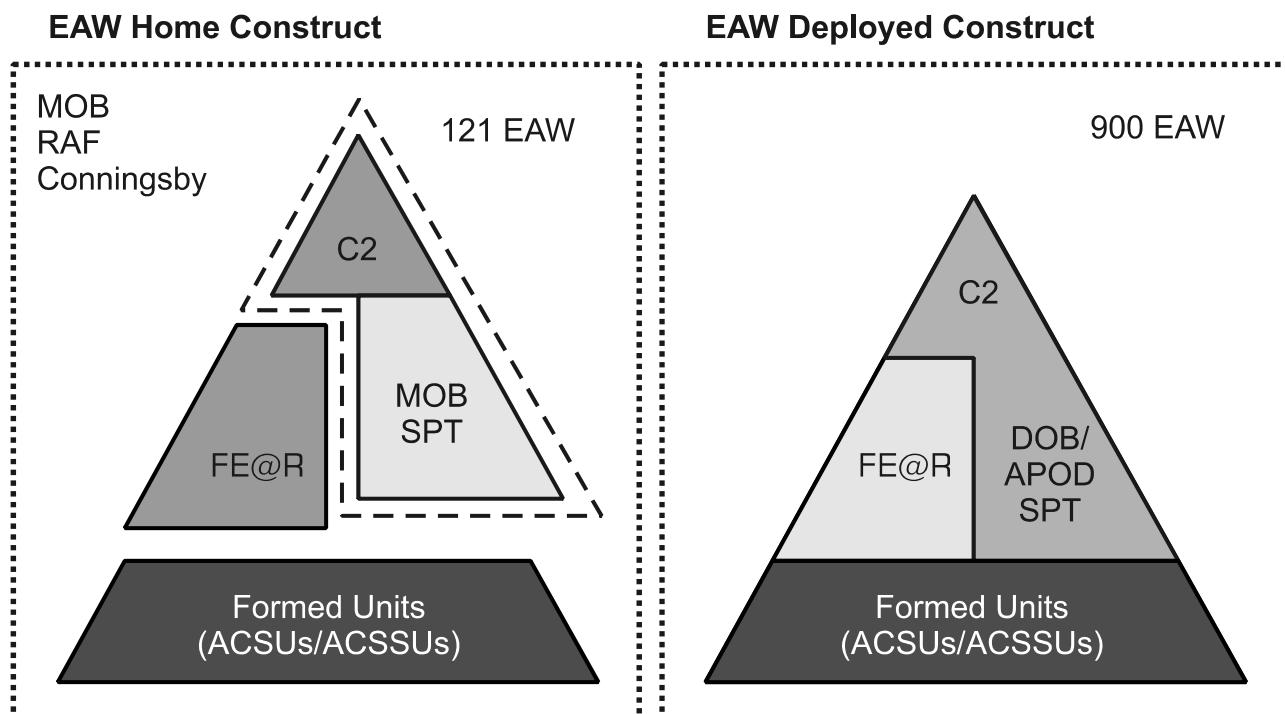


Figure 1C.1 - Home and Deployed Expeditionary Air Wing Constructs

1C5. Theatre Enabling. Upon receipt of planning guidance from the CAG, A4 Ops staff use the Modularised Support Force – Packaging IT System (MSFITS2) to

rapidly scope and task support packages required to enable and sustain the DOBs and APODs from which the EAWs and EAGs will operate, together with any Staging Airfields, Forward Mounting Bases (FMBs) and Support Areas that may be required to achieve the deployment. The JFACHQ, if forward deployed, will also need to be established, after which its A4 Branch will assume responsibility for theatre air logistic support. The Joint Force Air Component Commander's (JFACC's) preliminary aim is to achieve an Initial Operating Capability (IOC) at each location, at which point air operations may commence, followed by incremental enhancements in capability to reach Full Operating Capacity (FOC). FOC is the point at which full first and second line support is provided to deployed FE.

1C6. Deployed Air Logistic Command and Control. The A4 Branch within the Air Component Support (ACS) Division of the JFAC HQ may be deployed to provide direction on logistic issues including: SME support to all deployed Air Component FE during the deployment; bed-down, sustainment and recovery phases of an operation; and the interface with other deployed Components, notably the JFLogC. For small-scale operations, it is likely that the senior logistics officer deployed with each EAW will implement A4 staff direction and the A4 Division will present Air logistic issues and priorities to the JTFC's J4 staff. However, for larger scale operations, 85 (Expeditionary Logistics) Wing may be deployed to provide coordination of Theatre air logistics assets, including ACSSUs, and/or deliver cross-component support on behalf of either the JFACC or Commander JFLogC.

1C7. Air Combat Service Support Units. The Air Component's specialist deployable logistic support is provided by ACSSUs, which provide not only the key capabilities needed to enable deployed locations but also sustainment for those functions beyond the scope of EAWs. ACSSUs may be supported by LAND capabilities for the provision of functions such as DOB infrastructure, fuel, water and Postal and Courier support. ACSSUs and their roles are shown in Table 1C.2.

ACSSU	ROLE
No 85 (Expeditionary Logistics) Wing	Deployable Air logistic HQ
No 2 MT Sqn	Surface transportation
No 5001 (Expeditionary Airfield Facilities) Squadron	Deployed temporary aircraft maintenance facilities
Mobile Catering Support Unit (MCSU)	Deployable collective catering support and accommodation management
No 5131 (Bomb Disposal) Squadron	Air Operations EOD
Tactical Armament Squadron (TAS)	Expeditionary air armament
Deployable Supply Group (DSG)	In-theatre Supply and MT support
Forward Support (Fixed Wing)	In-theatre aircraft technical support and recovery
Tactical Communications Wing	CIS and tactical Air Traffic Control
Tactical Medical Wing	Deployed medical support including DOB medical support and Aeromedical Evacuation and Escorts
No 1 Air Mobility Wing (AMW)	Air movements support

Table 1C.2 - ACSSUs

1C8. Priming Equipment Packs. Sustainment of Class 2 aircraft spares is achieved by the provision of Priming Equipment Packs (PEPs) for each deployed platform. PEP scaling is calculated to sustain 10 days of operations at specified rates of effort, and will be detailed in the Air Component Sustainability Statement (SUSTAT). PEP scaling assumes no aircraft attrition, that Force Protection (FP) measures are sufficient to secure strategic and in-theatre Lines of Communication (LOC) and that air and surface resupply will be established from the start of an operation. Based on these assumptions, PEPs are predicated on a notional 5-day transit time and 5-days buffer stock. Replenishment is currently provided via either resupply from the UK Strategic Base or through the deployment of off-aircraft test and repair facilities deployed in Air Portable Workshops (APWs) and Air Portable Avionics Workshops (APAWs).

1C9. Reachout. Reachout represents the most significant single factor in the provision of logistic support to deployed Air combat FE. It allows logistic planning staffs to achieve the optimum logistic footprint in-theatre, underpinned by the assured provision of logistic advice to deployed staffs. It is exploited for the rapid resolution of logistic difficulties and for the timely resupply of materiel. Through the exploitation of effective Communication and Information Systems (CIS), it makes available the full spectrum of logistic experience, knowledge and capability in support

of deployed Air combat FE and the JFAC ACS staffs. With the exception of routine automated demand satisfaction, Air logistic staff within A4 Ops and platform and commodity Role Offices coordinate reachout requirements received from the Joint Operations Area (JOA). They input their priorities for movement through the Joint Supply Chain (JSC) to the JFLogC who liaise with the Defence Supply Chain Operations and Movements (DSCOM) in order to achieve a coherent, prioritised Theatre ‘pull’ that meets the overall operational plan. Specifically, reachout provides:

- a. Specialist Air Engineering and other advice to deployed Air FE and the deployed logistic command chain.
- b. The processing of real-time demands for resupply.
- c. Coordination of the provision of sustainment and additional capability requirements.
- d. A logistic planning support capability to the Air Component Commander’s staff.

1C10. Reverse Supply Chain. JFAC ACS and A4 Ops staff will monitor the Reverse Supply Chain (RSC) and provide input to the JFLogC, who manages the theatre end of the RSC using a coordinated priority list provided by DSCOM, based on IPT requirements. The expedient return of items subject to Partnered Support and Contractor Logistic Support (CLS) arrangements is particularly important. Overall repair turn round times will be protracted if unserviceable assets remain in-theatre; in addition to the denial of a potentially serviceable asset, there may be contractual penalties associated with delays to the repair loop.

1C11. Maintenance of Aircraft. Aircraft maintenance is an integral aspect of support to Air combat FE and directly affects the extent to which the JFACC is able to execute his plans. Fundamentally, the purpose of aircraft maintenance is to ensure the continued serviceability and airworthiness of battle-winning equipment, including platforms, air weapons systems and supporting systems. In general, the maintenance requirements of weapons systems are established prior to their deployment in support of operations. Moreover, the levels and location at which such maintenance is undertaken during operations will be considered by planning staff at a comparatively early stage in order that the associated logistic support requirements are established. When evolving plans require specific Air combat FE to be selected for operational deployment, appropriate Air and logistics specialist staffs at Command and Group HQ level, along with Defence Equipment and Support (DE&S) personnel, will determine the maintenance policy required. This will enable FE to operate effectively, while ensuring that the consequent logistic footprint is optimised in accordance with Air logistic principles and considerations.

1C12. Maintenance Regimes for Deployed Aircraft. During deployed operations, aircraft maintenance is conducted on DOBs. In addition to the conduct of first line maintenance, second line maintenance may also be undertaken in-theatre to support the operational task. Accordingly, DOBs will be provided with appropriate engineering modules in accordance with the precepts of modularised support described above. Whereas the MOB-based peacetime flying task is routinely supported by after-flight, before-flight and turn-round servicing, thus ensuring airworthiness and avoiding degradation in overall aircraft condition, such maintenance is generally not practicable during deployed operations. To amortise the effects of this on aircraft serviceability, the following servicing regimes may be authorised:

- a. Operational Re-Arming (ORA) enables the rapid re-arming of an aircraft in conjunction with servicing.
- b. Aircraft are treated as in continuous operation, precluding the requirement for normal flight servicing between flights.
- c. Contingency maintenance allows standards to be relaxed when other forms of scheduled and condition based maintenance have been suspended.
- d. Expedient maintenance policy allows for expedient repair, which is broadly equivalent to the generic term ‘Aircraft Battle Damage Repair’.
- e. Crew-assisted Aircraft Cross Servicing (ACS) is practiced by a number of nations at nominated airfields other than their parent MOBs. ACS may be expanded during operations to incorporate re-arming and other pre-determined services.

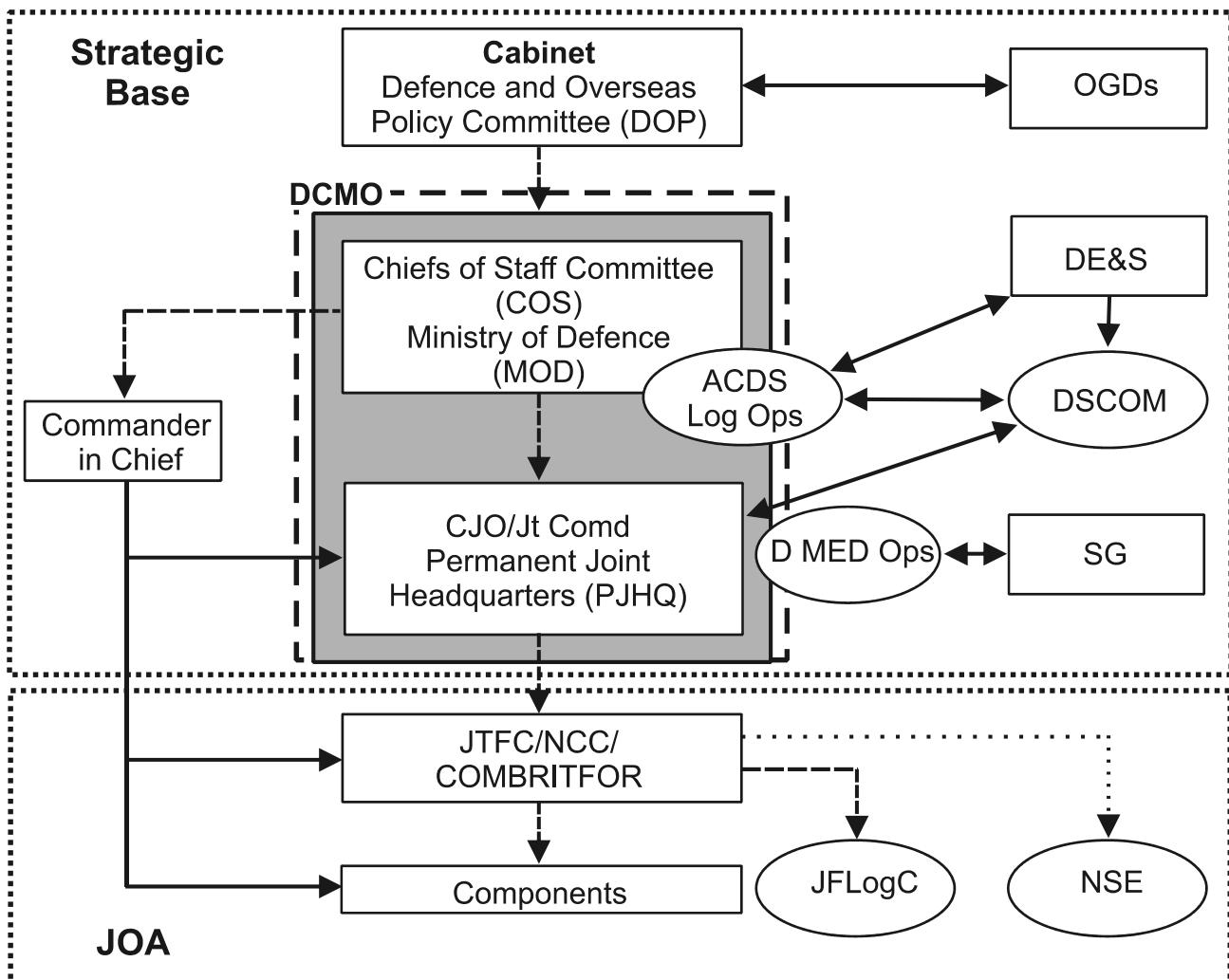
1C13. Reference. Further details on Air Logistics can be found in AP 100C-72 ‘*Air Operations Logistic Doctrine and Air Logistic Concept of Operations*’.

CHAPTER 2 – COMMAND AND CONTROL

SECTION I – LOGISTIC COMMAND AND CONTROL FRAMEWORK

- The Defence Crisis Management Organisation (DCMO) provides the Government with military advice and is the MOD's collective body for the overall management of crises and the higher direction of operations.
- Assistant Chief of Defence Staff (Logistic Operations) (ACDS (Log Ops)) and Permanent Joint Headquarters (PJHQ) are both integral parts of the DCMO and play a central role in the decision-making process.
- There are a range of options for delivering operational level logistic Command and Control (C2); for example, there may not be a Joint Task Force Commander (JTFC).
- There must be sufficient flexibility in logistic C2 arrangements to form a National Support Element (NSE), when involved in multinational operations.

201. The UK's logistic C2 framework supports command decision making and enables staff to communicate logistic priorities and other instructions to relevant subordinates, and others such as contractors, for execution. In order to provide the necessary level of logistic support to the JTFC, processes for the routine and reliable exchange of logistic information between the end user and the Strategic Base must be established. Figure 2.1 illustrates a generic formal C2 structure, although exact C2 arrangements will be tailored to meet operational requirements.



CMO	Defence Crisis Management Organisation
OGDs	Other Government Departments
ACDS(Log Ops)	Assistant Chief of Defence Staff (Logistic Operations)
DSCOM	Defence Supply Chain Operations and Movements
DE&S	Defence Equipment and Support
SG	Surgeon General
NCC	National Contingent Commander
NSE	National Support Element
JFLogC	Joint Force Logistic Component
JTFC	Joint Task Force Commander
JTFHQ	Joint Task Force HQ

Figure 2.1 - Logistic C2 Chain for Operations

202. **The Political Framework.** Government Ministers exercise C2 of crisis management at the highest level, either individually or in committee. At the strategic level, the Cabinet directs all diplomatic, economic and military resources that may be

allocated to resolve crises. The DCMO is a virtual organisation formed from MOD directorates and PJHQ supported by the Front Line Commands (FLCs), Director Special Forces (DSF) and Defence Equipment and Support (DE&S). It exists to provide the Government with military advice and in return, receives political direction on the basis for a military operation. It serves as the MOD's collective body for the overall management and resolution of crises, including the higher direction of operations. When appropriate, the DCMO provides the strategic level military liaison with OGDs, allies and coalition partners, as well as with organisations such as the UN. ACDS (Log Ops) is the key organisation within the MOD and DCMO for logistic matters.

203. Deployed Command and Control Arrangements for Joint Operations. UK forces are deployed under the Operational Command (OPCOM) of Commander Joint Operations (CJO) in his role as the Joint Commander (Jt Comd), based in PJHQ. Operational Control (OPCON) over assigned forces is invested in JTFC. Commanders in Chief of the FLCs retain Full Command of their forces assigned to an operation. The JTFC is responsible for planning and executing the theatre campaign and will normally direct operations, including logistic support, from a Joint Task Force HQ (JTFHQ) in theatre. The JTFC will have a designated DCOS, or ACOS J1/J4, depending on the rank of the JTFC, to direct logistic planning and to provide logistic advice.

204. Command and Control of Logistic Operations. There is no single model for the C2 of logistic operations; instead, there are a range of models that can be employed. At the very small scale of operations of short duration, such as a Non-combatant Evacuation Operation (NEO), the core JTFHQ J1/J4 staff will retain a high degree of centralised control. The JTFHQ will control both operational and tactical level logistics. As the complexity or duration of the operation increases, such as a Small-Scale Focused Intervention (SSFI), the JTFHQ staff will be augmented by specialist staff and additional general J1/J4 staff in order to provide 24 hour manning and the full spectrum of planning and execution. The JTFHQ has an Augmentee Manning List (AML), but additional staff could be drawn from the Standing JFLLogC (SJFLLogC). If the size and complexity of the operation increases further, JTFHQ staff lack the resources to manage and control logistics, particularly those involving the deployment of Components. Medium-scale operations require a separation between the JTFHQ operational logistic planning staff and devolved, tactical level logistic C2. The divisions above are only guidelines as the span of responsibility is dependent on the anticipated logistic planning and activity requirements and not necessarily linked to the scale of an operation. A small-scale operation may still involve the management of complex and demanding Lines of Communication (LOC).

205. Component Commanders. For small-scale operations, the JTFC may elect to exercise command directly over assigned forces through the JTFHQ Staff. However,

if circumstances demand, individual Component Commanders (CCs) may be appointed to discharge this responsibility. These will include Joint Force Maritime, Land, Air and Logistic CCs (JFMCC, JFLCC, JFACC and JFLLogC) together with Special Forces (SF). CCs are normally delegated OPCON of assigned forces, although in certain circumstances the JTFC may only grant Tactical Command (TACOM), subject to the agreement of the CJO. The JTFC will establish the command relationships and division of responsibilities between CCs. In addition to environmental component logistic Force Elements (FE) and those FE attributed by PJHQ to the JFLLogC, there is likely to be a range of surge logistic tasks at theatre level. This will require the JTFC to prioritise between individual components, and reassign command of logistic units between components according to operational priorities.

206. Requirement for a Joint Force Logistic Component. There may not always be a requirement for a JFLLogC,¹ although it offers an effective method of coordinating logistic assets that are spread between components. Combat components are focused primarily on forward logistics. By contrast, a JFLLogC has a dual role, looking forward to provide logistic support to the components and looking back to monitor logistic activities from and in the Strategic Base. The shape and structure of logistic FE will depend on a variety of factors such as the environment, enemy activity, friendly forces, time and space, surprise, security and the overall operational requirement. A JFLLogC is likely to be deployed when the scale or complexity of the operation exceeds the capability of the J1/J4 staff of the JTFHQ. The deployment of a JFLLogC to undertake the more practical aspects of operational and tactical logistics allows the JTFHQ J1/J4 staff to concentrate on the critical logistic factors affecting the campaign plan.

207. UK Logistics in a National Contingent Headquarters. Where the UK operates as a partner in a Coalition Force, a National Contingent Commander (NCC) or Commander British Forces (COMBRITFOR) will be appointed.² Components will normally remain within the overall UK command system, although the NCC may not have detailed planning authority over contingents embedded within larger coalition Components. The NCC headquarters will normally have a J1/4/8 cell to oversee UK logistic arrangements that may differ substantially from those of other nations. Depending on the situation, the J1/4/8 cell is likely to be responsible for:

- a. Briefing the NCC on operational logistic issues.
- b. Interfacing with other staff branches.

¹ The UK maintains a single SJFLLogC HQ at Very High Readiness; this is described in more detail in Chapter 1, Section III.

² Where Components are highly dispersed and/or operating within different coalition C2 structures, national Component Commanders may act as *de-facto* NCCs in their Area of Operation (AO).

- c. Providing direction and policy to a UK JFLogC and UK logistic elements of embedded contingents.
- d. Interfacing with coalition partners at the operational level.

208. **National Support Element.** A NSE provides the national logistic focus for the JTFC within a multinational operation. Given that the majority of operations are conducted in a multinational context, a NSE is likely to be the enduring successor organisation to the JFLogC for the life of an operation. It delivers a coordination and liaison function between the UK, other deployed coalition forces and CJO, although like the JFLogC it will require command of appropriate FE to deliver its outputs. Depending on the structure of the UK contribution to the multinational force, the NSE, in addition to a range of theatre logistic responsibilities, is likely to be closely involved with delivery of direct support to components. The structure of the NSE will depend upon the complexity of the operation, the range of logistic activities to be undertaken, the UK contribution and force laydown, the number of nations involved and any requirement for the UK to act as Logistic Lead Nation (LLN) or Logistic Role Specialist Nation (LRSN).³ NSEs normally consist entirely of Individual Augmentees (IA) and are tailored to PJHQ's requirements. It is, however, possible to use a formed HQ as the core of the NSE and the SJFLogC or Army Logistic Brigade HQs can be used in this way.

SECTION II – JOINT TASK FORCE HEADQUARTERS LOGISTIC COMMAND AND CONTROL

- Deputy Chief of Staff (DCOS) JTFHQ and the J1/J4 Staff monitor operational level logistic issues to reduce constraints on the JTFC's Campaign Plan.
- Responsibility for operational level logistic support requires delineation between PJHQ and the JTFHQ.
- A key logistic role of the JTFHQ staff is to prioritise the allocation of support between components and along the LOC.

209. **Operational and Tactical Joint Logistics.** Operational level logistics involves consideration of logistic influences on the Campaign Plan, the identification and planning of specific Joint logistic operations such as Reception, Staging, Onward Movement and Integration (RSOI) and the subsequent execution of logistic operations to support the delivery of the Campaign Plan. Operational level logistics is inherently Joint although the interface between the Joint operational and the tactical is not always clear. The scale and nature of the operation normally determine this interface albeit operational level logistics may be extremely complex even in a small-scale operation.

³ LLN and LRSN are covered in Chapter 10, Section III.

The details given in this section are generic and assume the deployment of a JTFC; however, there are a wide range of options for delivering operational level C2 and, in some operations, there may not be a JTFC. The extent of LOC dictates that operational logistics is not limited to the Joint Operational Area (JOA) or Theatre, particularly as the UK Strategic Base is increasingly responsible for providing direct support to operations. Operational level logistics is, therefore, not solely the preserve of the JTFHQ; PJHQ, DE&S and FLCs routinely deal with operational issues.

210. Operational Level Logistic Command and Control. PJHQ is responsible for the logistic aspects of the planning, deployment, sustainment and redeployment of the force. Logistic C2 relationships are shown at Figure 2.2, arrangements with the SF Component are broadly similar but on a smaller scale.

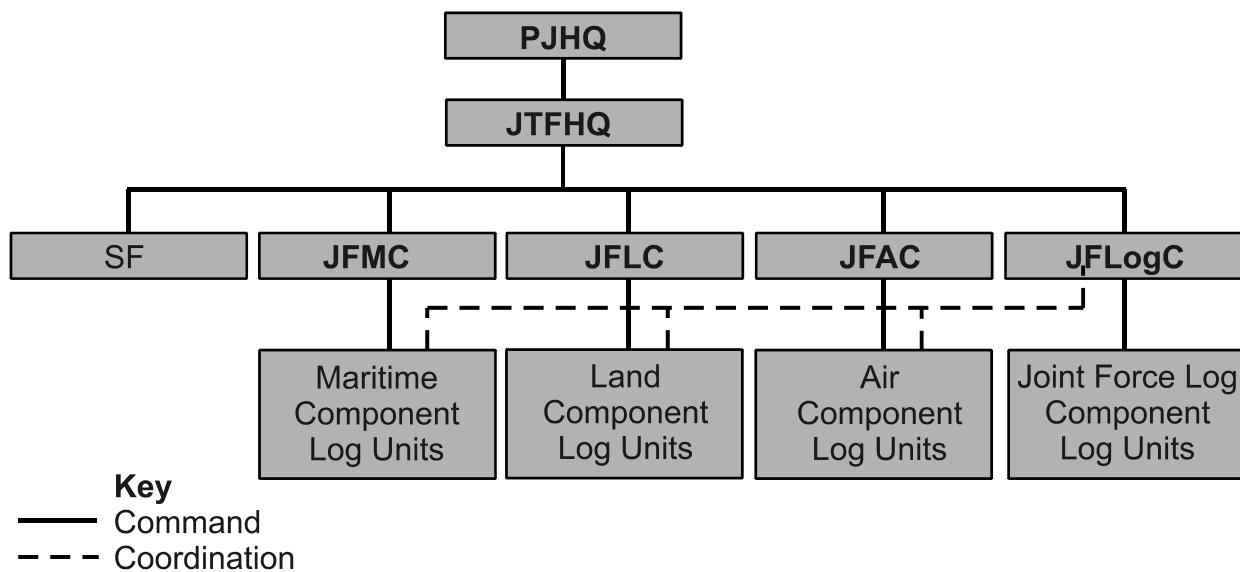


Figure 2.2 - Operational Level Logistic C2 Relationships

211. Joint Task Force Headquarters Logistic Staff. JTFHQ logistic staff are concerned with key battle-winning issues and critical constraints of a campaign. This involves directing support to meet the requirements of the campaign plan and subsequent operations. They are not concerned, other than by exception or in small-scale operations, with the detailed management or control of logistic assets, which provide the routine unit or formation level support within components. The role of the JTFHQ logistic staff is to direct all logistic activity at the operational level. DCOS or Assistant Chief of Staff (ACOS) J1/J4 at the JTFHQ, dependant upon the level of command of the JTFC, is not fighting ‘the contact battle’, but setting priorities, monitoring performance and shaping support for future tasks, and must consider logistics in the wider sense, which includes medical, personnel and welfare.

212. Roles of the Joint Task Force Headquarters Logistic Staff. Based on strategic guidance issued by PJHQ, logistic staff within the JTFHQ set logistic policy

in the JOA, and possibly also the theatre, contribute to the estimate process and the campaign plan and monitor the Recognised Theatre Logistic Picture (RTLP), which is updated by Component logistic staffs. The RTLP is the aggregation of logistic data on quantities, location, condition and transit status to provide a near real time disposition of logistic resources, which can be compared with rates of demand and replenishment to inform logistic planning. When plans are initially developed, it is the JTFHQ J4 Staff's responsibility to write the operational logistic plan and to ensure that logistic issues are appropriately represented in order to:

- a. Determine the logistic feasibility of operations.
- b. Inform the JTFC where logistic vulnerabilities lie and where risks can be taken.
- c. Exploit logistic strengths and minimise weaknesses arising from deployed FE or assets, taking remedial action as necessary.
- d. Develop future plans including the provision of logistic input to redeployment planning.

213. Joint Task Force Headquarters Logistic Staff Responsibilities. Many support tasks, such as the medical support chain, extend across the JOA and beyond as a continuous process. To ensure effective use of resources, speed, and flexibility in the face of changing circumstances, the JTFC's directives to components must clearly define the roles and responsibilities of the JFLogC and its relationship with other components. Detailed management of this relationship is the responsibility of the JTFHQ Logistic Staff. Responsibilities of JTFHQ Logistic Staff at the operational level include:

- a. Setting theatre logistic policy and priorities. This includes the auditable authorisation of high priority demands for materiel in accordance with Joint Service Publication (JSP) 886 '*The Defence Logistics Support Chain Manual*', which is covered in Chapter 4. This function is normally delegated to the JFLogC or NSE commander.
- b. Contributing⁴ to the Military Strategic Estimate (MSE) through the Logistic Estimate.⁴
- c. Configuring logistics, including medical support,⁵ in accordance with the JTFC's intentions.
- d. Negotiating Host-nation Support (HNS) and In-Country Resource (ICR) provision in consultation with the Civil Secretary and Civil-Military

⁴ The Logistic estimate is covered in Chapter 5.

⁵ Medical Support is covered in JDP 4-03 '*Medical Support to Joint Operations*'.

Cooperation (CIMIC) staff and in accordance with any Memorandum of Understanding (MOU) which may have been drafted or arranged by MOD with the Host Nation (HN). Where no MOUs are in place, MOD will direct which logistic staffs are the most appropriate to negotiate and draft the necessary over-arching HNS arrangements.

- e. Coordinating, in conjunction with PJHQ, the availability of scarce or crucial resources between components and between allies in order to avoid unnecessary duplication of capability or effort.
- f. Writing the operational level logistics plan, including policy in the JOA for common-user resources, such as fuel, food and water, usually based on a Logistic Lead Service⁶ or even LLN.
- g. In conjunction with PJHQ, setting priorities for movement into and out of the JOA and the subsequent use, maintenance, repair and redeployment of resources in accordance with the Campaign Plan, including use of the military estate.⁷
- h. Developing the RTLP and reporting on the logistic resource state within the JOA. This includes collating reports from the Component logistic staffs, particularly the JFLogCHQ, or receiving consolidated data for the whole theatre from the JFLogCHQ.
- i. Coordinating the logistic requirements of other nations where the UK is the LLN for all or some aspects of logistic support.

214. Prioritisation of Support. The prioritisation of support is particularly important where there are substantial constraints in the LOC, such as access only by air-bridge, or where accessible stocks are insufficient to meet the demands of all the Components. The JTFC is not normally required to become involved in routine supply, other than to ensure that unequivocal policy on the Standard Priority System and Codes (SPS/SPC) is set. By exception, where conflicting demands exist, the JTFC is required to advise PJHQ of the desired priority through the creation of a Theatre Priority List (covered in detail in Chapter 8). PJHQ, on behalf of CJO, will then direct DE&S to deliver according to these priorities. Correct prioritisation decisions are dependent on information from many sources, including the end-user of the equipment, the component's maintenance and supply organisation, the component's operations staff for relevance to tactical plans, other components, and the Strategic Base for availability and delivery issues. Depending on the nature and volume of prioritisation requirements, the J1/J4 staff may draw on expertise from within the JFLogC to coordinate information before working with the J3 staffs to

⁶ See Lexicon.

⁷ Covered in JWP 4-05 ‘Infrastructure Management on Joint Operations’.

establish the significance on the JTFC's campaign plan. Effective asset tracking and visibility can significantly ease this process.

SECTION III – JOINT FORCE LOGISTIC COMPONENT COMMAND AND CONTROL

- The core of a JFLogC HQ at Medium Scale will be formed from the SJFLogCHQ.
- The appointment of a single logistic commander provides coherent Joint logistic support within the JOA.

The JFLogC:

- is tasked by the JTFC to execute the Joint Logistic Plan.
- is responsible to the JTFC for the delivery of coherent, coordinated logistic support to the Joint Task Force (JTF) in accordance with operational priorities.
- commands all logistic assets and capabilities in the JOA that it is assigned by the JTFC.
- coordinates in-theatre logistic support in accordance with the priorities given by the JTFC.

215. Tactical Level Support to Joint Operations. The principal characteristic of Joint tactical level logistics is the appointment of a single commander to provide coherent logistic support within the JOA; this will normally be the JFLogC Commander. The effective execution of coordinated logistics in support of Joint operations requires a Joint staff, coordination between the single Services and the appropriate use of component logistic resources. Joint tactical level staff, with a broad range of specialist expertise, can take responsibility for specific activities of common benefit to 2 or more environmental components. The tasks undertaken by the Joint staff will be based on the policy direction given by the JTFC. The tasks will involve Tri-Service coordination, which recognises that some low-level logistic systems continue to operate between the components and DE&S in the Strategic Base.

216. Joint Force Logistic Component Organisation. The JFLogC HQ is a task-organised, Joint logistic command and staff organisation. The SJFLogC is commanded at 1st level; however, like many other HQs, it can be organised and commanded at a lower level depending on operational requirements. The JFLogC is also task-organised, as are the range of units placed under its command. The JFLogC HQ will vary in size and range of staff capabilities according to the nature of the operation it is required to support. The structure shown at Annex 2A represents the full range of staff and functional cells that could deploy in support of an operation and illustrates the range of functions carried out by a HQ coordinating theatre-level

logistics. It does not reflect the additional C2 requirements that would be required if the HQ was also responsible for a specific AO or the additional functions it would be required to carry out if the HQ was also acting as the NSE.

217. Deployment of a Joint Force Logistic Component. The decision to deploy a JFLogC HQ will be made by PJHQ according to the logistic complexity of the operation. Whilst estimate-driven, it is the PJHQ logistic HQ of choice for enabling a new theatre of operations other than in the simplest of scenarios. Deployment of the HQ will inevitably influence logistic C2 across the whole operation. The number of FE required by the JFLogC is likely to be most significant during the Reception, Staging and Onward Movement (RSOM) stages of an operation. Task-organised component FE will be attributed to the JFLogC by the JTFC for specific tasks and will then be returned back to their parent components according to JTFC priorities. Component logistic staffs will coordinate and develop their elements of the JTFC's campaign plan in conjunction with JFLogC HQ. Tactical level logistic C2 will normally remain organic to the combat components as there is no inherent benefit in imposing Joint logistic structures at this level. Occasionally, a component will be given the lead to assume specialist tactical level logistic responsibility for the Joint Task Force (JTF), particularly where other component contributions to the operation are minimal.

218. Role of a Joint Force Logistic Component. A JFLogC provides a single Joint focus for all logistic activity in support of a deployed JTF. It has particular responsibility for the Reception, Staging and Onward Movement (RSOM)⁸ of FE in the JOA and the sustainment of the operation. It commands the theatre end of the Coupling Bridge (CB) and ensures that FE and sustainment stocks arrive in theatre in accordance with the JTFC's priorities and are deployed to components as required. A JFLogC is not responsible for the detailed management of component logistic support although it will maintain visibility of this support and influence activity in order to ensure that the JTFC's priorities are met. The JFLogC may be allocated a specified AO for which it will be assigned Force Protection (FP) and other responsibilities, although its ability to effectively control an AO will depend on the threat assessment and the allocation of suitable assets. If the JFLogC is not responsible for the security of the AO within which it is located, close liaison with the HQ performing this function is necessary to ensure coordination of the security effort with the JFLogC's support functions. A deployed JFLogC will:

- a. Command all logistic assets and capabilities assigned to the JFLogC by the JTFC in the JOA. It will contribute to the JTFHQ J1/J4 staff's operational estimate process, where necessary, and conduct liaison, as required, with coalition partners, deployed contractors and the HN.

⁸ The JFLogC will be responsible for the RSOM element of Reception, Staging, Onward Movement and Integration (RSOI). It will assist in the integration process but this is a J3 led activity.

- b. Coordinate in-theatre logistic support, in accordance with the JTFC's priorities, by the activation and maintenance of robust LOC. Each component will retain command of logistic assets deployed as an integral part of its units and formations, unless otherwise directed by the JTFC. However, to ensure economy of effort and to maximise logistic efficiency, integration and standardisation, the JFLogC will normally be given at least coordinating authority over all logistic assets in the JOA.
- c. Establish and manage the RTLP, as part of the Joint Operating Picture, on behalf of the JTFC. The RTLP is covered in full at Section 3 of Chapter 3.

219. Functions of the Joint Force Logistic Component. Specific functions of the JFLogC are covered in Annex 2B.

(INTENTIONALLY BLANK)

ANNEX 2A – GENERIC JOINT FORCE LOGISTIC COMPONENT STRUCTURE

2A1. Standing Joint Force Logistic Component. The structure of the Standing Joint Force Logistic Component (SJLogC) is shown at Figure 2A.1.

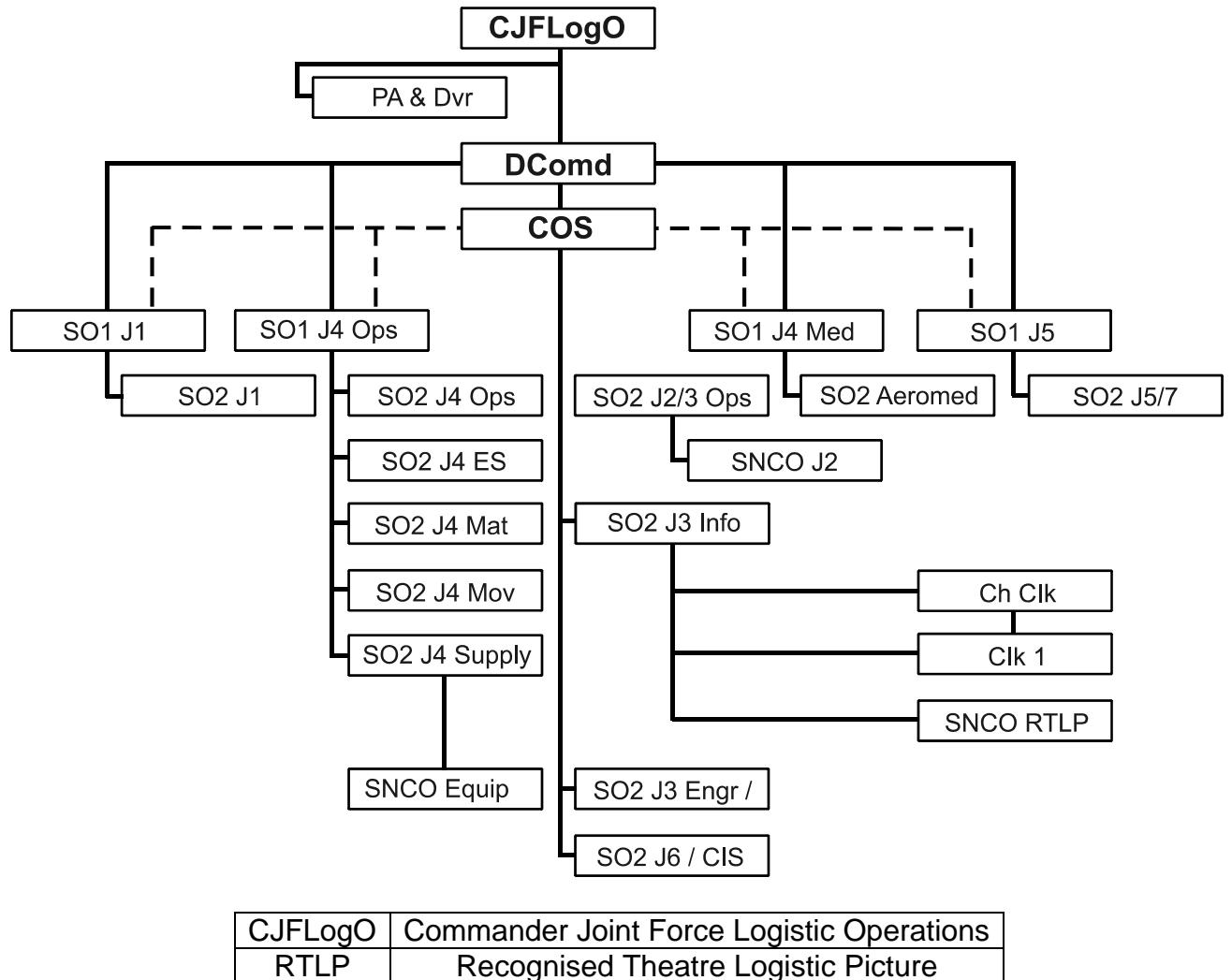


Figure 2A.1 - Standing Joint Force Logistic Component Structure

2A2. Deployed Joint Force Logistic Component. A deployed Joint Force Logistic Component (JFLogC) requires its own J2, 3, 5, 6 and 7 staff. When deployed as a component, functions such as contingency planning, Relief in Place (RIP) planning, Force Element (FE) integration and the coordination of support for assigned FE, communications and logistic information systems are carried out by the JFLogC on a routine basis. A J8 cell is included in a deployed JFLogC structure, illustrated at Figure 2A.2, which may incorporate the Civil Secretariat function if this is not undertaken by the Joint Task Force Headquarters.

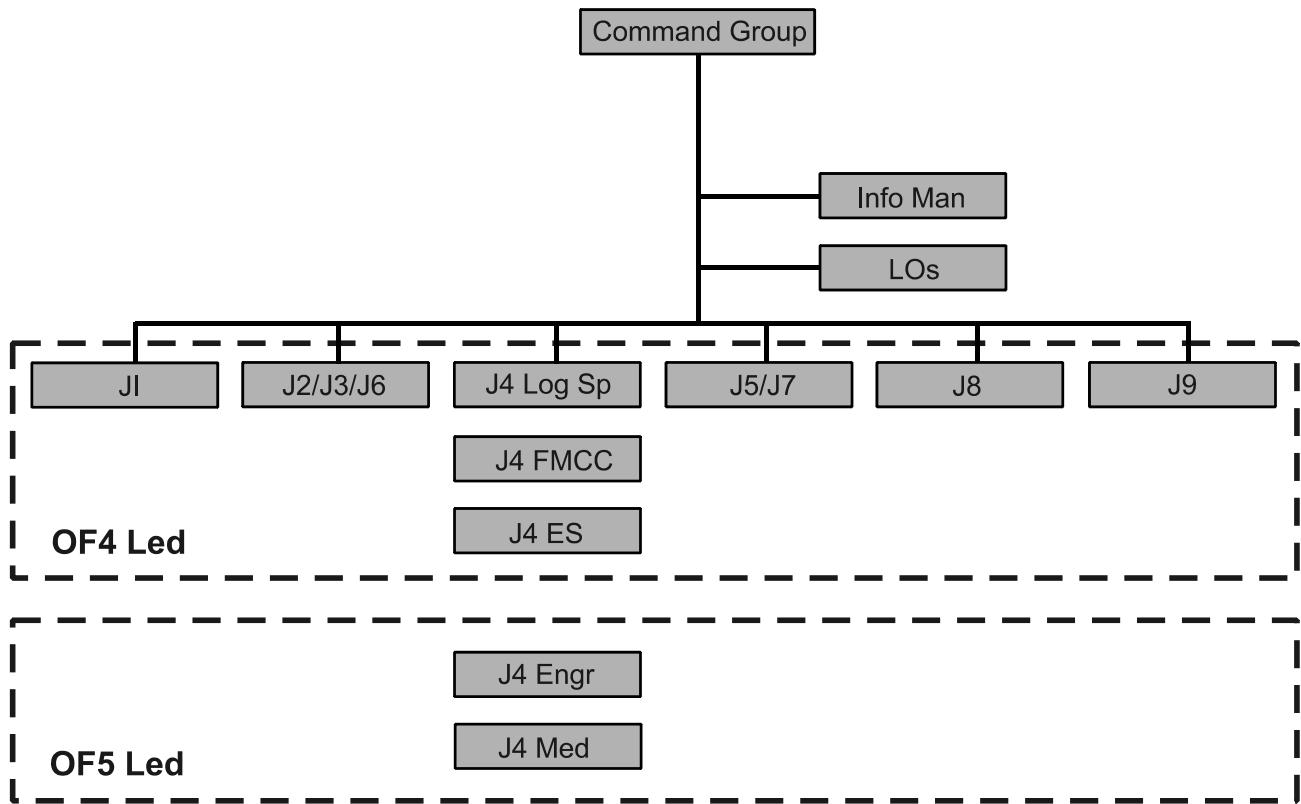


Figure 2A.2 - Representative deployed Joint Force Logistic Component Structure

2A3. Communications and Life Support. 2 Signal Regiment will normally provide strategic communications for the JFLogC. Additional tactical communications requirements, as well as life support, Force Protection and security requirements should be determined during the estimate process and task organised as required.

ANNEX 2B – FUNCTIONS OF A JOINT FORCE LOGISTIC COMPONENT

General Functions

2B1. Theatre Activation. The Theatre Activation Party is made up of specialist logistic and administrative experts capable of conducting reconnaissance and implementing initial In-Country Resource (ICR) arrangements for the receipt of a larger enabling force and a Joint Force Logistic Component (JFLogC) Headquarters (HQ). The size of the Party will be driven by the specialisations required and will normally be led by a member of the Standing Joint Force Logistic Component (SJFLogC) HQ. The composition of the Party should supplement the range of skills contained within the previously deployed Joint Task Force Headquarters (JTFHQ) reconnaissance party including as appropriate; food services, fuels, Host-nation Support (HNS), labour resource, environmental health, movements, local resources/supply including military contracts staff, administration, port and maritime and appropriate engineer specialists. Civil Secretariat, Finance and Contracts staff are likely to be included to avoid budgetary delay. Tasks will include:

- a. Identification of the availability and suitability of HNS/ICR in order to develop clear planning parameters for both Permanent Joint Headquarters (PJHQ) and JTFHQ and to secure approved resources.
- b. Coordination of reconnaissance and advance party reception, including accommodation, transport and all aspects of life support.
- c. Establishing a Theatre Reception Centre (TRC) to enable all deployed Force Elements (FE) to be tracked and Operational Locations (OPLOC) recorded.
- d. Operating, where necessary, as the advance element of a JFLogC HQ.
- e. Establishing systems for asset tracking and in transit visibility as early as possible.

2B2. Movement Control. JTFHQ movement staff are responsible for setting intra-theatre transport and movements policy, priorities and, in conjunction with PJHQ, those for inter-theatre movements. They have a close relationship with the JFLogC HQ, which is responsible for conducting force reception and redeployment and the coordination of movement. In principle, the Joint Movement Unit, who initially execute the movement plan, should deploy early, although they may subsequently be re-deployed to support other operations as the JFLogC becomes properly established and takes over this responsibility. For Movement Control the JFLogCHQ should contain, as a minimum, the following 2 organisations:

- a. **Force Movement Control Centre.** The Force Movement Control Centre (FMCC) plans and coordinates in-theatre movements in accordance with plans established by the JFMS. The FMCC is tri-Service and based on an established nucleus augmented from the JFLogC maintained Augmentation Manning List (AML). This ensures that the FMCC has sufficient experienced staff to function effectively and also provides it with movements and consignment tracking C2 capabilities at key nodes. The FMCC maintains close liaison with the Joint Force Air Component Command (JFACC), who commands intra-theatre Air Transport (AT) assets and the aero-medical organisation.
- b. **Force Movement Control Unit.** The Force Movement Control Unit (FMCU) groups tri-Service theatre movements elements under a unit headquarters to deal with detailed operational reception and embarkation requirements at Ports of Disembarkation (PODs). The FMCU is under the Operational Control (OPCON) of the JFLogC and deploys its various elements to best support the Joint Force requirement. The FMCU coordinates its activities with the supply, transportation, engineering and pioneer units that are placed under command of the JFLogC.

2B3. Establishing In-Theatre Movement and Life Support. The JFLogC is responsible for coordinating the movement of the Joint Force within the Theatre, and arranging necessary life support including Force Protection (FP). These operations normally require Joint control to ensure optimum use of transport assets. Tasks will normally include:

- a. **Reception, Staging and Onward Movement.** Reception, Staging and Onward Movement (RSOM) is a complex Joint C2 operation that is best controlled through a single headquarters to draw together the movements and administrative functions necessary to move, process, accommodate and provide life support functions to a transiting force. Close liaison with the JTFHQ is necessary to enable timely response to late Force Element Table (FET)¹ changes. RSOM is covered in detail in Chapter 7.
- b. **Intra-Theatre Supply.** The JFLogC will control intra-theatre air transport and possibly Main Supply Routes (MSR), although these are more likely to be controlled by the Land Component.
- c. **Redeployment Planning.** In conjunction with the JTFHQ and PJHQ staff, the JFLogC is likely to be responsible for planning recovery movement and the preparation of equipment and stores for future use. A separate organisation may be formed as part of post conflict activities.

¹ A FET lists all assets, including personnel, equipment and materiel that are to be deployed.

2B4. Orientation. A Joint Force Orientation and Briefing Unit is a Joint unit composed of RN, Army and RAF education staff, supplemented by other experts that is based initially at the Air Mounting Centre (AMC) and subsequently at a PODs or the JFLogC HQ² to provide:

- a. Pre-deployment orientation and in-theatre ‘top-up’ briefings.
- b. Orientation handbooks and language cards as appropriate.
- c. A forces newspaper or news sheet where required.
- d. HN liaison, security and force protection tasks as directed.

2B5. Forward Mounting Base Support. A Forward Mounting Base (FMB) is a base established within the operational area, to support operations at Forward Operating Bases³ (FOB). A FMB should have the capacity for an insertion force to form-up within it and subsequently to be able to handle reinforcements, reserves and evacuees. Depending on the scale of an operation, the FMB may also be required to provide some logistic support functions, requiring logistic C2, communications and functional units. In addition, it may also provide a hub for intra-theatre airlift and as such, both the Joint Force Air Component (JFAC) and JFLogC HQs will need to identify clear control arrangements with PJHQ to ensure that logistic capability in the Joint Operations Area (JOA) is not compromised. If a FMB is required, responsibility for selection and activation rests with PJHQ, closely assisted by Defence Supply Chain and Operational Movements (DSCOM) Movement Operations. Appropriate assets will need to be identified and brought together once the operational requirement has been confirmed, as there is no standing organisation at readiness to operate a FMB. The task of supporting a FMB will only fall to the JFLogC HQ if it is geographically appropriate. However, it constitutes a discrete element within Lines of Communication (LOC) and the JFLogC HQ will require a degree of control over its logistic assets. FMB support must be carefully considered during planning to ensure that the integrity and continuity of support across the Coupling Bridge (CB) and into the JOA, or JOAs, is maintained.

2B6. Logistic Functional Control. Logistic Functional Control is defined as ‘the authority to direct the method and processes employed to conduct logistic functions in order to ensure commonality and efficient use of resources’.⁴ In order to provide the required logistic support to the JTFC, the JFLogCC will coordinate a range of logistic support activities including supply and distribution, movements, maintenance, infrastructure, the provision of fuel, water, electrical power, Temporary Deployable

² The location of the Joint Force Orientation and Briefing Unit will be determined by the RSOM requirements of each particular operation.

³ JDP 0-01.1 ‘United Kingdom Glossary of Joint and Multinational Terms and Definitions’.

⁴ New definition for JDP 4-00.

Accommodation (TDA) and medical and personnel administration support. This support may be provided from UK or multinational military sources, from the HN, from contractors or from other ICR. The delivery of effective Joint support to operations depends upon the JFLogC exercising coordination authority over all in-theatre logistic assets as well as command of those units which provide that Joint support. Task-orientated groupings may be established as Joint Units that could include units to operate Ports of Disembarkation (PODs), life support or facilities such as Convoy Support Centres (CSC), marine salvage and repair and marine fuels provision. These units would be formed from assets, personnel and equipment from each of the components.

2B7. Force Supply and Distribution. Inventory control and prioritisation is fundamental to the economic and efficient operation of the force. Routine individual demands will not normally pass through the JFLogC HQ, but will be extracted using the appropriate supply systems. However, the JFLogC must monitor the operation of the Joint Supply Chain (JSC) to ensure it meets operational requirements. Supply and distribution units under command of the JFLogC will be responsible for the receipt, storage, control, maintenance, accounting and distribution of operational logistic stocks to the components in accordance with the JTFC's priorities. The JFLogC will identify potential shortfalls or choke points in the system and manage subsequent distribution against these priorities. This requires the fusion of all data to achieve visibility of all deployed assets through the establishment of a Tracking Cell in the JFLogC HQ. Priorities for unloading materiel will be determined by the J4 staff at the JTFHQ, who will either advise PJHQ directly or via the JFLogC. PJHQ will direct the order of loading of these stocks from the Strategic Base through DSCOM.

2B8. Logistic Detachments. In any Joint operation there are likely to be JFLogC units or groupings of units positioned in areas geographically separated from the Joint Supply Area (JSA) such as FMBs, Forward Logistic Sites (FLSs) and Support Helicopter (SH) units. Consequently, the JFLogC HQ requires the capability to establish logistic detachments that can provide essential logistic support functions at dispersed locations.

Specific Functions

2B9. Equipment Support. Equipment Support (ES) is normally conducted by individual components with resources held at first and second line. However, the nature of the operational requirement and the commonality of equipment and practices may require the coordination of some ES resources, including military personnel, units and contractors, within the JOA. This support will be managed by the JFLogC HQ, which will set force policy for repair, recovery, backloading, modification of equipment, cannibalisation, disposal, salvage and dealing with hazardous waste. It will also coordinate production of the Theatre Mission Critical Equipment list in

consultation with other components and the JTFC and manage the Theatre Equipment Priority List on behalf of the force.

2B10. Medical. Medical support⁵ is increasingly Joint and multinational in its delivery, but Roles 1 and 2 remain integral to all components. The JFLogC has responsibility for the control and management of JFLogC Role 1 and 2 medical facilities, Theatre level Role 3 and air and surface medical evacuation (MEDEVAC). Depending on geography and the operational situation, some JTFHQ medical planning cell functions may be embedded in the JFLogC HQ for access to communications and physical proximity to the majority of medical units, but will remain part of the operational level JTFHQ. Land based Role 3 support and land evacuation is primarily provided by the Army Medical Services. The construction of Role 3 facilities for the Land and Air Components is an Engineer responsibility. The provision of medical stocks, equipment and drugs on operations is the responsibility of J4 (Log). Aeromed evacuation, whether conducted tactically from forward areas or strategically out of theatre, is normally provided by the RAF. Medical support to the Maritime Component is covered in the Maritime environmental annex.

2B11. Infrastructure. Supervision of infrastructure tasks, which are under the overall direction of the Joint Force Engineer in JTFC HQ, will normally fall to 29 Engineer Support Group, which is affiliated to, and exercises with, the SJFLogC HQ. Infrastructure tasks are likely to include:

- a. The development of force reception, assembly and staging areas including the provision of operational infrastructure, bulk water and fuel storage as well as electrical power generation and distribution, maritime re-stow areas and life support services. The expertise required is likely to include the ability to construct and maintain transit camps and associated facilities using TDA and other expeditionary camp infrastructure.
- b. The establishment, control and administration of a force Prisoner of War (PW) cage where necessary.
- c. The formulation of an infrastructure development plan.

2B12. Recognised Theatre Logistics Picture. The Recognised Theatre Logistic Picture (RTLP) is coordinated by the JFLogC as a means of Logistic Decision Support and Situational Awareness (SA) used both by personnel within the theatre and by agencies extending back along the JSC. The RTLP contains FE and force logistic data, geospatial information and other logistic and operational documentation such as signals, situation reports and Theatre Priority Lists.

⁵ Medical issues are covered in detail in JDP 4-03 ‘*Medical Support to Joint Operations*’.

2B13. White Fleet Management. The planning and conduct of white fleet operations within the JOA will generally be coordinated by the JFLogC. White fleet transport often forms a vital element in linking PODs and a FMB.

2B14. Reverse Supply Chain. The JFLogC coordinates all returns from theatre in close liaison with the DLOC and DSDA. Efficient execution of this function ensures that critical items are swiftly returned into the repair loop, so as to maintain high availability whilst keeping stocks in depots and in the theatre to a minimum.

2B15. Urgent Operational Requirement Management. A close liaison is maintained between the JFLogC and the DLOC to ensure that Urgent Operational Requirement (UOR) related materiel is accorded the necessary priority to enable its swift delivery to the point of need.

2B16. Contract Management and Labour Support. Contracts for the provision of services in theatre are let by the JFLogC in accordance with national Contractor Support to Operations (CSO) policy. Ideally, the number of prime contractors will be kept to a minimum to facilitate the overall contract management task. In addition to contracted out services, local labour may be employed in direct support of the JFLogC HQ or assigned FE. A small cell within the JFLogC undertakes this function, coordinating pay, conducting security screening and setting terms and condition of employment.

2B17. Supply Chain Performance Management. In order to optimise the effectiveness of the JSC, the JFLogC oversees its functioning in theatre, identifying choke points and making recommendations for resolving difficulties when they occur.

2B18. Provost. Provost assets will be required to provide the necessary Joint capability to ensure military effectiveness throughout an Area of Operations (AO) controlled by the JFLogC. Assets may include Service police from all 3 Services. The Commanding Officer of the Military Police Line of Communication Regiment (MP LofC Regt) may also be designated Provost Marshal JFLogC. Provost support across LOC must be Joint and fully coordinated.

2B19. Force Postal and Courier Services. The JFLogC commands the force Postal and Courier Services (PCS) unit which:

- a. Receives and distributes courier bags and mail by sea, land and air.
- b. Provides Post Office counter facilities.
- c. Provide electronic mail services ‘e-blueys’.

2B20. Personnel and Administration Support. The JFLogC is responsible for:

- a. The administration of the Operational Establishment Table, in conjunction with PJHQ J1 and J3, to ensure that the necessary FE are generated and deployed in accordance with the JTFC's intent.
- b. The control and administration of personnel arriving into and departing from theatre, ensuring that the administrative aspects of RSOM are carried out including Operation Location (OPLOC) tracking, briefings and administration of the Operational Welfare Package (OWP).
- c. Coordination of theatre policy for Joint Personnel Administration (JPA) and the maintenance of force personnel records.
- d. Maintaining a single point of contact for casualty and compassionate reporting and, in conjunction with J4 Med and the FMCC, administering an effective system for the management and movement of casualties and compassionate cases.
- e. Managing theatre aspects of fatalities, including in-theatre coordination of repatriation.
- f. The control and administration of theatre PW and Detainees, in conjunction with J9 and the Theatre Provost Marshall, but with particular responsibility for ensuring compliance with the requirements of the International Committee of the Red Cross (ICRC).
- g. Depending on the nature of the operation, the JFLogC may administer some aspects of theatre discipline chains, provision of advice for the convening of official inquiries, such as Boards of Inquiry and the staffing of honours and awards submissions.

2B21. Force Field Administration Office. A Joint Force Field Administrative Office will be established to perform Force Cashier and Force Field Records functions in order to maintain records for all UK elements of the Joint Force.

- a. **Force Cashier.** The Force Cashier is responsible for indenting for accounting for and supplying cash to unit and formation Imprest Account holders under OPCON of the JFLogC. The cashier also has responsibility for supporting unit and formation pay and personnel staffs.
- b. **Force Field Records.** The Field Records Section is required to account for all manpower in the JOA, including ship-to-ship movement of personnel. The section must be capable of deploying at least one data capture team for each POD/Point of Embarkation (POE) as well as holding a reserve. Personnel tracking difficulties should not be underestimated and plans for ensuring the

collation of correct information need to be considered before the arrival of any personnel in the JOA or even before deployment from home base.

2B22. Environmental Safety. A Joint organisation responsible for the maintenance of the general safety of the force may be established to assist the commander in the management of environmentally related operational risk. The organisation should include elements responsible for fire safety, environmental health, transport safety, J2 and police elements. The challenge that this represents when viewed against a large JOA with a dispersed force and the varying requirements by components over different phases of an operation should not be under-estimated. The Logistic Estimate must consider the optimum provision of Environmental Safety.

2B23. Governance. Governance is covered in detail at paragraph 514. The JFLogC will carry out the following functions:

- a. Confirm that FLCs have effective governance procedures in place for their in theatre FE.
- b. Confirm that contract sponsors have effective governance procedures in place for the support and services delivered under HNS and CSO arrangements.
- c. Identify gaps between single-Service instructions and procedures in theatre to achieve safety and quality across components and specifically between individual units and multinational partners.
- d. Identify areas where the adoption of Joint practices and procedures would rationalise and/or improve the effectiveness of existing single-Service systems.
- e. Engage logistic subject matter experts within theatre to provide process improvement proposals to operational commanders, at all levels, where appropriate.
- f. Review in theatre incident and accident reports and take action to coordinate process improvements when the report indicates that a boundary issue exists between individual units and/or multinational partners.

CHAPTER 3 – ENABLING FUNCTIONS

SECTION I – JOINT SUPPLY CHAIN

- The Joint Supply Chain (JSC) forms the spine of logistic support to operations and the development of an operation specific JSC Plan is the central pillar of the logistic estimate.
- The JSC Blueprint sets out key principles and supporting activities that ensure the effective operation of a particular JSC design.
- The JSC estimate identifies the performance levels required of the whole JSC and influences the development of long term JSC planning.
- Performance Management of the JSC is an essential element of supporting operations.

301. Function. The JSC, introduced in Chapter 1, is dependent upon an effective information system, operating from the Strategic Base all the way forward to deployed Force Elements (FE), and the use of agreed standardised procedures. It is a key enabler for the achievement of Integrated Logistics, described in paragraph 107. The JSC enables the effective utilisation of all logistic providers including UK Defence, allies, Contractor Support to Operations (CSO), Host-nation Support (HNS), Other Government Departments (OGDs) and Non-Governmental Organisations (NGOs).

302. Joint Supply Chain Blueprint. The JSC is the Defence controlled network of nodes comprising resources, activities and distribution options that focus on the rapid flow of information, services and materiel between end users and the Strategic Base to generate, sustain and redeploy operational capability. It is founded upon integrated logistic information systems, common policies, doctrine, processes and procedures to provide a core enabling capability for Defence, optimised to deliver military effect. The generic design of the JSC is set out in Joint Service Publication (JSP) 886 '*The JSC Blueprint*', Volume 1, Part 1, Pamphlet 1. The Blueprint provides a set of characteristics, which define the elements necessary to plan, configure and execute the JSC. This is shown at Figure 3.1. The key elements of the JSC are:

- a. **End-User Focus.** A JSC should be optimised and designed to meet end-user requirements in order to generate, sustain and redeploy operational capability and ensure that all FE have a single and readily identifiable ‘supply focal point’.
- b. **Single Integrated System.** A JSC should be planned, designed, and then operated, as a single integrated system. Planning should consider inventory, transportation, materiel handling and infrastructure together, not in isolation. It should be operated against clearly defined requirements that take

into account reliability, responsiveness and geography and have an integrated Command and Control (C2) system where each C2 node is aligned with the relevant logistic processes and change can be effected quickly and efficiently. The forward and reverse JSC must be operated as a single system. The Reverse Supply Chain (RSC) is not just ‘backloading’; it requires planning, configuration and execution across inventory, transportation, materiel handling and infrastructure in the same way as the forward JSC.

c. **Efficient Standardised System.** A JSC should be configured for efficiency, tempered by flexibility, making maximum use of simple standardised procedures and common protocols. This will ensure consistency and coherence as well as improving JSC robustness. It will also speed flow, reduce variability and provide visibility where it is needed.

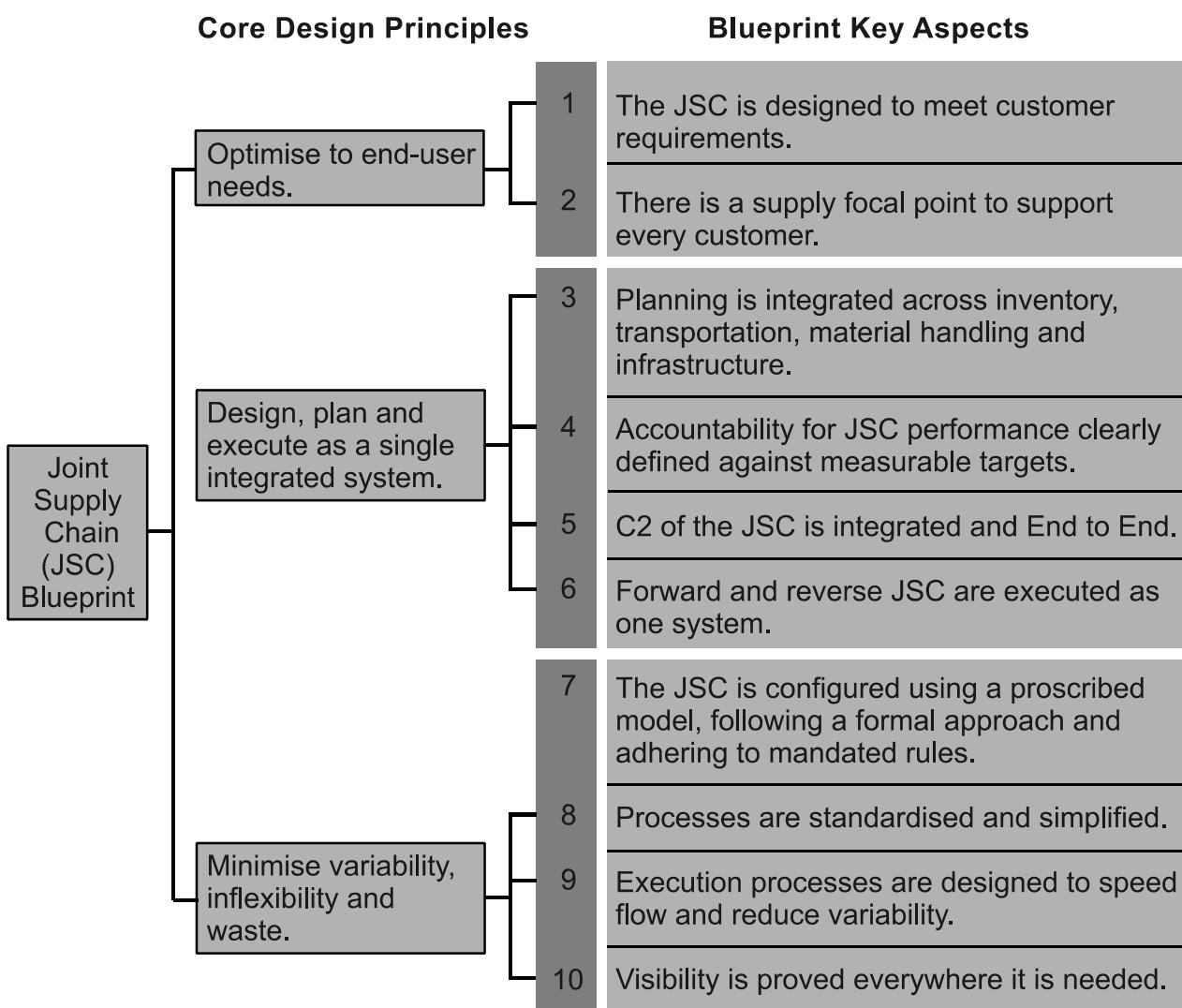


Figure 3.1 - JSC Blueprint

303. Construction of the Joint Supply Chain. Traditionally Defence JSCs have focused on the physical distribution of materiel and services, however, the JSC places increased emphasis on the timely flow of accurate information regarding user requirements and supplier availability in order to optimise efficient logistic support. The construction of a JSC involves 3 activities: planning, configuration and execution.

304. Planning. The JSC operates at several different levels dependent on planning timescales. The Core JSC is the consolidation of all JSC activity that is not tailored specifically to the support of individual operations. It relates to the common resources, mainly in the Strategic Base, which are involved in providing routine support for the Front Line Commands (FLCs), as well as the non-deployed infrastructure and resources to support operational supply chains. Long-term Core JSC planning looks 20 years ahead to enable efficient capital expenditure planning and resourcing. Operational JSCs provide support for specific deployments. In the Joint Operations Area (JOA), resources are normally used solely to support a specific operation whilst the resources towards the Strategic Base end of the Core JSC are often shared with other deployments. Planning for an effective operational JSC starts from the outset of operational planning, with the Logistic Estimate process identifying the performance levels required of the whole JSC and influencing the development of long-term JSC planning.

305. Configuration and Execution. The configuration of the JSC is directly linked to the planning process and is concerned with the layout, structures, capabilities and processes that underpin the operation of a JSC. Execution of the JSC is vested in a spread of organisations, but overall management of the JSC's performance is the responsibility of the Defence Supply Chain and Operational Movements (DSCOM) through a formally established Performance Management (PM) Cell. Further details are contained in JSP 886 '*The Defence Logistics Support Chain Manual*'.

306. Performance Management. The role of the DSCOM JSC PM Cell is to measure JSC activity, identify failings and then propose remedial action, either directly to organisations in the Strategic Base area or via the Permanent Joint Headquarters (PJHQ) for deployed FE. PM of the JSC is an essential element of supporting operations. The aim of PM is to continually improve JSC reliability ensuring that demands are met in a timely fashion. The initial JSC plan, developed from the JSC Estimate, identifies the deployment of logistic assets and establishes time metrics from the Strategic Base forward into the deployed area and up to the point of use. These timings are articulated within the Sustainability Statement (SUSTAT) and take into consideration the processing time in the base, availability of assets across the Coupling Bridge (CB) and the forward distribution of assets in theatre. PM is of limited utility during the deployment phase and is best suited to the sustain and recovery phases of an operation where the JSC is well established, processes are more mature and the JSC is less likely to be the victim of variability.

The key benefit of PM is the development of an enhanced level of reliability and the building of confidence in the JSC.

SECTION II – LOGISTIC SITUATIONAL AWARENESS

- Logistic Situational Awareness (SA) provides the basis on which initial logistic planning takes place.
- Effective logistic SA requires both accurate logistic information and timely operational information and intelligence.
- Logistic Information Management (Log IM) enhances the delivery of coherent logistic information in support of the operational commander.
- Networked Enabled Capability (NEC) will enhance the ability to exploit logistic information.
- A Joint Logistic Picture (JLP) and the Recognised Theatre Logistic Picture (RTLP) provide a common logistic picture to all key organisations involved in the provision of logistic support.

307. Logistic Information Management. Logistic SA is a product of timely and accurate logistic information combined with relevant operational information and intelligence. SA sets the context within which activity will be conducted; logistic information enables the logistic inventory to be better managed, demands to be met more quickly, and logistic services and the logistic footprint to be optimised for the operational situation. Logistic information is held on a large number of Logistic Information System (Log IS) applications, which support the logistic process. These are being rationalised into a smaller number of Joint applications designed to be generic rather than to support specific platform processes. The latter is necessary to deliver the Log IM required to support the effective operation of the JSC and meet the needs of the Operational Commander. Log IM combines available information technology (IT) with logistic processes and practices to enhance the efficiency and effectiveness of logistic support. Log IM helps facilitate the coordinated assessment, planning and management of logistic resources. Log IM will be enabled by:

- a. **Networked Enabled Capability for Logistics.** NEC provides a significant enhancement to the exploitation of logistic information through the timely provision and exploitation of information and intelligence to enable more effective decision-making. NEC is being implemented through a coherent and progressive development of Defence equipment, software, processes, structures, and individual and collective training, underpinned by the development of a secure, robust and extensive network of networks. NEC is potentially a very powerful method of supporting logistic C2.

b. **Information Infrastructure.** Information infrastructure is designed to meet operational capability requirements. The Defence Information Infrastructure (DII) will provide a single integrated coherent information infrastructure for both static and deployed forces. It will support the progressive delivery of NEC.

308. **Delivery of Logistic Information.** Logistic Information will be delivered through a number of web-based information sharing capabilities. These capabilities access a common set of data allowing all users to see the same logistic information from numerous locations. The relationship between these capabilities is shown diagrammatically at Figure 3.2 and explained below:

a. **Joint Logistics Picture.** PJHQ requires a Joint Logistic Picture (JLP) to provide logistic SA. A JLP provides a complete picture of logistic activity in the Strategic Base, including industry, activity across the CB(s) and relevant information from JOA(s).

b. **Recognised Theatre Logistic Picture.** The Recognised Theatre Logistic Picture (RTLP) is the logistic contribution to the Joint Operations Picture (JOP) and will update the JLP with theatre-specific information. It supports logistic decision-making for a particular JOA using a secure intranet to link deployed HQs, usually at Component Command level, with key organisations back in the UK. These are Assistant Chief of Defence Staff (Logistic Operations) (ACDS (Log Ops)), PJHQ, Front Line Commands (FLCs) and DSCOM. The key attribute of the RTLP is that all users view the same version of current information, enabling decision-makers to have a common understanding of the operational situation on which to base their decisions. They are constantly provided with all relevant activity and information involving the logistics component. PJHQ J4 has primacy for developing the RTLP, although in practice it is usually generated and controlled by the Joint Force Logistic Component (JFLogC) or equivalent organisation. There may be several operations running concurrently and, therefore, there may be a number of RTLPs in existence at any one time.

c. **Coalition/NATO Operating Pictures.** A Common Operating Picture (COP), constructed to meet a specific operational requirement, may be used to support multinational and coalition operations. Although they may be hosted on a variety of different infrastructures, COPs are increasingly sophisticated and used within most coalition groupings. In common with the JLP and the RTLP, they are usually web-based and use a secure intranet. The complexity of COPs and the capability of countries using an intranet system can vary greatly. For NATO operations, the logistic contribution to the picture will usually be generated by use of the Logistic Functional Area Services Capability Package (LOGFAS CP). This is a suite of applications that provides a deployment,

movement and sustainment planning tool, a movement execution and visibility tool and a logistics reporting tool. LOGFAS CP provides the necessary information for NATO or coalition logistic authorities to make timely and better informed decisions.

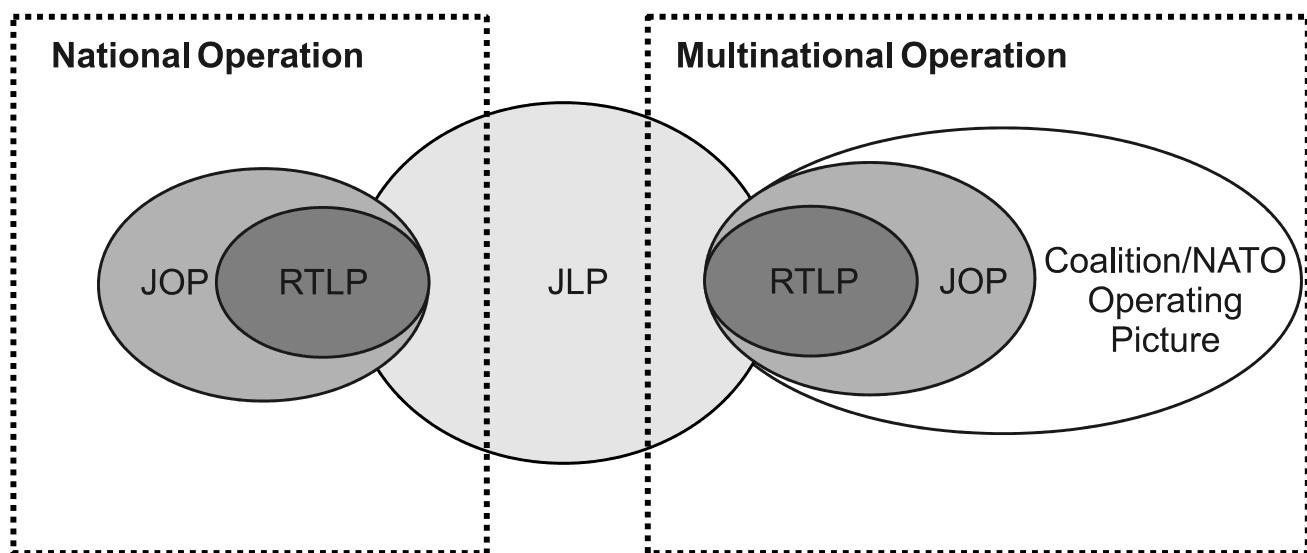


Figure 3.2 - Logistic Information Relationships¹

SECTION III – FORCE PROTECTION

- Logistic Force Protection (FP) is a key consideration during the estimate and planning process. FP measures should be evaluated in accordance with a logistic FP model that considers:
 - Criticality assessment.
 - Threat assessment.
 - Vulnerability Assessment.
 - Risk management.
 - Incident response.

309. FP² is as important for logistic FE as it is for combat FE. The lack of integral FP, including firepower and mobility, of logistic FE and the dispersed nature of their deployment, make logistic FE particularly vulnerable. FP measures should be considered from the outset of the estimate and planning process to ensure the security of logistic personnel, materiel, equipment and infrastructure. FP measures should be based on an assessment of the factors covered below.

¹ This diagram shows 2 concurrent operations, one national the other multinational, for illustrative purposes only.

² FP is ‘The means by which operational effectiveness is maintained through countering the threats from adversary, natural and human hazards, including fratricide, in order to ensure security and freedom of action.’ (JDP 0-01.1) It is covered in detail in AJP-3.14 (JDP 3-64) ‘Allied Joint Doctrine for Force Protection’.

310. **Deployment.** Logistic FE and capabilities are particularly vulnerable during deployment and the conduct of the Reception, Staging and Onward Movement (RSOM) process. During the RSOM phase of an operation the JFLogC Commander (JFLogCC) is likely to be the supported commander and be provided with FP by other Components. The JFLogCC will lead on local liaison and coordination for FP to enable the mission.

311. **Criticality Assessment.** Identify those logistic capabilities that are critical to mission success. This will include logistic assets, essential infrastructure and equipment, Lines of Communication (LOC) and JSC nodes. Criticality Assessment should be considered in terms of the risk from any degradation of a capability, lack of availability and value. The results of the criticality assessment permit risk analysis to be conducted by considering the likelihood and impact of a threat exploiting a vulnerability to a capability or asset that is critical to mission success.

312. **Threat Assessment.** Determine the general and specific threats and hazards to those logistic capabilities and assets that are critical to mission success. The Threat Assessment should identify the nature of the threat, its capabilities, intentions, likelihood and probability. For logistic capabilities, this will include the likelihood of criminal activity and lack of local population support in key locations such as ports.

313. **Vulnerability Assessment.** Assess the vulnerability of critical logistic assets and capabilities to the threats identified in the Threat Assessment, and the consequences to mission success of interdiction or failure. A vulnerability assessment compiles and examines information on the vulnerability of assets, including personnel, materiel, establishments, information systems, and activities. The result of a vulnerability assessment is the identification of deficiencies or weaknesses that render critical assets, capabilities or activities vulnerable to a range of known or likely threats.

314. **Risk Management.** Determine and manage the risk to mission success arising from the degradation and/or failure of critical logistic assets and capabilities. Risk Management is the process of identifying, evaluating, selecting and implementing mitigating controls and measures to reduce identifiable risks to an acceptable level, commensurate with mission success. The implementation of appropriate FP controls and measures following risk assessment will reduce the likelihood or severity of these various threats, hazards and vulnerabilities.

315. **Incident Response.** Identify and implement appropriate incident response and consequence management controls and measures, including the development and implementation of an emergency response and recovery plan, in reaction to any attacks on logistic assets and capabilities. Logistic FP controls and measures should

be maintained, reassessed and amended throughout the mission, in the light of any experience gained.



Part 2
Prepare

PART 2

Prepare

CHAPTER 4 – FORCE GENERATION

401. Chapter 4 covers 3 specific aspects of Force Generation. Section I covers the logistic support required to generate Force Elements (FE) from their normal readiness state ($FE@R^X$) to the level at which they are ready to deploy (R^0). Section II covers the generation of specific logistic FE. Finally Section III covers the increasing role of contractors and their involvement in the Force Generation process.

SECTION I – LOGISTIC SUPPORT TO FORCE GENERATION

- Director of Joint Commitments (DJC) directs and manages the Force Generation process.
- Logistic Support to Force Generation within the Operational Planning Cycle (OPC) is the activity and resources necessary to maintain $FE@R$ and generate FE from R^X to R^0 .

402. Force Generation¹ brings FE to a state of readiness for operations through the assembling and organising of personnel, equipment and supplies. This includes training and equipping FE and preparing the support assets and personnel necessary to deploy, sustain and recover them. Responsibility for directing and managing the Force Generation process lies with Directorate of Joint Commitments.

403. **Logistic Support.** The Departmental Plan sets the requirement for Force Elements to be held at varying degrees of readiness ($FE@R$). Training and maintenance activity, together with associated logistic support and sustainability requirements, is programmed against this readiness requirement. The Logistic Support element of the OPC is illustrated at Figure 1.1 and described in Paragraph 108. Environmental variations are described in the environmental annexes to Chapter 1. Defence Equipment and Support (DE&S) delivers the logistic support that enables Front Line Commands (FLCs) to deliver the outputs specified in Service Delivery Agreements (SDA). These outputs are derived from Statements of Requirement (SOR) that include individual and collective training, equipment sustainability, interoperability and readiness. Together these outputs produce FE at the required readiness that can be allocated to mission groups to meet operational requirements. These outputs are aggregated as Customer Supplier Agreements (CSAs) between the DE&S and FLCs.

¹ Force Generation ‘The process of providing suitably trained and equipped forces, and their means of deployment, recovery and sustainment to meet all current and potential future tasks, within required readiness and preparation times’. (JDP 0-01.1)

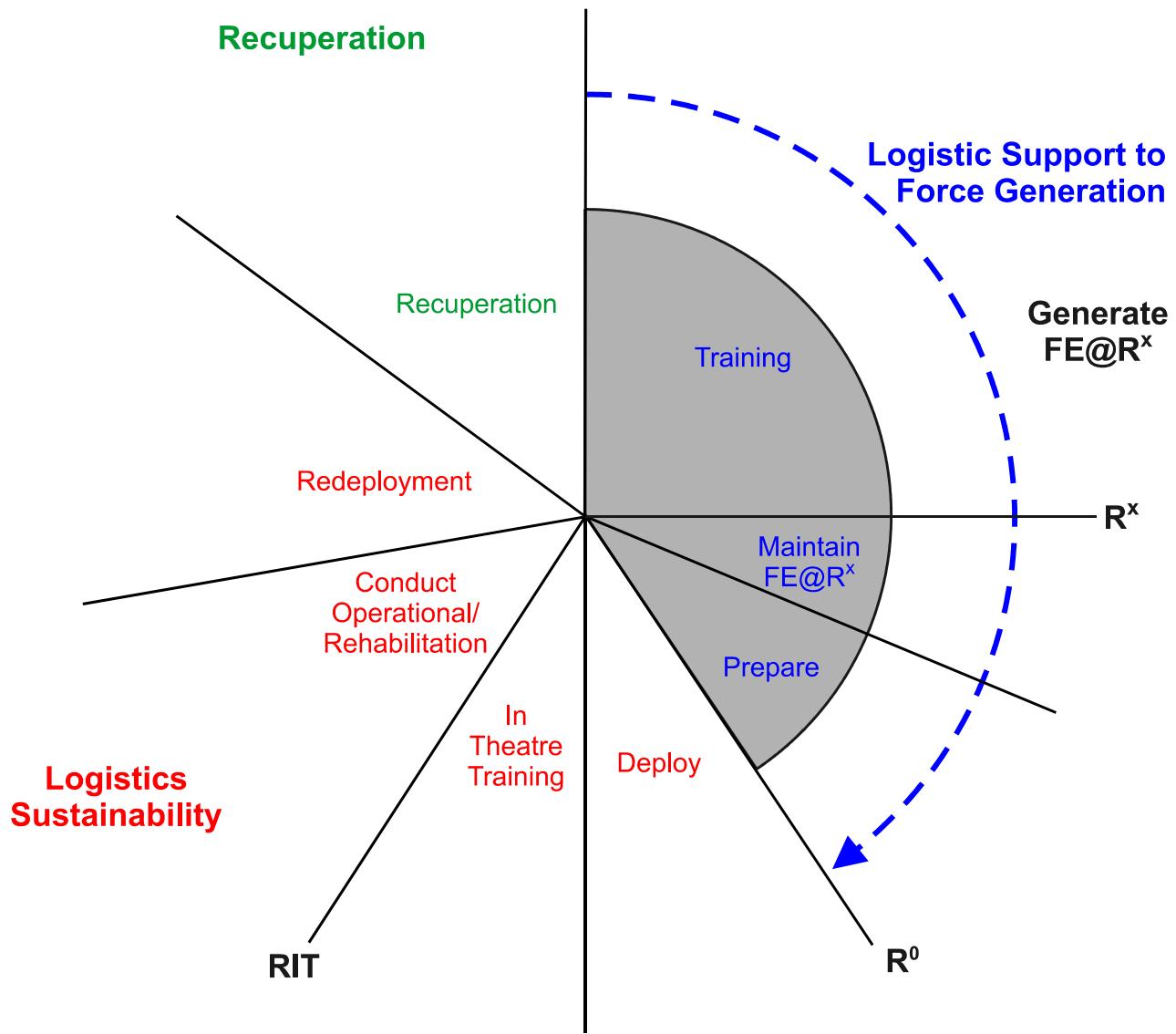


Figure 4.1 - Operational Planning Cycle: Logistic Support to Force Generation

404. Logistic Activity. The planning and estimate process, which is described in detail at Chapter 5, provides the direction for force generation activity. Logistic activities in support of force generation include quantifying the logistic support required to generate FE from R^X to R^0 , defining Lines of Communication (LOC), identifying the requirement for initial support packages and assessing the sustainment requirement to deliver both initial and full operating capability (IOC/FOC). Force generation is a continuous process and includes the requirement to roule FE, retain the capacity for reinforcement and maintain units assigned to the Joint Rapid Reaction Force (JRRF) at a high state of readiness.

405. Force Preparation. FLCs maintain their forces at varying degrees of readiness in order to meet the requirements of the MOD's Departmental Plan and the UK's commitment to the JRRF. FLCs achieve the required levels of readiness in a variety of ways, dependant on the requirement and the particular needs of their particular

operating environment. Each FLC has to achieve a balance between holding FE at high readiness for extended periods, providing forces for enduring deployed commitments, and maintaining acceptable harmony levels.

SECTION II – GENERATION OF LOGISTIC FORCE ELEMENTS

- Logistic support to operations will include multinational logistic support, Contractor Support to Operations (CSO) and Host-nation Support (HNS) as well as UK military personnel and equipment.
- The Total Logistic Force is the mix of regular Service personnel, reserves and contractors that make up deployed logistic FE.

406. National Assets. The OPC would normally dictate that those logistic assets held on the JRRF roster should be considered as the first logistics deployment option. However, the nature of the operation might require that other units or headquarters be selected, for example as part of a multinational force. If logistic assets not on the JRRF are selected logistic planners need to ensure that they receive prioritised preparation, including the necessary training and allocation of appropriate equipment, so that they can provide effective support to deploying formations and integrate with other national components, Joint organisations or nations. In particular, Communications and Information Support (CIS) infrastructure needs to be matched against the requirements of the deployed Logistic Information Systems (Log IS) plan.

407. Total Logistic Force. Deployed logistic FE will be a mix of regular Service personnel, reserves and contractors. Together they will form the TLF required to provide the necessary logistic support to an operation. Reserves are covered in paragraph 409, CSO in Section III.

408. Logistic Force Element Preparation. Initial force planning will consider the ability of UK national military logistic assets to provide the optimum combination of logistic FE matched to the operational requirement. This will be developed during the estimate process to identify a number of potential logistic options based on various operational scenarios. Once the required logistic tasks and associated assets have been established, PJHQ will identify any shortfalls and constraints and consider the availability of logistic support from other sources during the generation of Force Element Tables (FETs). This will include multinational logistic support, CSO and HNS. PJHQ will also request specific force package contributions and advice from FLCs, DE&S and the Surgeon General (SG) as required. The involvement of Commander Joint Force Logistic Operations (CJFLogO) in the force generation process will assist in identifying potential economies of scale against the various readiness criteria of FE and specific component support needs.

409. Reserves. A significant proportion of national military logistic manpower is held within the Reserve Forces. A major planning and political issue is, therefore, how to utilise such Reserves. Reserves may volunteer for operational tours of duty or elect to serve on Full Time Reserve Service (FTRS) however; if the number of Reserve FE needed requires compulsory mobilisation, the necessary decision must be made by Ministers. Compulsory mobilisation will be authorised under the Reserve Forces Act 1996 (RFA 96), which permits call out action for peacekeeping, humanitarian and disaster relief as well as combat operations. Reserves should not be relied upon exclusively to deliver the logistic capabilities required for the early stages of an operational deployment due to the likely timing of their mobilisation. There are, however, 3 categories of Reserve that provide additional flexibility:

- a. **High Readiness Reserve.** The High Readiness Reserve (HRR) is made up of individuals, who, voluntarily and with their employer's consent, accept an increased call out liability. Logistic HRRs consist of a small number of specialists including those in the movements and port operations areas as well as Forward Logistic Site (FLS) Teams that support the Maritime Component.
- b. **Sponsored Reserves.** Sponsored Reserves are MOD contractors who can be mobilised to provide the same capability in uniform that they deliver as civilians. For example, the Army's ability to deliver armour and mechanised infantry vehicles to the battlefield using tank transporters is heavily dependent on this capability.
- c. **Engineer Logistic Staff Corps.** The Engineer Logistic Staff Corps (ELSC) is made up primarily of chief executives, directors and senior technical or operational managers of engineering, transport and logistics firms or organisations. The seniority of ELSC members is deliberate to give authority and weight to the advice provided. The expertise of the ELSC is used in the following areas:
 - (1) Operations and Projects – in theatre consultancy, best practice techniques, advice on design and project management.
 - (2) Procurement – particularly relating to engineer or logistic equipment services.
 - (3) Corporate Planning and Processes – particularly advice on quality systems, human resource development and the management of change.
 - (4) Infrastructure, Geographic and Environmental data worldwide.

SECTION III – CONTRACTOR SUPPORT

- CSO is a key component in the provision of logistic support to operations.
- The use of CSO must be carefully planned and considered early in the Force Generation process.
- Contractor Logistic Support (CLS) is increasingly common in the support of equipment.
- Service provision contracts are vital to the delivery of essential services on operations.

410. Contractor Support to Operations. CSO was introduced in Chapter 1 and must be considered during the Force Generation process. In addition to deploying as part of the Force, contractors will also provide a significant number of enabling functions to assist with its generation and deployment. Deployed forces are increasingly likely to face tasks for which they are not fully trained or equipped such as assisting with redeveloping national infrastructure; contracting is a significant tool that may be employed to gain access to additional resources and services. It may be also employed to augment or complement the military support capability. CSO enables the commercial sector to provide a portion of deployed support providing an additional option for meeting operational support requirements.

411. Types of Contractor Support. CSO may be planned or *ad-hoc*. Planned CSO involves the deliberate determination of support requirements for an operation that can be met effectively by contracting with a commercial provider. *Ad-hoc* contracting, by contrast, can either be a response to unforeseen requirements that arise during the course of an operation or outsourcing to contractors for capabilities not met through force generation. The last-minute nature of *ad-hoc* contracting, and the time required to secure funding approval, can result in increased costs and delayed delivery of the required capabilities. CSO forms an integral part of the overall deployed logistic support capability. Such support should only ever augment military capability, rather than act as a substitute for it, since complete reliance on contractor provision may result in unacceptable risk. The use of contractors should not preclude consideration of Host-nation Support (HNS) or multinational arrangements between nations contributing to the operation.

412. Planning. The use of CSO must be considered as early as possible in the Force Generation process. This ensures that requirements for contractor support are identified early and that the contribution of CSO can be fully optimised. Both planned and ad hoc contracting can release military manpower for other tasks; however, the planned approach has the greater potential to make the best use of both military and civilian support capabilities. A planned approach permits the identification of where

and when the use of contractors is desirable and facilitates the early integration of contractor capabilities into the operation. Where contractors have already been selected in advance of an operation to provide support, they should contribute to the operational support planning process to ensure that their capabilities are properly integrated into the operational plan. The deployment of contractors, whether using their own resources or not, must be included in the overall deployment plan and the planning process must include a risk assessment of the presence of contractors in the Joint Operations Area (JOA).

413. Ministry of Defence. The MOD use of CSO is articulated in Joint Service Publication (JSP) 567 '*Contractors on Deployed Operations*' and has 3 guiding principles:

- a. **Assured Support.** The capability provided by CSO must provide an assured service for the military commander. The contract sponsor must make appropriate contingency plans to cover both the risk of contractor non-delivery and a deteriorating operational situation and threat environment that precludes the deployment of contractor personnel.
- b. **Value for Money.** CSO is only viable if the proposition is attractive to the prospective contractors. At the same time, CSO must demonstrate value for money for the MOD. The MOD will consider the cost of CSO against the delivery of operational benefit, that is, cost savings against operational risk. Where possible the total cost of CSO should be considered, including the indirect costs to the MOD of providing Force Protection (FP), for both manpower and equipment, life support including medical support, and transportation of contractor personnel.
- c. **Force Protection.** The operational environment within which CSO is delivered must be sufficiently safe and secure. The MOD provides FP for contractor personnel to a level commensurate with the threat determined by the local military commander. If the security environment deteriorates to the extent that the provision of FP becomes unsustainable, consideration must be given to the withdrawal of CSO.

414. Status of Contractors. Personnel employed under CSO arrangements remain the employees of the contractor and retain their civilian status. There are no circumstances where contractors employed by the UK will be authorised to conduct an armed role. CSO is delivered within 2 main categories.

- a. **Contractor Logistic Support.** CLS contracts are increasingly common for the support of equipment. Integrated Project Teams (IPTs) are delivering equipment to the FLCs with support contracts that require contractors to meet specified availability targets. Contractors, therefore, have the option of

delivering to theatre immediate replacement equipments, in the event of equipment failure, or sending the necessary technical personnel to effect repair in situ. All CLS contracts must mandate use of the Joint Supply Chain (JSC) and the manner in which FP will be provided for contractor personnel. There is also an increasing requirement for IPTs to ensure that items requiring repair outside of theatre under CLS contracts are assigned the appropriate priority in the Reverse Supply Chain (RSC).

b. **Service Provision Contracts.** A wide range of services can be provided by Service Provision Contracts including food supply and catering, accommodation and facilities management, infrastructure construction, conservancy services, communications services and facilities, airfield management and support services, and interpretation. Service provision includes the Contractor Logistics (CONLOG) enabling contract managed through PJHQ, communications services contracts managed through the Director General Information Systems and Services (DG ISS), and a wide range of supply chain services provided through the agencies and organisations controlled by Director General Joint Supply Chain (DG JSC). Contracts arranged by DG JSC, DG ISS and PJHQ are generally let from the UK, but there will be a range of logistic support contracts that are more likely to be let locally. Providing the security environment is sufficiently benign, Service Provision Contracts are likely to become the default for service provision on enduring operations.

415. **Risk Mitigation.** Operational experience of CSO, particularly during the early stages of operations, has highlighted the need to consider CSO risk during the force planning process.² Operational circumstances may preclude the use of CSO and/or contractors may choose not to deploy their personnel into high threat environments. Contingencies may include the requirement to maintain a military capability and the use of Reserve Forces including Sponsored Reserves. Additional risk mitigation may also include long term partnership arrangements, to help develop military-commercial relationships, and early engagement of contractors in the planning cycle.

² The Support Solutions Envelope (SSE) is used during the equipment approvals process to ensure that contract sponsors consider the risks and implications of incorporating CLS within the proposed support solution.

(INTENTIONALLY BLANK)

CHAPTER 5 – PLANNING

SECTION I – PLANNING PROCESS

- At the highest level, Ministers conduct crisis management, either individually or in committee.
- The Defence Crisis Management Organisation (DCMO) provides the Government with military advice and receives political direction as the basis for a military operation.
- The Current Operations Group (COG) assesses the severity of a crisis and considers options for intervention.
- The role of the Strategic Planning Group (SPG) is to assess the crisis and evaluate military strategic options for consideration by Cabinet.

501. Planning for any operation must include consideration of the logically possible. The principles of logistics, covered in Chapter 1, assist in this consideration and emphasise the critical importance of logistic planning being conducted as an integral part of, and not in parallel to, operational planning. Planning is covered in detail in JWP 5-00 '*Joint Operations Planning*'. The planning process, highlighting logistic input to the process, is at Figure 5.1.

502. **Political Control and Direction.** At the highest level, Ministers conduct crisis management, either individually or in committee. The MOD is responsible for providing the Government and Defence Ministers with sound and timely advice on the policy and strategic military aspects of all situations that may require UK military involvement. Following Ministerial direction, the role of the DCMO¹ is to ensure that ministerial decisions are translated into clear direction to military headquarters.

503. **Initial Crisis Response.** Planning normally commences when the COG,² formed by the Deputy Chief of Defence Staff (Commitments) (DCDS(C)), or Operational Tasking Group (OTG)³ directs the formation of a SPG⁴ to conduct a Political Strategic Analysis (PSA), which has become known as a Political/Military Estimate. For smaller operations, or due to time constraints, a COG is often not formed; as a result, an SPG is likely to be formed

¹ The Defence Crisis Management Organisation (DCMO) is a virtual organisation, formed from existing MOD departments and Permanent Joint Headquarters (PJHQ) who are supported by the single-Service commands, Director Special Forces (DSF) and Defence Equipment and Support (DE&S).

² COG – Normally chaired by DCDS(C) and selected staff. Foreign and Commonwealth Office (FCO), Department for International Development (DFID) and Cabinet Office are also invited to attend.

³ OTG Membership comprises: DCDS(C), Chief of Joint Operations (CJO), Policy Director, Chief of Defence Intelligence (CDI), FCO, Secret Intelligence Service (SIS), Government Communication Headquarters (GCHQ) and the Joint Intelligence Committee (JIC). In attendance, Director Strategic Plans (D Strat Plans) and Directorate of Targeting and Information Operations (DTIO).

⁴ The SPG is normally chaired by D Strat Plans. Attendance is bespoke and normally includes key MOD directorates, PJHQ, Front Line Commands (FLCs), FCO, DFID, Home Office and the Cabinet Office.

by Director Strategic Plans. For larger operations, the iterative planning process will commence months in advance of deployment. In either case, the PSA process is not a recognisable military estimate, but a virtual process conducted cross-Whitehall through a series of bilateral and multilateral engagements. From the PSA, the SPG produces a paper for the Chiefs of Staff (COS) Committee,⁵ outlining the potential military options initiated by the SPG; this may also include a Strategic Campaign Plan (SCP) to show the relationship between national levers of power. The SPG also drafts a CDS Planning Directive,⁶ also termed CDS Planning Guidance that sets the parameters for the Chief of Joint Operations (CJO) at the Permanent Joint Headquarters (PJHQ) to undertake the Military Strategic Estimate (MSE). Early command-led articulation of CDS' intent, within the Planning Directive, helps correctly focus resultant planning activity.

⁵ The COS comprises CDS, the single-Service Chiefs of Staff, the Vice Chief of the Defence Staff (VCDS) and all the Deputy Chiefs of Staff. It may also have representation from the Cabinet Office, FCO and DFID.

⁶ This may also give authority to deploy Military Intelligence Liaison Officer (MILO) or an Operational Liaison and Reconnaissance Team (OLRT), if required.

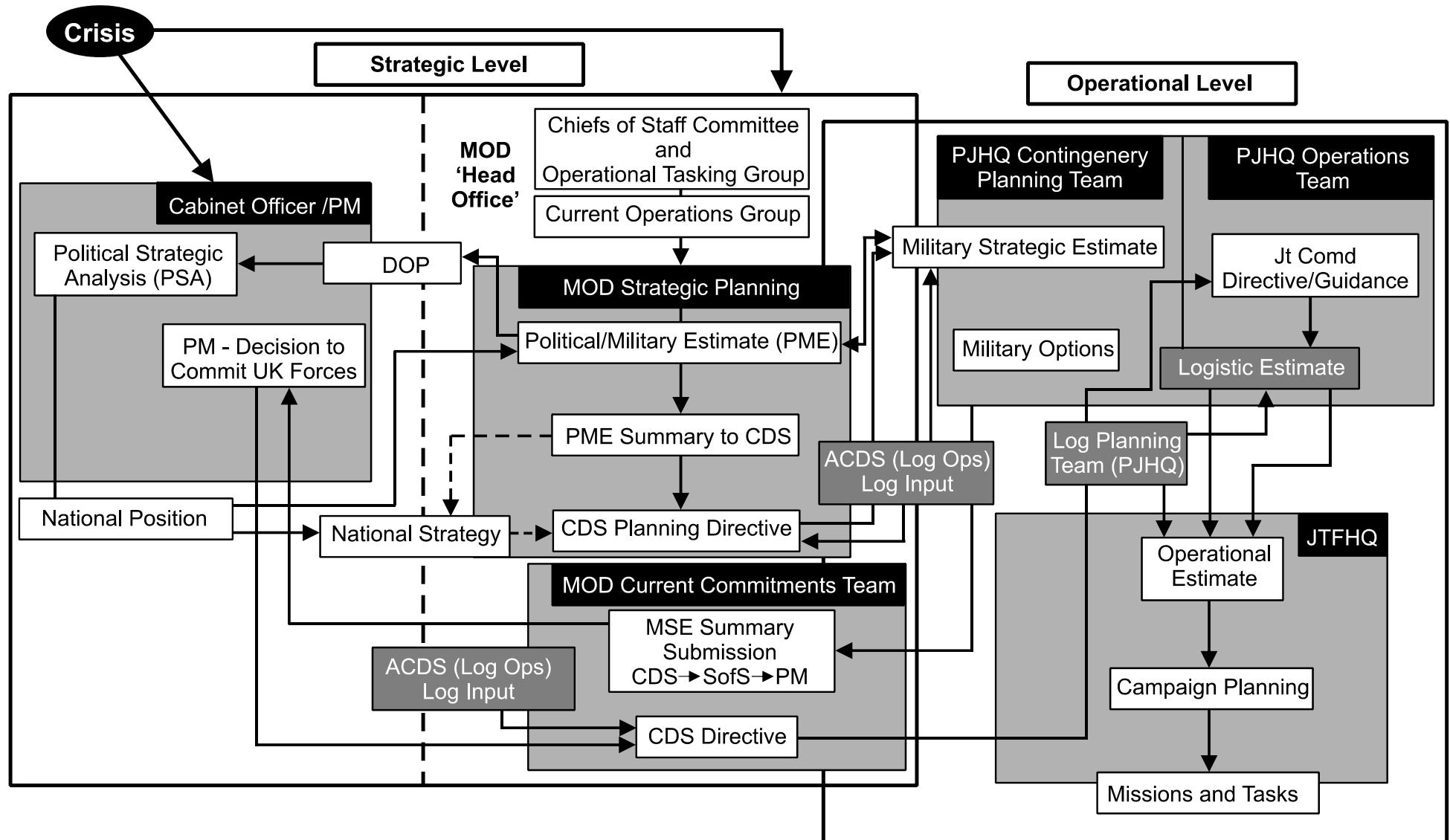


Figure 5.1 - Logistic Input to the Planning Process

(INTENTIONALLY BLANK)

504. Military Strategic Estimate/Chief of Defence Staff Directive. The MSE utilises a combination of the SPG COS paper and operational detail added by both the Current Commitments Team (CCT)⁷ and PJHQ's Contingency Planning Team (CPT).⁸ The MSE is generally produced by the CPT, in consultation with the CCT, and provides an assessment of the feasibility of military courses of action. The summary of the MSE is then used by the Secretary of State and CDS to advise the Cabinet Office on the military consequences of a decision to commit UK forces. Once this decision is made, CDS gives detailed direction to the Joint Commander (Jt Comd), usually CJO, through the CDS Directive, drafted by the CCT. This states the military strategic objectives, the desired end-state and constraints to be applied to operational planning. Time scales for planning can vary though time is usually at a premium, emphasising the need for efficient staff procedures and concurrent activity within the DCMO in concert with DSF, FLCs and Defence Equipment and Support (DE&S).

505. Joint Commander's Mission Directive. Once the operation moves from the planning to the execution phase, the CPT will transition to an Operations Team (OT) with leadership in PJHQ passing from J5 to J3. The Jt Comd issues a Mission Directive to the JTF Commander (JTFC), expanding upon the military strategic direction in CDS Directive and including a mission statement. The Jt Comd is subsequently responsible for giving further direction and advising the JTFC as necessary.

SECTION II – LOGISTIC INPUT TO THE PLANNING PROCESS

- Assistant Chief of Defence Staff (Logistic Operations) (ACDS (Log Ops)) staff provide logistic input to the Strategic Planning process.
- A Logistic Planning Team (LPT) is established at PJHQ to conduct a Logistic Estimate and provide input to the MSE.
- Development of the Joint Supply Chain (JSC) Plan is an important element of the Logistic Estimate.
- The Sustainability Statement (SUSTAT) confirms the overall logistic resources required for an operation.

506. Strategic Planning Process. The SPG, in preparing CDS' Planning Guidance, should consider certain fundamental logistic issues to ensure that logical and clear planning parameters are set. Logistic input to the process is led by ACDS (Log Ops) staff based on the SPG's assessment of the likely duration and expected intensity of the operation. Based on a strategic logistic estimate process carried out by ACDS

⁷ A CCT is formed from relevant staff drawn across the MOD and will almost always include regional, capability, intelligence, logistics and movements staff. The CCT will handle current operational issues and issues surrounding the deployment, action and recovery of forces and in doing so will liaise with other Government departments.

⁸ The CPT comprises functional representatives from the PJHQ staff branches and the JFHQ, and is led by J5.

(Log Ops) staff, logistic input will include limitations on, and requirements for, critical assets, the requirement for any in-theatre training, concurrency with other operations, movement constraints and guidance on the use of existing arrangements such as Memorandums of Understanding (MOUs). In order to monitor and coordinate logistic process, ACDS (Log Ops) will form and chair a logistic Contingency Planning Group (CPG), reporting to Chief of Defence Materiel (CDM) and DCDS(C) as necessary.

507. Operational Planning Process. The CPT led by PJHQ J5 produce an MSE, in consultation with the CCT, which will identify the capabilities required from DSF and FLCs and warns DE&S of the likely resources required to conduct the operation. All PJHQ staff branches, including J4, are represented on the CPT. Logistic input to the MSE is provided via the J4 member(s) of the CPT through the production of a Logistic Estimate conducted by a Logistic Planning Team (LPT). The LPT is chaired by Deputy Assistant Chief of Staff (DACSOS) J4 and has representatives from ACDS(Log Ops), Defence Supply Chain and Operational Movement Group (DSCOM), FLCs and the Joint Force Logistic Component (JFLLogC). The composition, role and outputs of the LPT are shown at Figure 5.2.

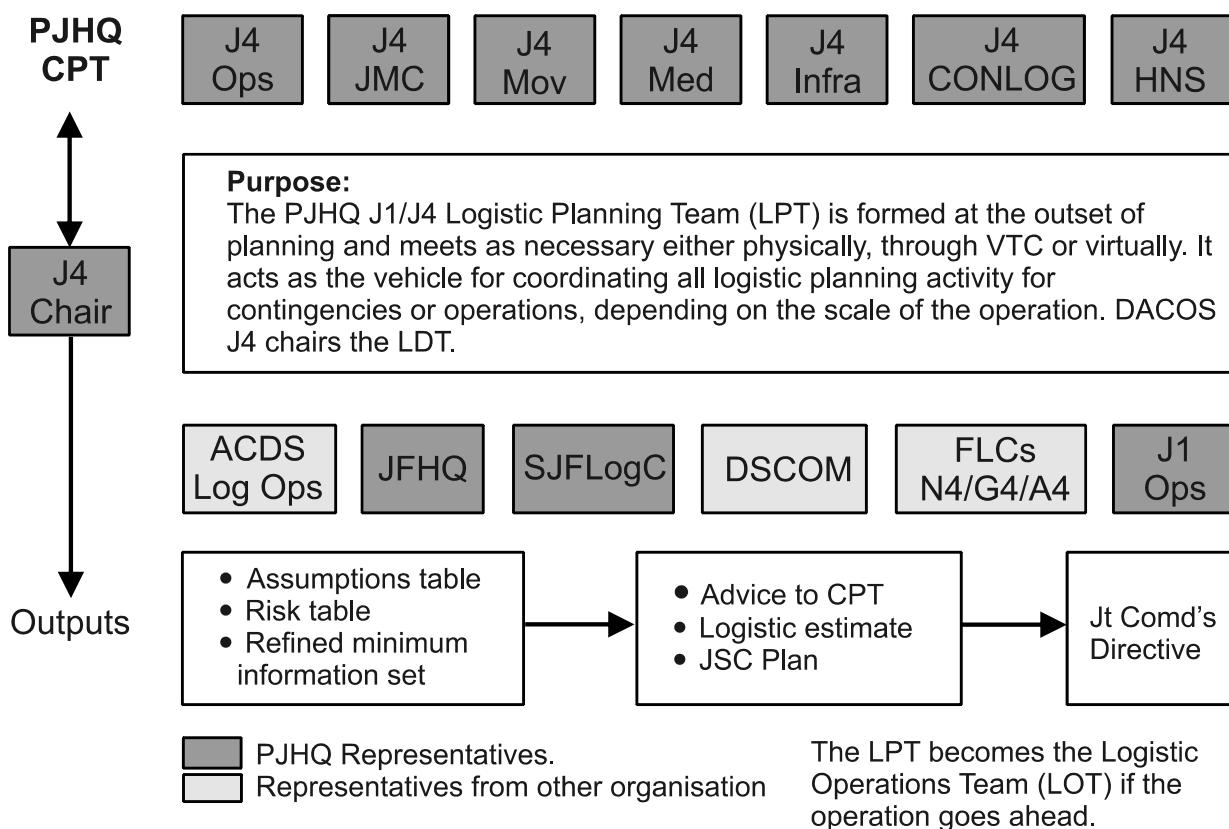


Figure 5.2 - Composition, Role and Outputs of the LPT

508. Logistic Estimate. The JSC forms the ‘spine’ of logistic support to operations and the development of an operation specific JSC Plan is the central pillar of the Logistic Estimate. It is covered in detail at Sections III and IV and Annex 5C. The Logistic Estimate also requires inputs from 4 other areas:

- a. **Medical.** J4 medical staff conduct their own estimate process based on likely medical support requirements, including vaccination requirements and anticipated casualty rates. This impacts on movement and transportation requirements and the deployment priorities for logistic Force Elements (FE).
- b. **Personnel.** J1 staff conduct an estimate process to consider a range of personnel issues including welfare packages, personnel support and administration. This has a particular impact on the role of a deployed JFLogC that undertakes a range of J1 activities.
- c. **Infrastructure.** J4 infrastructure staff conduct an estimate process to determine the availability and suitability of infrastructure in the Joint Operations Area (JOA) and the need to provide or build infrastructure for the deployed force. The output from this process can have a major effect on the Logistic Estimate with significant additional deployment requirements in terms of personnel and materiel.
- d. **Logistic Information Systems.** Log IS underpins the JSC; therefore, Log IS planning must be undertaken from the outset of the planning process. Log IS considerations are covered in Section V.

509. Logistic Input to the Joint Task Force Commander's Operational Estimate. The Operational logistic estimate is a development of that produced for the MSE and remains an iterative and consultative process that cannot be undertaken in isolation. The estimate and assessment of courses of action leads to the formulation of the logistic plan, which becomes part of the JTFC's Operational Directive and subsequently the JTFC's Campaign Plan.

510. Estimate at the Tactical Level. The Standing JFLogC (SJFLogC) will be engaged in the planning process from the outset. It is represented on the LPT and will therefore contribute to the Logistic Estimate conducted as part of the MSE process. It is likely to form the core of a deployed JFLogC who will conduct a tactical estimate, following a similar format to that used at the strategic and operational levels. This estimate will be informed by the environmental Components.

511. Defence Equipment and Support Input to the Planning Process. The diversity and complexity of DE&S necessitates a single point of planning coordination. DSCOM is responsible for pan-DE&S planning for operations and represents the DE&S throughout the operational planning process. DSCOM manages DE&S inputs to the planning process by establishing an Operational Planning Group (OPG), chaired by Director DSCOM and attended by representatives from all relevant areas of DE&S.

Directives

512. Chief of Defence Staff Directive. The CDS Directive will be based on the output of the MSE and will contain a Logistic Annex. This Annex will take information from the Logistic Estimate undertaken by the LPT. A generic Logistic Annex template is at Annex 5A.

513. Sustainability Statement. The CDS Directive contains a SUSTAT that is based on factors identified during the conduct of the Logistic Estimate. The SUSTAT confirms the overall logistic resources required and provides the authority for the release and commitment of finance and materiel. It articulates anticipated demand predicted by analysis undertaken as part of the Logistic Estimate process. Effective and accurate analysis during the initial estimate and planning stages will provide a more robust operational sustainability baseline. Each subordinate directive will also contain a SUSTAT, which is progressively more detailed to meet the specific requirements of each level of command. SUSTATs will normally be modified in the light of experience as the campaign progresses, and individual operations or phases within the campaign may require their own SUSTAT. A generic SUSTAT is at Annex 5B.

514. Governance. A Joint governance framework for logistics, including engineering and materiel supply activity for all environments, must be established to ensure the effectiveness and safety of support to operations. This governance framework will include; external quality audits, flying standards flight visits, reporting and investigation of accidents and incidents and the conduct of equipment handover procedures during Relief in Place and Formed Unit roulements. The framework must provide for effective governance of cross-boundary activity between units, where units from a different Service or nation share a common functional or geographic boundary. Best practice should be identified and authorised governance regimes should be adopted and combined wherever possible. Direction on governance requirements will be included in the relevant CDS Directive and subsequently amplified by PJHQ in terms of detailed C2 structures and processes. Governance requirements will be established in line with the following principles:

- a. The JTF HQ should contain a single focus for the governance of logistics. All Components and FE must report through this focal point to provide the JTFC with the assurance that a coherent safety approach is being followed in support of the operation.
- b. A single focal point should be established in-theatre to collate single-Service inspection reports but it will add little value unless it is manned with, or has access to, the correct technical experts to progress these reports. The PJHQ implementation plan must take into account the optimum combination of in-theatre expertise and reach-out or temporary deployment capabilities.

c. The extent to which governance authority is delegated forward will be articulated in the CDS Directive and PJHQ orders. However, in principle, local commanders should be given the maximum opportunity to support the operation and exercise appropriate risk management by being given the authority and responsibility for conducting an appropriate and efficient operation. When allocating responsibility, consideration must also be given to the ‘under command’ status of logistic systems, both resident and transiting, that are involved in-theatre.

SECTION III – LOGISTIC ESTIMATE AND JOINT SUPPLY CHAIN PLAN

- The Logistic Estimate enables coherent and coordinated planning activity to be driven from an early stage using well defined and endorsed common assumptions.
- The principal output of the Logistic Estimate is the development of an operation specific JSC Plan.

515. The complexity, and evolutionary nature, of the logistic planning process means that the JSC Plan must be kept under continuous review. It is, in effect, a living document that develops both iteratively, as higher level planning matures, and responsively, as assumptions and circumstances evolve or performance diverges from that which is required.

516. **Joint Logistic Estimate.** The Joint Logistic Estimate coordinates all logistic planning activity and develops an operation specific JSC. It enables:

- a. Coherent and coordinated planning activity to be driven from an early stage using well defined and endorsed common assumptions.
- b. Clearly defined roles and responsibilities for JSC planning, configuration and execution.
- c. Improved ability to identify risk within the chosen JSC configuration design through the use of Decision Support Tools (DSTs).
- d. Improved execution through closer integration at all levels of planning, including use of an information sharing capability, the JSC Estimate Team Site (JSCETS) and defined performance targets.

517. **Logistic Estimate Outputs.** The Logistic Estimate will influence, and be influenced by, the outputs from the medical, personnel, infrastructure and Log IS staff as described in paragraph 508. The output of the Logistic Estimate will be an operation specific JSC Plan and logistic freedoms and constraints that will be used to

inform subsequent operational and tactical level logistic estimate planning. The JSC Plan is issued by PJHQ to DE&S, FLCs and the JFLLogC together with any other organisations tasked with providing FE or capabilities to form the JSC. The JSC Plan will be included in the Coupling Bridge Directive and be a reference document to the JTFC's Campaign Plan.

518. Joint Supply Chain Plan. The operation specific JSC Plan should be underpinned by a set of supporting annexes including:

- a. **Minimum Information Set.** In order to carry out the quantitative analysis required for JSC planning, a Minimum Information Set (MIS) is required, at the earliest opportunity, prior to starting a Logistic Estimate. The MIS should be provided by the SPG, refined by the LPT, drawing on CDS Planning Guidance or based on MOD endorsed planning assumptions.
- b. **Synchronisation Matrix.** The Synchronisation Matrix is a detailed JSC timeline that shows critical milestones and dependencies.
- c. **Assumptions Table.** J3/J5 planners will not always be able or ready to provide detailed planning parameters. The LPT will produce an Assumptions Table in order to derive the plan. These assumptions need to be owned, documented and reviewed during each iteration of the plan. The use of a set of common assumptions by all JSC planners will ensure that all planning is coherent.
- d. **Risk Table.** The JSC must be established with the resilience to cope with operational uncertainty. Risks may be defined by the Jt Comd or identified during the JSC planning process. They must be owned with mitigating actions or contingency plans in place.
- e. **Capability Gaps.** Once the JSC configuration is designed, it will be assessed for capability gaps based on information contained in the Assumptions and Risk tables. These capability gaps should be expressed to the Jt Comd as a resource bill to meet the requirement in full, along with the gap in operational capability that would result from failing to mitigate the gap.

SECTION IV – CONDUCT OF THE LOGISTIC ESTIMATE

- The Logistic Estimate process should start in the early stages of operational planning.
- CJO as the operation's Supported Commander is tasked to produce an Operation specific JSC Plan.
- The Logistic Estimate is common in format, process and outputs to the Operational Estimate.

Roles and Responsibilities

519. **Chief of Joint Operations.** CJO as the operation's Supported Commander is authorised to produce an operation specific JSC Plan. CJO will ordinarily delegate to Assistant Chief of Staff (ACOS) J1/J4 the authority to establish a LPT as described in Section II. The LPT will conduct the Logistic Estimate process.

520. **Assistant Chief of Defence Staff (Logistic Operations).** ACDS (Log Ops) is responsible for:

- a. Communicating to the SPG, the risks in not providing the MIS to the LPT in the required timeframe.
- b. Informing CJO of the logistic aspects of the CDS Directive. This should explicitly direct CJO, as Supported Commander, to produce an operation specific JSC Plan.
- c. Management of logistic assumptions during the planning process and providing strategic input into the Logistic Estimate.

Logistic Estimate

521. The Logistic Estimate is shown in detail at Figure 5.3⁹ and described in detail in Annex 5C. Although the Estimate follows a sequential process, the changing nature of the planning environment makes it naturally iterative. The process should enable the Jt Comd to understand the requirement, identify the art of the possible, select the optimal Course of Action (CoA) and translate it into a robust plan.

⁹ The Logistic Estimate uses a similar process to the operational estimate described in JWP 5-00 ‘Joint Operations Planning’ but there are significant differences.

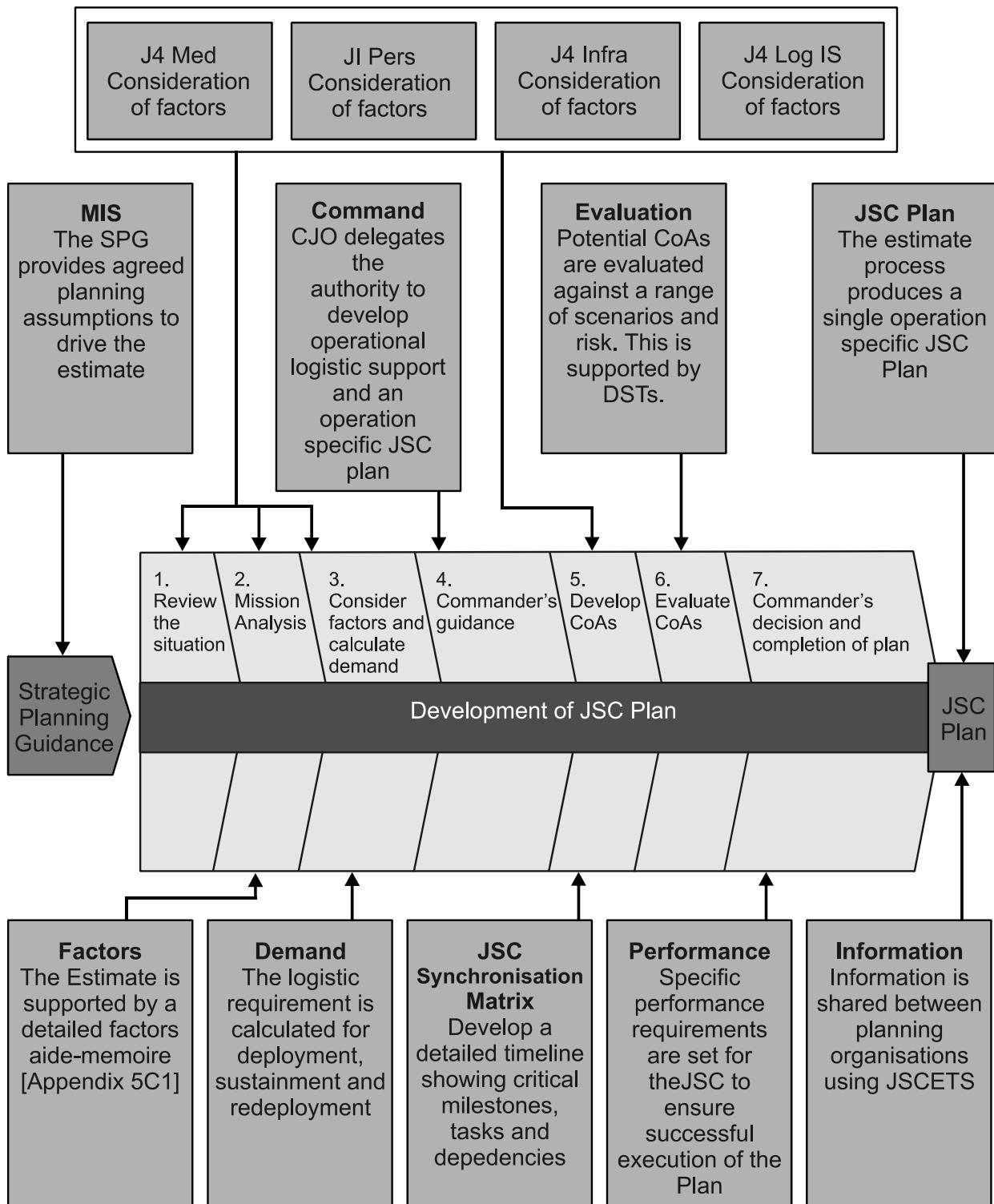


Figure 5.3 - The Logistic Estimate

522. **Scheduling the Logistic Estimate.** The Estimate process should start as early as possible. However, in the early stages of operational planning, key political decisions may not have been made, thereby complicating the creation of the MIS necessary to commence the Estimate. Inputs to the Estimate that are required in order to determine the optimum JSC such as the Joint Force Element Table (JFET), the Joint

Desired Order of Arrival (JDOA) and the J3 Operational Plan may not have been agreed.

523. Minimum Information Set. The MIS consists of 4 key elements. Destination, Intensity, Scale and Timing, the fidelity of which will improve over time. These elements are used to address the key questions that require answering during the early stages of the planning process. Table 5.4 provides an illustrative example of how the MIS is used.

	Information Required	Information Needed to:
Destination	<ul style="list-style-type: none"> • What are the likely locations of 3rd, 2nd and 1st lines? • What restrictions are there on Strategic LOC, APODs and SPODs? 	<ul style="list-style-type: none"> • Assess what LOC and transport will be required • Anticipate the level of in-theatre resource availability • Identify the best options for Strategic LOC, APODs and SPODs • Assess the requirement on in-theatre LOC and nodes
Intensity	<ul style="list-style-type: none"> • What is the combat activity profile? 	<ul style="list-style-type: none"> • Identify the rate at which the force will consume
Scale	<ul style="list-style-type: none"> • What Force Elements will be deployed? • What is the force laydown (numbers at 3rd, 2nd and 1st lines)? 	<ul style="list-style-type: none"> • Identify the number of consuming elements required to be sustained • Calculate the lift capacity required to transport the force to the destinations • Identify how many elements will consume at active combat rate
Timing	<ul style="list-style-type: none"> • What is the deployment timescale? • In what priority do personnel, force elements and equipment need to arrive in theatre? • What is the duration of the operation? 	<ul style="list-style-type: none"> • Assessed the required capacity and type of deployment transportation • Identify when deployment should begin • Assess the required sustainability of the JSC • Anticipate recovery requirements

Table 5.4 - Illustrative Minimum Information Set

524. Applying the Estimate Process. In common with other forms of Estimate, the focus of the Logistic Estimate is on outputs not process. The best approach to identifying the required outputs is to follow the generic estimate process set out at Annex 5C. However, this should not preclude varying the process to suit the situation and Small Scale operations, in particular may not require a full estimate to be conducted. Nevertheless, whatever the scale of the operation, there remains a basic requirement to produce a JSC Plan.

525. Supporting the Estimate Process. JSC DSTs allow planners to model both the forward and reverse JSC. The tools model the flow of materiel, personnel and equipment across all nodes of the JSC from deployment to redeployment. They predict overall JSC performance providing support to JSC planners for the identification of risks and constraints, and in making informed resource decisions.

Decision Support Tools

526. There are 2 logistic planning DSTs:

- a. The Coupling Bridge Analysis Tool allows users to map available resources against supply, movement and handling requirements for a JFET.
- b. The Demand Forecasting Tool will allow users to identify the demand volumetrics for each class of supply for a given JFET.¹⁰

527. The use of DSTs:

- a. Facilitate the rapid generation, population and configuration of the JFET and JDOA.
- b. Allow logistic CoAs to be modelled, identify the levels of support that can be provided and give an understanding of associated risks.
- c. Provide support to JSC training, both individual and collective, ensuring that the role of the JSC on operations is fully understood.

528. **Joint Supply Chain Estimate Team Site.** The JSCTS is an information sharing facility that is accessible to JSC planners across Defence, and is fundamental to developing a coherent operational level JSC plan. Although the long-term aspiration is for this capability to form part of the Joint Logistic Picture (JLP), in the interim JSCTS has been developed by PJHQ to facilitate Situational Awareness (SA) across the JSC. JSCTS provides access to:

¹⁰ The Demand Forecasting Tool is currently under development.

- a. Key information including Team Site Standard Operating Procedures (SOPs), file plans, directives, templates for the estimate process, DSTs, estimate outputs and performance management.
- b. Joint, single-component and NATO logistic doctrine publications.
- c. World briefing maps, the Defence Intelligence Service web and the CUBE.¹¹
- d. The JSCETS is accessed via the PJHQ home page on DII(C) Secret.

SECTION V – LOGISTIC INFORMATION SYSTEMS PLANNING

- Log IS planning is an important element of the logistic planning process because appropriate and effective Log IS is required across the entirety of the JSC.
- Log IS is a significant factor when conducting the Logistic Estimate.

529. The importance of Log IS in the conduct of the Logistic Estimate and the development of a JSC Plan was introduced in Section II. Log IS planning inputs into the Logistic Estimate and JSC planning are important as appropriate and effective Log IS will be required across the entirety of the JSC. Moreover, the Log IS planning process also addresses the supporting infrastructure, Information Exchange Requirements (IER) and communications requirements; it therefore supports the wider J6 planning process. The process is shown at Figure 5.5.

¹¹ An MOD information tool that contains detailed information on a range of countries.

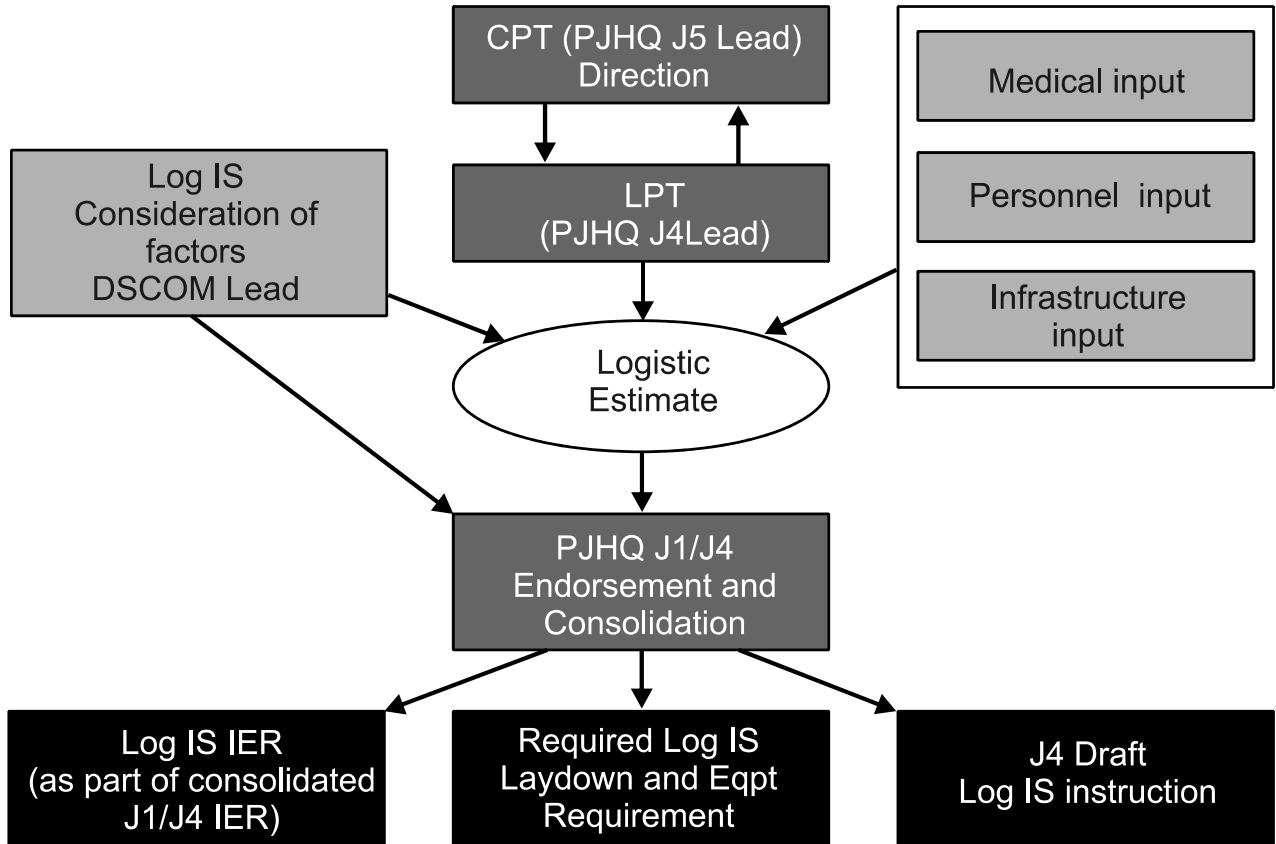


Figure 5.5 - Log IS Planning Process

530. Logistic Information Systems Factors. The consideration of Log IS factors is led by DSCOM supported by all HQs and organisations involved in the JSC process so that the totality of the Log IS requirement in the Strategic Base, across the Coupling Bridge (CB) and in the JOA is addressed. The adoption of a Log IS Estimate process underpins the Joint Logistic Estimate and delivers significant benefits to logistic planners, the development of the JSC plan and to the wider logistic community.

ANNEX 5A – LOGISTIC ANNEX TO CDS DIRECTIVE**ANNEX F TO CDS DIR **/** TO JT COMD OP ********DATED ** *** ******OP **** - LOGISTICS DIRECTIVE****5A1. LOGISTIC CONCEPT:**

- a. Context of operation – multinational etc? Logistic implications of climate, terrain, culture.
- b. How mounted and sustained?
- c. How long; operation and redeployment. Specific/unusual requirements for deployment.

5A2. TASKS:**a. CJO:****(1) Multinational:**

- (a) Logistic Lead Nation.
- (b) MJLC.
- (c) MOUs/Technical Arrangements.
- (d) Explore potential for efficiencies through MN/other activities.
- (e) Guidance on MN SUSTAT (if required).

(2) National:

- (a) Coordination requirements for national plan (Joint arrangements).
- (b) Identify and coordinate movement co-ordination arrangements.
- (c) Identify JSC.
- (d) Infrastructure plan.

b. FLCs:

- (1) Provision of logistic support including procedures.
- (2) Staff tables and organisation to POE.
- (3) Requests for operational stocks.

(4) Notify PJHQ and DE&S, through DSCOM, of any logistic constraints as they arise.

(5) Identify recuperation opportunities.

c. DE&S:

(1) Specific support activities necessary, based on situational factors.

(2) Movements support.

5A3. SUSTAINABILITY.

a. How long to plan for, in what conditions.

b. With what key sustainability constraints or provisos.

c. With what priorities.

5A4. ACCOUNTING.

a. With what accounting arrangements.

b. Using what UIN or Special Operations Code (SOC).

5A5. MEDICAL.

a. Reference to medical direction (elsewhere).

ANNEX 5B – GENERIC SUSTAINABILITY STATEMENT

General

5B1. Introduction. State here the purpose of the Sustainability Statement (SUSTAT) and the operation for which it is written. Reference the key planning documents in order to provide a baseline for the document. These references should include:

- a. Chief of Defence Staff (CDS) Planning Directive.
- b. CDS Operational Directive.
- c. Theatre Reconnaissance Reports.
- d. Preliminary Operations Reconnaissance Reports and/or ASSESSREPS.
- e. Joint Logistic Sustainability Planning Assumptions (JLSPAs).
- f. Component Logistic Sustainability Planning Assumptions.
- g. Service-specific Planning Directives (if appropriate).
- h. Coupling Bridge (CB) Directive.

5B2. Background and Governance. The SUSTAT is developed by the Permanent Joint Headquarters (PJHQ), who remain the ultimate authority for any amendments and revisions, although these can and should be proposed by Front Line Commands (FLCs) through PJHQ J4. [Contact details for the responsible desk in PJHQ should be inserted here.]

Situation

5B3. Key Assumptions. Key Assumptions should be derived from the key planning documents or have provenance as factors from initial estimates. They set the criteria against which the rest of the SUSTAT is developed. As the SUSTAT develops through its iterations, any further planning assumptions from Director of Joint Commitments (DJC) should be incorporated and shown in **bold** to highlight the change. Examples of further planning assumptions are:

- a. Size of the Area of Operations (AO).
- b. Size of the deployment (for example, medium scale).
- c. Assumptions on multinational support and interoperability and any support to Other Government Departments (OGDs).

- d. Assumptions on Host-nation Support (HNS).
- e. Level of Component Command.

5B4. Force Composition:

- a. **Units.** Unit information should be shown pictorially as an ORBAT at Annex 5A to the SUSTAT and tabulated below to develop additional detail. Locations refer to in-theatre locations, not the Strategic Base.

Ser	Location	Maritime	Land	Air	Other
(a)	(b)	(c)	(d)	(e)	(f)
1	Location 1	Insert Force Elements (FE), starting with HQ Groups	Insert FE, starting with HQ Groups	Insert FE, starting with HQ Groups	Ports of Disembarkation (PODs)
2	Location 2	As above	As above	As above	Forward Mounting Base (FMB)
3	Location 3	As above	As above	As above	OGD
4	Location 4	As above	As above	As above	Contractor Support to Operations (CSO)

- b. **Key Equipments.** Key equipment information quantifies the percentage availability of key equipments to be achieved at Full Operating Capability (FOC) and then sustained. It should be tabulated in accordance with the format and footnotes below. The figures must be compiled in consultation with the FLCs, who will consult Subject Matter Experts (SMEs) and advise on feasibility in light of platform numbers:

Ser	Equipment	Availability¹	Steady State (SS) Activity²	Other Combat (OC) Activity	High Intensity Combat (HIC) Activity
(a)	(b)	(c)	(d)	(e)	(f)

¹ Shown as a % figure except for helicopters which are shown as Task Lines from total aircraft fleet.

² To be in km/day for land assets, nm/day for maritime assets and sorties for air assets. All helicopters, irrespective of Service are shown as hours per Task Line or hours per aircraft depending on sustainability implications.

c. **Personnel Totals.**

Ser	Location	Maritime	Land	Air	OGD	CSO	Force Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Location 1	Insert No	Insert No	Insert No	Insert No	Insert No	
2	Location 2	Insert No	Insert No	Insert No	Insert No	Insert No	

5B5. Supported Component. The Supported Component for the operation should be formally stated in bold here, for example, **MARITIME**. The Supported Component may be different for different phases of the operation.

5B6. Campaign Chronology:

- a. **Deployment Period.** Components will deploy in order to meet the following timelines:

Ser	Capability	Maritime	Land	Air	OGD	CSO
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Preliminary Operations	--/---	--/---	--/---	--/---	--/---
2	Initial Operating Capability (IOC)	--/---	--/---	--/---	--/---	--/---
3	FOC	--/---	--/---	--/---	--/---	--/---

- b. **Deliberate Operations.** Must include the following information:

(1) **Operational Profile.** This must state whether Peace Enforcement (PE)/Peacekeeping (PK)/Deliberate Intervention (DI) etc. and then quantify the surge sustainment capability required; for example, ‘the operational profile is for PE Ops requiring SS sustainment, but retaining the capability in theatre to surge to HIC’.

(2) **Provisional Activity Rates.** These should be tabulated below:

Component	Activity in Days	In Theatre Training (ITT)³	SS	OC	HIC	Total Days
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Maritime						
Land						
Air						

³ This figure must factor in environmental training.

(3) **Concept of Operations.** An outline of the provisional Concept of Operations (CONOPS) must be stated in terms of: the support required, to what level of deployed force, over what in-theatre Lines of Communication (LOC) and over what duration. Although this does not preclude the delivery of support outside these parameters, it provides a useful baseline for operational and tactical planning. It should be tabulated using the fields below:

Activity	Activity in Days	OC	HIC	Total	Remarks
(a)	(b)	(c)	(d)	(e)	(f)

c. Other Operations.

5B7. **Logistic Laydown.** The Logistic Laydown should be shown as either a table or preferably a schematic at Annex 5B to the SUSTAT. It must be coherent with the information on Force Composition at Paragraph 5B4.

a. **Theatre Stockholding Policy.** This must reflect the metrics relevant to each Component, for example, Days of Supply (DOS) for Maritime and Air, Daily Consumption Rate (DCR) for Land. It must include the Supply Chain Processing Time (SCPT) and state whether or not the UK is complying with a NATO stockholding policy. It should be coherent with the policy on Priming Equipment Packs (PEPS) and with the Logistic Laydown at Annex 5B to the SUSTAT. It should stipulate, by level, what will be held where and tabulated as shown below:

	DOS/DCR Holding					
Level		ITT	SS	OC	HIC	Remarks
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Force						
Formation						
Unit						

b. **Supply Chain Processing Time.** In calculating theatre holdings, the formula $h = x + y$ should be used where: h is the Theatre holding to be achieved, expressed in Days of Supply (DOS), x is the SUSTAT-mandated holding and y is the SCPT for shipping a Standard Priority Code (SPC) 03 demand. If required, the strategic airbridge must be used to mitigate sustainment risk. The minimum total time for planning

purposes from placement to satisfaction of demands should be tabulated as shown below:

Ser	Stage in Process	SPC 01	SPC 02	SPC 03	SPC 04
(a)	(b)	(c)	(d)	(e)	(f)
1	Unit Demand on In-Theatre Secondary Depot	Must be stated in days			
2	Theatre Demand Processing Time	1hr = 0.042 days			
3	UK Demand Processing Time				
4	UK Materiel Handling Time				
5	Time to Coupling Bridge				
6	Max interval between sustainment transport				
7	Add weekend days for serials 3-6				
8	Coupling Bridge Transit Time				
9	Theatre Distribution Time				
10	SCPT	Column total	Column total	Column total	Column total

Deploy/Sustain/Recover

5B8. Frequency of Re-Supply. The frequency of re-supply will affect the sustainability of all Components; therefore, the ‘pull’ of items and personnel into the JOA must be prioritised. Improved availability of re-supply options, by air or surface, will reduce the need for prioritisation. Limitations on re-supply will generate a greater requirement for prioritisation and a requirement for increased Component/JFLogC interaction to meet the JTFC’s operational plan.

5B9. Supply Chain Processing Time. An understanding of SCPT is essential to allow the correct priority to be given for any item moving through the JSC. Failure to correctly apply SCPT may cause items to be over prioritised and reduce the efficiency of the JSC with unnecessary movements.

5B10. Operational Mounting Process. The Operational Mounting Process (OMP) and accurate details of the CB are essential for effective movement from the Strategic Base to the JOA. The diverse requirements of Components must be reflected together with clear parameters for the allocation of movement priorities.

Destination

5B11. This paragraph should cover the characteristics of the operational theatre. It should also cover any intra-theatre or intra-Joint Operations Area (JOA) LOC but not the strategic LOC. It must describe: the environment, the threat, POD characteristics and transport Infrastructure and deliver an assessment of HNS capability. This should be tabulated as shown below or articulated under separate sub-headings.

Ser	Factor	Characteristics	Remarks
(a)	(b)	(c)	(d)
1	Environment		
2	Threat		
3	Transport Infrastructure		
4	HNS		
5	APOD/SPOD		

Distance

5B12. Distance should be stipulated using *nm*, *hrs* and *days* as the metric for Maritime and Air and *km*, *hrs* and *days* for Land. Where known, details on the ‘going’ for Land (metal, paved or unpaved road) should be included.

Ser	LOC	Geographical Boundaries	Characteristics
(a)	(b)	(c)	(d)
1	Strategic Sea		
2	Strategic Air		
3	Operational Sea		
4	Operational Land		
5	Operational Air		
6	Tactical Sea		
7	Tactical Land		
8	Tactical Air		

Duration

5B13. This must be coherent with the Campaign Chronology articulated at paragraph 5B6. Additional information should focus on any phasing that requires the use of staged or temporary locations and/or capabilities. Examples might include the deployment of an air or aviation force into the JOA or the utilisation of a FMB for deployment and recovery. The use of key equipments could also be phased with more assets required for deployment and recovery than for sustainment.

Demand

5B14. Class 1:

- a. **Water.** The figures for this commodity are contained in Planning Assumptions, which should be used in conjunction with military judgement.

Ser	Purpose	Volume SS Activity	Volume OC Activity	Volume HIC Activity	Remarks
(a)	(b)	(c)	(d)	(e)	(f)
1	Field Consumption				
2	In Camp Steady State				
3	Medical				
4	Bottled Water Reserve				
5	Vehicle Maintenance				
6	Aircraft Maintenance ⁴				
7	NBC Decontamination				
8	In-Theatre Washdown				

- b. **Rations.**

Ser	Type	Requirement
(a)	(b)	(c)
1	Fresh	
2	Operational Ration Packs (ORP)	

5B15. Class 2 Materiel - Scaled. FLCs in conjunction with IPTs are to direct unit holdings of scaled materiel and consumables consistent with the campaign chronology at paragraph 5B6 and based on:

- a. Historical and predictive equipment failure data.
- b. SCPT guidance in the SUSTAT.

⁴ Should include any requirement for ionised water.

- c. The requirement to support Urgent Operational Requirement (UOR) equipment.
- d. Environment-specific personal equipment issues.
- e. Environment-specific equipment packs.

5B16. Class 2 Materiel - General. This should stipulate the in-theatre stockholdings for all Class 2 Materiel.

5B17. Class 3 Fuel and Lubricants. This paragraph should direct the Defence Fuels Group (DFG) to hold a shelf stock, where possible, of the required items from the FLC Fuel and Lubricants (F&L) spreadsheets to minimise the risk of nil stock and delay to the SCPT. Increasing use of CLS by some IPTs means that some F&Ls are provided by a contractor rather than the DFG. In addition it should:

- a. Stipulate the in-theatre stock holding for general and specialist commodities.
- b. Tabulate the bulk fuel types by quantity and location that are to be held as sustainment stock in-theatre.

5B18. Class 4 Engineer and General Defence Stores. This paragraph should mirror the format above and as a minimum should include:

Ser	Type	Requirement
(a)	(b)	(c)
1	Expeditionary Camp Infrastructure (ECI)	
2	Defence Stores	
3	Engineer Resources	

5B19. Class 5 Ammunition. The likelihood of variations to the SCPT due to specialist natures, additional release authority, requirement for Controlled Humidity Environment (CHE) storage or customs and specialist transport requirements should be assessed. In addition:

- a. Theatre stockholdings should be articulated using specific FLC nomenclature (for example, Standard Weapon Loads), geographical location and planned intensity of operation:

Ser	Type	Location	Requirement
(a)	(b)	(c)	(d)
	Maritime Component	1	
		2	
	Land Component	1	
		2	
	Air Component	1	
		2	

b. Any stock held by Defence Equipment and Support (DE&S) to reduce the deployed footprint, and mitigate the cost of CHE storage in-theatre, should be held at stipulated readiness to move which must be articulated here.

5B20. Medical. The medical laydown must be in accordance with the Force Composition table at paragraph 5B4. J1 staff may draw upon Operational Analysis to estimate potential fatalities for repatriation planning. The planned laydown of Role 1/2/3 in theatre must be specified. A casualty estimate should be tabulated as shown below:

Ser	Type	Requirement
(a)	(b)	(c)
1	Wounded in Action (WIA) Peak	% range, of which ?% will require admission
2	Disease and Non-Battle Injuries (DNBI) Daily	% of which ?% will require admission
3	Medical Evacuation (MEDEVAC)	As required
4	Strategic Air Evacuation (STRAT AE)	% per month

5B21. Chemical, Biological, Radiological and Nuclear. Any detailed Chemical, Biological, Radiological and Nuclear (CBRN) scalings should be relegated to an Annex. Given the cost and limited life of CBRN-specific antibiotics, these CBRN stocks should only be deployed where the J2 assessment supports the decision.

5B22. Mission Essential Equipment. Details of any Mission Essential Equipment (MEE), which is required for the operation should be provided along with the priorities that must be applied to ensure its availability. This will inform the relative priorities for the movement, maintenance, repair and fitting of MEE.

5B23. Servicing and Repair Policy. Effective servicing and repair is essential for maintaining the availability of equipment and FE. This support may be provided by

individual Components, HNS or contractors and clear policy guidance must be given to ensure awareness of the available solutions for dealing with unserviceable equipment at theatre level.

Distribution:

CinC FLEET
CinC LAND COMMAND
CinC AIR
DSCOM
Maritime CC
Land CC
Air CC
JFLogCC
Commander British Forces
Commander Preliminary Operations (if nominated)

ACDS (Log Ops)
MOD D Def Log Ops
FLC Log Branches
MN LO (if appropriate)
HQ DSF

ANNEX 5C – THE LOGISTIC ESTIMATE PROCESS

PRELIMINARIES AND PREPARATION

5C1. Form a Logistic Planning Team to conduct a Logistic Estimate and develop a Joint Supply Chain Plan. The Logistic Planning Team (LPT) will form under the direction of Chief of Joint Operations (CJO), who will delegate leadership of the LPT to either Assistant Chief of Staff (ACOS) J1/J4 or Deputy Assistant Chief of Staff (DACOS) J4. ACOS J1/J4 will advise on the requirement to form an LPT in conjunction with Assistant Chief of Defence Staff (Logistic Operations) (ACDS (Log Ops)), the Defence Supply Chain Operations and Movements (DSCOM) and the Front Line Commands (FLCs). The requirement will be based on strategic direction and an assessment against the available Minimum Information Set (MIS). The LPT Leader will task ACDS (Log Ops), DSCOM and FLCs to provide logistic planners to form the LPT. The LPT Chief of Staff (COS) will normally be SO1 J4 Plans, who will determine the LPT battle rhythm and identify the requirement for LPT members to meet together and to share information on the Joint Supply Chain Estimate Team Site (JSCETS). A supporting Estimate staff, comprising an SO1/SO2 from DSCOM and an SO2 from J4 Operations Support (Ops Sp) will provide Information Management (IM), meeting space and other support functions as required. Specifically J4 Ops Sp will manage the JSCETS ensuring that the site is available at all times and the correct user permissions are set.

5C2. Decide on number of meetings, schedule which Estimate steps are to be conducted at which meetings and develop timelines and agendas. The number of meetings is dependent on the scale and complexity of the operation and the length of time available for planning.

5C3. Consolidate and prepare a summary of existing planning materials for Estimate meeting 1. The emphasis of this summary should be on the core logistic drivers, especially demand volumetrics.

5C4. Verify that the MIS has been provided in order to initiate the Estimate process and where necessary gain endorsement of outstanding assumptions. Where gaps exist in what is known, assumptions should be made and owned. The Strategic Planning Group (SPG) owns the assumptions in the MIS.

STEP 1 – REVIEW THE SITUATION

5C5. Key Questions. The key questions answered by Step 1 are:

- a. What is the situation: the Destination, Intensity, Scale and Timing of the operation?

- b. What are the current plans and concurrent operations?

5C6. Process. Step 1 establishes the operational context within which logistic support to the operation needs to be configured. Any plans produced by other staff branches, specifically medical, personnel, infrastructure and Logistic Information Systems (Log IS), should be briefed to the LPT. Additionally, any higher level external constraints including the effect of concurrent operations should be briefed. Step 1 should be J2 led with information drawn from various sources. The objective is to ensure that the LPT is fully briefed with the focus on those areas that have a significant impact on logistic support. If more material needs to be covered, it should be provided to the LPT as pre-reading.

5C7. Output. The output of Step 1 is a shared awareness of:

- a. The situation.
- b. Current plans.
- c. Concurrent operations.

STEP 2 – MISSION ANALYSIS

5C8. Mission Analysis. Mission analysis is led by the appointed logistic Commander, who will consider what is required and why. What is required relates to the mission and the why relates to the operational context. Four mission analysis questions must be addressed:

- a. **What is the logistic intent and what effects must logistic support deliver?** CJO is the Operational Commander and the Supported Commander for the delivery of personnel and materiel to the Coupling Bridge (CB). The identification of Supporting Commanders, and understanding their roles, is relatively straightforward, but the likely lack of a clearly defined mission may introduce difficulties. A clear mission is often delivered late in the planning cycle, but a preliminary logistic plan can usually be developed and then gradually refined as the mission becomes clearer.
- b. **What are the specified and implied tasks for each organisation delivering logistic support?** Many of the specified and implied tasks will be standard for any operation. The LPT should review this list and add additional tasks using the Tasks Matrix at Figure 5C.1. The LPT should review this extended list for inconsistencies, major gaps and significant risks, constraints, assumptions or information requirements. Where possible, tasks should be transferred to the logistic Synchronisation Matrix timeline, described further in Step 4. At this stage, the task list should seek to be comprehensive to prevent

organisations expecting others to carry out implied tasks of which they are not aware.

	Within Base Area	Port of Embarkation (POE)	CB	Joint Operations Area (JOA) Port of Disembarkation (POD)	First Line Support
Force Generation					
Deployment					
Reception, Staging and Onward Movement (RSOM)					
Sustainment					
Command and Control (C2)					
Infrastructure					
External Support					
Support for Operations					
Redeployment					

Figure 5C.1 - Tasks Matrix

- c. **What are the constraints and freedoms on the configuration and operation of logistic support and the Joint Supply Chain?** The LPT should then focus on identifying constraints and freedoms in configuring logistic support and the JSC. This process is assisted by referring to the constraints aide-memoire at Figure 5C.2.

Freedom/Constraint Categories		Time	Resources
What are the JSC plan areas affected		Time	Resources
		Deductions	Deductions
Logistic Activity	Inventory	<p>Base</p> <p>IPT procurement timelines for critical services and materiel</p> <ul style="list-style-type: none"> • timeline for UORs • PEP building timelines to meet unit outload 	<ul style="list-style-type: none"> • Budget for UORs • prioritisation of scarce critical equipment • availability of specialist containers
		<p>JOA</p> <ul style="list-style-type: none"> • notification timelines for enabling in-theatre contracts 	<ul style="list-style-type: none"> • effect of multinational purchasing on local market
	Transport	<p>Base</p> <ul style="list-style-type: none"> • leadtimes for enabling base transport contracts • unit vehicles non-deploying enables 	<ul style="list-style-type: none"> • transport for specialities • base transport requirements by class of supply and pax
		<p>Coupling Bridge</p> <ul style="list-style-type: none"> • Shipping market leadtimes • commercial air transport market conditions and leadtimes • impact on ability to supply by surface route 	<ul style="list-style-type: none"> • prioritisation of strategic AT assets • prioritisation of strategic maritime transport assets • budget for commercial AT • budget for surface transport • effect of multinational demand on commercial transport markets
	JOA	<ul style="list-style-type: none"> • leadtimes for enabling in-theatre transport • unit vehicle equipment tables 	<ul style="list-style-type: none"> • effect of multinational hiring of local transport assets • prioritisation of speciality/scarce transport assets • limitations on the military logistic burden • transport requirements by class of supply and pax
		<p>Base</p> <ul style="list-style-type: none"> • leadtimes for DSDA to surge labour • licensed jetty available for specialist loading • unit MH non-deploying assetsbase transport contracts • unit vehicles non-deploying enablers 	<ul style="list-style-type: none"> • unit resources to get R0 and inload PEP • ability for DSDA to surge
	MH&I	<p>Coupling Bridge</p> <ul style="list-style-type: none"> • leadtime in deploying critical MHE • leadtime in acquiring/building in-theatre facilities • leadtimes in MH&I UORs • C vehicle PFI contract notification 	<ul style="list-style-type: none"> • prioritisation of critical MHE • budget for acquisition & construction of in-theatre facilities • limitations on the military logistic burden • RSOI requirements for enablers
		<p>JOA</p> <ul style="list-style-type: none"> • leadtime in getting FMB to FOC • leadtimes in enabling SPOD handling contracts • leadtime in deploying critical MHE • leadtimes in MH&I UORs 	<ul style="list-style-type: none"> • surge requirements for SPOE and APOE • prioritisation of critical APOD/SPOD MHE
	IS	<ul style="list-style-type: none"> • leadtimes for IS hardware and comms UORs • leadtimes on contracted IS • J6 planning and execution timelines 	<ul style="list-style-type: none"> • prioritisation of IS bandwidth • prioritisation of critical IS hardware and comms equipment

Figure 5C.2 - Constraints Aide Memoire

d. **Has the situation changed? Against what risks must logistic support and the Joint Supply Chain be resilient? What assumptions are we making?** This question is used to identify the risks to logistic support and the

JSC Plan. Once risks have been identified each risk goes through the risk evaluation process shown at Figure 5C.3, which identifies the impact and likelihood for each risk and agrees a risk management strategy, including contingency plans. Each risk is assigned an owner, who is responsible for executing the risk management strategy and is recorded on the Risk Table.

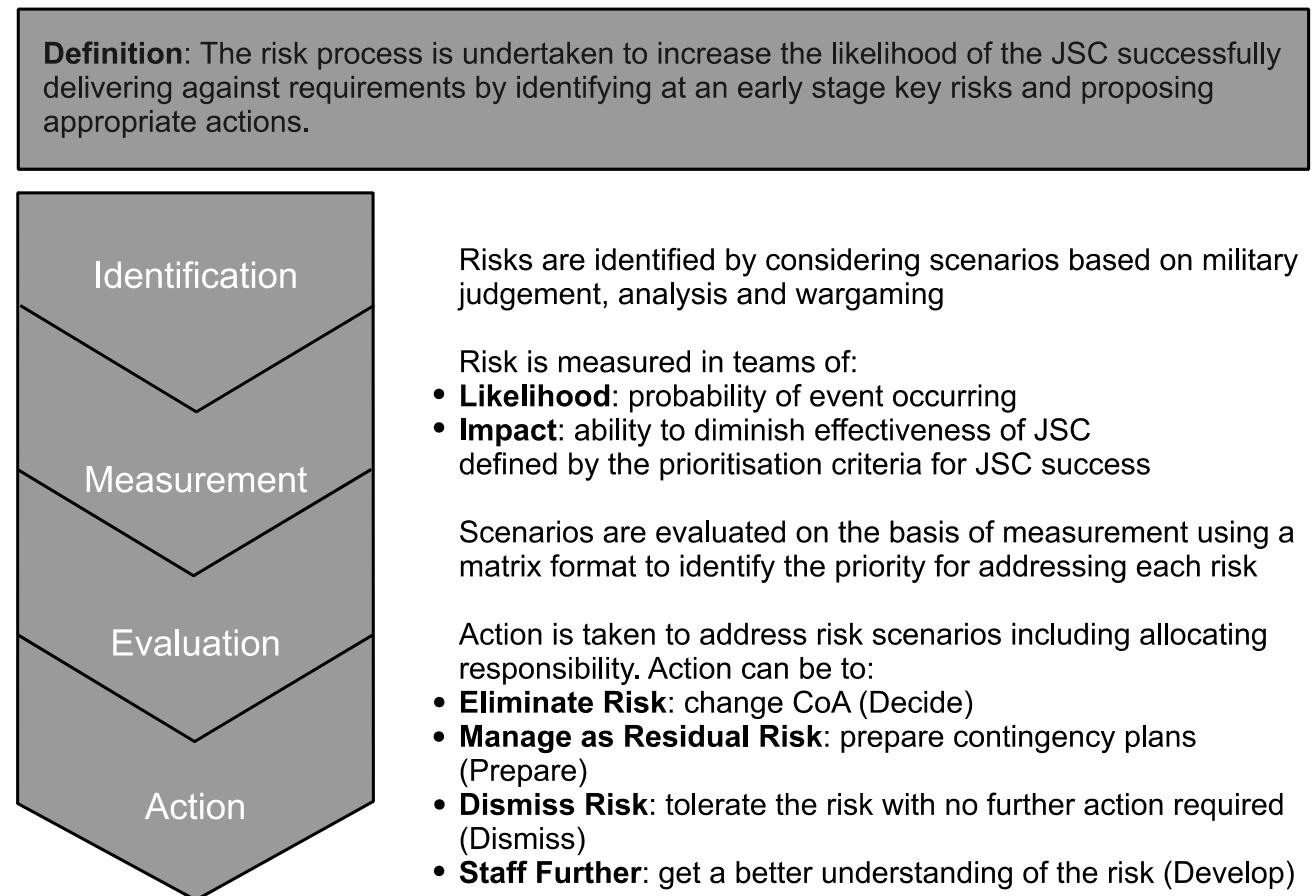


Figure 5C.3 - Risk Evaluation Process

e. **Assumptions.** Question 4 must also be used to look at the assumptions that are being made or need to be made in order to provide the necessary logistic support and develop the JSC plan. Each assumption should be assigned an owner, recorded in the Assumptions Table, rated according to likelihood of the assumption proving incorrect and the impact of that assumption being broken. Where possible, a parallel Request for Information (RFI) should be triggered to turn each assumption into a fact.

f. **Change in Situation.** At each subsequent review of the Logistic Estimate the question ‘Has the situation changed?’ needs to be asked and the Tables of Risks and Assumptions should be reviewed to identify any changes. If there are changes some logistic support activities and/or elements of the JSC Plan may need to be revised and parts of the Estimate process repeated.

g. **Requests for Information.** As the process of analysing the mission is conducted the Commander's Critical Information Requirements (CCIRs) and various other information requirements will be identified. Each of these requirements should be captured together with an owner, who is accountable for finding out the answer and the date by which the information is required. The complete list of RFIs and their owners, shown at Figure 5C.4, should be circulated to the LPT at the end of each meeting.

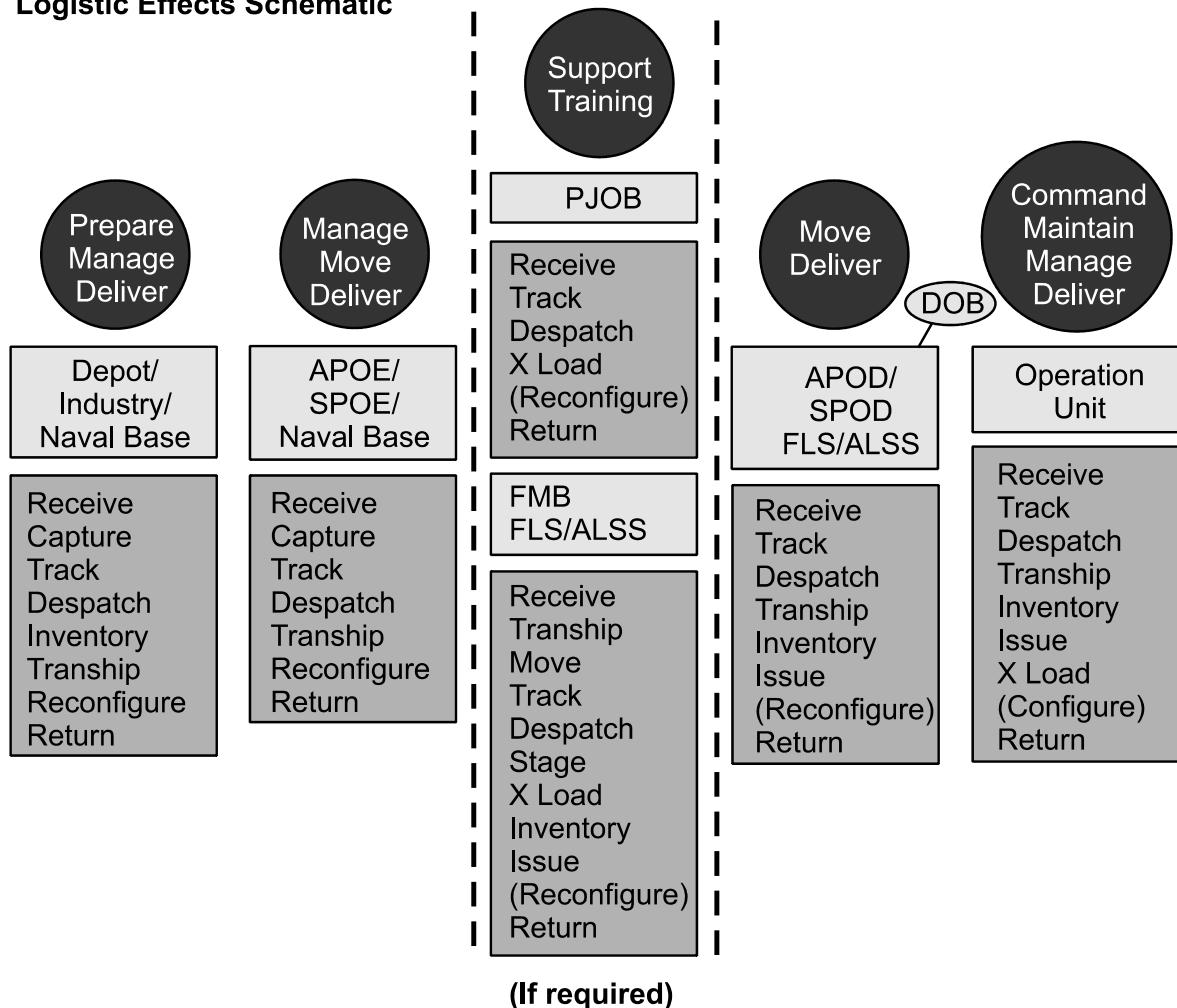
Mission

No	Question		Deduction	Task								
	Checklist	Comment		Type	Status	Notes	Owner/ Authority	DTG Response Due	DTG Initiated	DTG Response Received	Response	Remarks
Mission Analysis												
1.	a. Intention Of Superior Comds (1) Two Levels up			CCIR	Urgent							
				RFI	Open							

Figure 5C.4 - RFI Management Table

5C9. **Back Brief to the Commander.** After the 4 questions have been answered the COS should back-brief the Commander on the key findings. The LPT will then receive the Commander's initial direction. At this stage, the Commander may decide to develop a logistic Effects Schematic showing what effects logistic support should achieve. This schematic shows, against a map, or simplified representation of the geographical logistic laydown, the specific effects to be achieved in different locations. An example of a Logistic Effects Schematic is shown at Figure 5C.5.

Logistic Effects Schematic



Effect	Definition
Receive	Receive consignment
Capture	Capture and track consignment on Log IS system
Reconfigure	Reconfigure or breakdown consignments
Tranship	Transfer from one form of transport to another
X Load	Move consignment from one transport asset to another of the same mode
Inventory	Planned inventory holding
Stage	Stage element for entry into theatre
Issue	Issue consignment to receiving unit
Despatch	Despatch consignment on Log IS system
Return	Return consignment to unit, repair or disposal

Figure 5C.5 - Logistic Effects Schematic

5C10. Outputs. The outputs of Step 2 are:

- Commander's initial planning direction or warning order.
- Estimate planning information:
 - Specified and implied tasks.
 - Information requirements; CCIRs and RFIs.

- (3) Constraints and freedoms.
- (4) Risks.
- (5) Assumptions.

STEP 3 – CONSIDER FACTORS AND CALCULATE DEMAND

5C11. Consideration of Factors. Step 3 requires the LPT to consider factors that will influence logistic support and the development of the JSC Plan. Each member of the LPT should consider the factors that relate to their area of operations prior to the Estimate meeting. Each LPT member should present their key deductions and the full LPT should discuss the key factors that fall across multiple areas of responsibility. This process is supported by the Consideration of Factors Aide Memoire that breaks the factors down into 9 categories. This is at Appendix 5C1.

5C12. Calculation of Demand. In order to design an effective JSC, the required volume that must flow along the JSC in order to deploy and sustain the force must be understood throughout deployment and sustainment. This assesses the capabilities and capacity required at each node of the JSC. Demand on the JSC is described in terms of the volume or tonnage that needs to be moved, broken down by commodity group. For deployment, this should be calculated by analysis of the JSC Synchronisation Matrix to identify the likely process requirements at each node. This is normally conducted by developing a timetable for the critical leg of the JSC, usually the CB, before calculating the timetable for all JSC activities. Sustainment requirements are calculated using information on all consuming units, their planned activity profiles and standard Daily Consumption Rates. The outputs of these calculations are the JSC ‘demand volumetrics’ and form a key input into the JSC wargaming process. The quantification of demand volumetrics is extremely complex and is supported by a Demand Forecasting Tool. This tool identifies demand volumetrics and consequent logistic capability requirements, enabling the optimisation of JSC resources and the identification of risk. It delivers 3 main outputs:

- a. Daily consumption demand.
- b. Inventory requirement.
- c. Daily capacity requirement.

5C13. Outputs. The LPT COS presents emerging options to the Commander. The outputs of Step 3 are:

- a. Emerging options.
- b. Estimate planning information including tasks, RFIs, constraints, risks

and assumptions.

- c. Demand forecast for each point of demand.
- d. Refined Logistic Effects Schematic.

STEP 4 – COMMANDER’S GUIDANCE

5C14. The Commander will provide direction to the LPT for turning the options identified in Step 3 into separate Courses of Action (CoAs). There will usually be a preferred CoA and each alternative CoA will involve a variation of one aspect of the preferred CoA such as the use of a Forward Mounting Base (FMB).

STEP 5 – DEVELOP LOGISTIC COURSES OF ACTION

5C15. **Key Questions.** There are 4 key questions for each potential CoA:

- a. What is the concept of operations?
- b. What are the risks and issues?
- c. What is the cost?
- d. What are the potential capability gaps?

5C16. **Process.** The task in Step 4 is to develop and validate the Commander’s potential CoAs. At this stage of the process, the complex and diverse nature of logistic support requires that the task of developing and validating CoAs is broken down between the members of the LPT and supporting staff. The Commander continues with liaison activities, visits and discussions, while the staff carry out rigorous analysis of the potential CoAs in accordance with the Commander’s intent. Activities are synchronised using a Timeline and Effects Schematic. The Timeline shows all the critical milestones, tasks and dependencies between tasks on a single timeline and is used to identify critical decision points. The Effects Schematic is refined to show exactly what effect needs to be achieved at what geographical point and how that effect should be achieved. The Timeline and Effects Schematic are combined to form the Synchronisation Matrix, which is used during the modelling process and is a critical component of the JSC Plan. In parallel with the development of the Synchronisation Matrix, resource requirements for each CoA need to be identified and translated into costs where applicable.

5C17. **Output.** The output of Step 4 is a concept of operations for each CoA supported by:

- a. A Logistic Effects Schematic.

- b. A Timeline.
- c. Resource requirements including rough order costs.
- d. Identification of any capability gaps.

STEP 6 – EVALUATE LOGISTIC COURSES OF ACTION

5C18. Key Questions. The questions to be answered by Step 6 are:

- a. How well does each CoA meet operational requirements and how should it be refined?
- b. How resilient are the CoA(s) to potential risks?
- c. What is the recommended CoA?

5C19. Process. The Logistic Estimate process utilises modelling tools such as the Coupling Bridge Analysis Tool (COBRAT) to evaluate the performance of potential CoAs. The flow of men, equipment and materiel through the JSC is simulated over time for both deployment and sustainment, against a range of risks and scenarios. The key issues emerging from the simulation are discussed and mitigating actions identified. The level of flow needs to be mapped against the Timeline to identify potential points of failure and bottle-necks. Additionally, each of the risks already identified should be placed on the timeline at the point at which they have maximum impact.

5C20. Outputs. The outputs of step 6 are:

- a. A refined concept of operations for each CoA.
- b. Recommendation of the optimal CoA.

STEP 7 – COMMANDER’S DECISION AND COMPLETION OF PLANS

5C21. Key Questions. The questions answered by Step 7 are:

- a. What is the recommended CoA?
- b. What key decision points will drive planning?
- c. What detailed planning is required?

5C22. Process. The last step of the Logistic Estimate process requires the Commander to decide on the CoA, or combination of CoAs and then direct the completion of the

operation specific JSC Plan. The JSC Plan is completed by the LPT supported by planning support staff.

5C23. Performance Management System. Specific performance requirements must be set during the planning process to enable operational control of the JSC during execution of the JSC Plan. These should normally include required inventory levels, pipeline times and throughput for each node. Accountability for meeting those targets should be assigned to the appropriate level of command. During Step 7, performance targets should be set and a robust JSC Performance Management System (PMS) put in place to monitor requirements and inform the chain of command if performance diverges from the JSC Plan.

5C24. Information Sharing Capability. The JSCETS provides the mechanism for information exchange between members of the LPT. The JSCETS contains all JSC planning inputs and outputs.

5C25. Outputs. The outputs of Step 7 are:

- a. The Commander's decision.
- b. An operation specific JSC Plan.

(INTENTIONALLY BLANK)



Part 3
Project

PART 3

Project

CHAPTER 6 – LOGISTIC SUPPORT TO DEPLOYMENT

SECTION I – MOUNTING

- Permanent Joint Headquarters (PJHQ) is the controlling headquarters for all deployed Joint Operations unless otherwise directed.
- PJHQ J4 Joint Mounting (JM) Cell forms the core of the PJHQ Deployment Cell for specific operations and provides a focus for all Mounting issues, working to J3/J5 direction.

601. **Mounting.** Mounting is the term applied to all preparations made in areas designated for the purpose of assembling Force Elements (FE) in anticipation of an operation. It includes the assembly in the mounting area, preparation and maintenance within the mounting area, movement to loading points and subsequent embarkation to either ships, craft or aircraft if applicable.¹

602. **UK Context.** In the UK, mounting refers to the practical coordination of tasks as dictated by the Detailed Deployment Plan (DDP). The DDP encompasses all orders and directions that allocate strategic lift assets and detail the embarkation of personnel and cargoes. The DDP is covered in detail in Section II. Mounting includes the identification and preparation of forces, their equipment and stores, pre-deployment training and briefings and transportation to the Point of Embarkation (POE), most commonly via the Joint Air Mounting Centre (JAMC) at South Cerney or the Sea Mounting Centre (SMC) at Marchwood Military Port.

603. **Force Generation.** Force Generation and Mounting are 2 distinct, but interdependent activities. Force Generation is the sum of activities conducted by the Front Line Commands (FLCs) and Defence Equipment and Support (DE&S) to provide the appropriate capability and FE at Readiness (FE@R), to satisfy a Joint Statement of Requirement (JSOR). It is not specifically part of the mounting process but is a precursor to any deployment. Responsibility for the preparation of FE and the generation of capability (FE@R) lies with the FLC/DE&S chains of command.

604. **Mounting Command and Control.** PJHQ is the controlling HQ for all deployed Joint operations and major Joint exercises.² PJHQ is responsible for directing the activities of FLCs and DE&S in the mounting of a Joint force and for coordinating the deployment of that force, but it has no responsibility for that element of mounting relating to Force Generation. Mounting is a J3-led process directed by J3 Operational Teams (OTs). Functional responsibility for mounting lies with Assistant

¹ AAP-6 ‘NATO Glossary of Terms and Definitions’.

² FLCs can be nominated as Mounting HQs, particularly when deploying FE are drawn primarily from a single Service.

Chief of Staff (ACOS) J1/J4 and is exercised on his behalf by Deputy Assistant Chief of Staff (Mounting/Movement) (DACS M&M). DACS M&M commands³ the J4 Joint Mounting Cell (J4 JM Cell) and J4 Movements Cell (J4 Mov Cell) whose roles are as follows:

- a. **J4 Joint Mounting Cell.** The J4 JM Cell provides a standing operational-level focus within PJHQ for the command and control (C2), coordination and development of the Operational Mounting Process (OMP). In close liaison with the Defence Supply Chain Operations and Movements (DSCOM), it plans, coordinates and directs the mounting-related activities of the FLCs, DE&S, Joint Force Headquarters (JFHQ) and the Joint Force Logistic Component (JFLogC) during the deployment, sustainment and redeployment phases of Joint operations and exercises. The J4 JM Cell has replaced single Service ‘lead’ Mounting HQs, and works to either J3 or J5 for ongoing operations or contingency planning respectively. The J4 JM Cell provides coherent Joint management of the mounting process; developing Joint Mounting Orders (JMOs) and Coupling Bridge (CB) Directives; synchronising DE&S Force Element Table (FET) inputs with those of deploying FE; and monitoring deployment progress and CB performance, in particular the effective use of strategic movement assets.
- b. **J4 Movement Cell.** The J4 Mov Cell coordinates the call forward of FE with FLCs and DSCOM Movement Operations (Mov Ops) and executes the movement plan in accordance with the Load Allocation Table (LAT). It is also responsible for assisting DSCOM Mov Ops in the de-confliction and resourcing of theatre demanded sustainment requirements alongside sustainment deployment serials.

SECTION II – DEPLOYMENT PLANNING

- The Joint Task Force Commander (JTFC) and Joint Force Logistic Component Commander (JFLogCC) need to be involved with pre-deployment planning as early as possible.
- The speed of deployment into theatre is largely dependent on the availability of appropriate strategic lift assets provided through DSCOM.
- The Joint Force Element Table (JFET)/Joint Desired Order of Arrival (JDOA) determines the sequence and loading patterns of FE on departure.
- Joint Task Force Headquarters (JTFHQ) and JFLogC enabling elements require early entry to theatre and representation on reconnaissance activity.

³ DACS M&M also commands the J4 Operations Support Cell (Ops Sp Cell), which has no mounting role.

605. Permanent Joint Headquarters Deployment Cell. At the start of planning for an emerging operation, a Deployment Cell may be created with the J4 JM Cell at its core. The Deployment Cell provides a standing Contingency Planning Team/Operational Team (CPT/OT) focus, which directs and coordinates the planning for the initial deployment, sustainment and redeployment activities for that operation. The Deployment Cell provides the deployment focus for an operation, but it is not established to manage the mounting activities for enduring operations. The J4 JM Cell normally provides the focus for Deployment Cell activity using J4 Mov and DSCOM subject matter expertise as required. The Cell works initially to the direction of the J5 CPT then, as the operation matures, the Cell will work under the authority of the relevant J3 OT.

606. Planning and Estimate Process. The planning and estimate process, described in Chapter 5, underpins all pre-deployment activity. Estimate outputs define Lines of Communication (LOC), initial support and the required level of sustainment for both initial and full operating capability (IOC/FOC) of the Joint force. The J4 JM cell, as the core of a Deployment Cell if established, assumes most of the planning, liaison and directing workload that would otherwise be undertaken by J3/5. The major outputs of the cell are the creation of a JFET/JDOA and the hierarchy of deployment orders, directives and instructions that form the DDP.

607. Joint Force Element Table. Once the Military Strategic Estimate (MSE) is concluded, PJHQ will issue a statement of required capabilities to the FLCs and DE&S known as the JSOR. The JSOR details those tasked to provide FE to the operation and enables the drafting of single-Service or organisational FETs. The J4 JM Cell acts as the focus for FET submissions from FLCs/JTFHQ/JFLGc and DE&S, and coordinates submissions in an iterative round of staffing for accuracy and completeness. The product is consolidated into a JFET for submission to J3 for ratification against the JSOR. Once endorsed by J3, the final JFET is issued under J3 authority, and becomes the authoritative document governing the shape and size of the deploying force. The JFET is comprehensive and details FE in ‘capability groupings’, but is not as detailed as FLC staff tables. In addition to informing the JTFC of the capabilities, equipment and availability of initial operating stocks, capability gaps are highlighted in order that they might be addressed under J3 direction.

608. Joint Desired Order of Arrival. The order of arrival of FE into a theatre must match the Commander’s intent for the delivery of effect. PJHQ OT and JTFHQ Staff work concurrently to develop a JDOA from the JFET which supports the operational plan. The JDOA determines the sequence and loading patterns of FE on departure; its production is an iterative process involving JTFHQ, DSCOM Mov Ops, and PJHQ. The JDOA enables early bids for strategic movement assets to be made and allows the Joint Force to be mounted and deployed in a manner consistent with the operational plan. Critical requirements must be identified early to ensure that arrival in the Joint

Operations Area (JOA) meets the Commander's intent. The JDOA is a JFET with FE prioritised according to required loading, movement and delivery dates.

609. Logistic Enablers. In order to support the Reception, Staging and Onward Movement (RSOM) of FE, it will be necessary to deploy logistic resources, particularly enabling assets, early to facilitate theatre activation. A well-found port will invariably be the Sea Port of Disembarkation (SPOD) of choice; however, there is a requirement to maintain a deployable capability that is able to operate an austere port infrastructure well below that of a well-found port. If required, this deployment must occur in advance of RSOM. The desired posture of forces on arrival in theatre must also be clearly defined as this will affect the way any cargo is stowed and shipped.

610. Detailed Deployment Plan. Until a DDP is produced the mounting process is characterised by planning activity and a detailed staffing process. Once the DDP has been produced, the dominant factor in the process is the physical movement of personnel and equipment. The production of a DDP denotes the point in the mounting process where there is a change in emphasis from deployment planning to deployment execution. This change in emphasis is important for both internal and external stakeholders because it is reflected by transfers of responsibility in most of the key organisations involved in the mounting process. The DDP is not a single document, but exists as a set of dynamic instructions that normally include:

- a. JFET/JDOA.
- b. PJHQ operational guidance including the Joint Mounting Order (JMO), CB Directive and Strategic Movement Instruction (SMI).
- c. Load Allocation Table (LAT), covered in Section III.

611. Planning Considerations. The key planning consideration is how long an operational deployment will take, as this will be the main determining factor in how quickly the desired operational effect might be achieved. The speed of operational deployment is largely dependent on the availability of appropriate strategic lift assets and, to a lesser extent, the ability to receive FE into the JOA. The Deployment Planning process is shown at Figure 6.1.

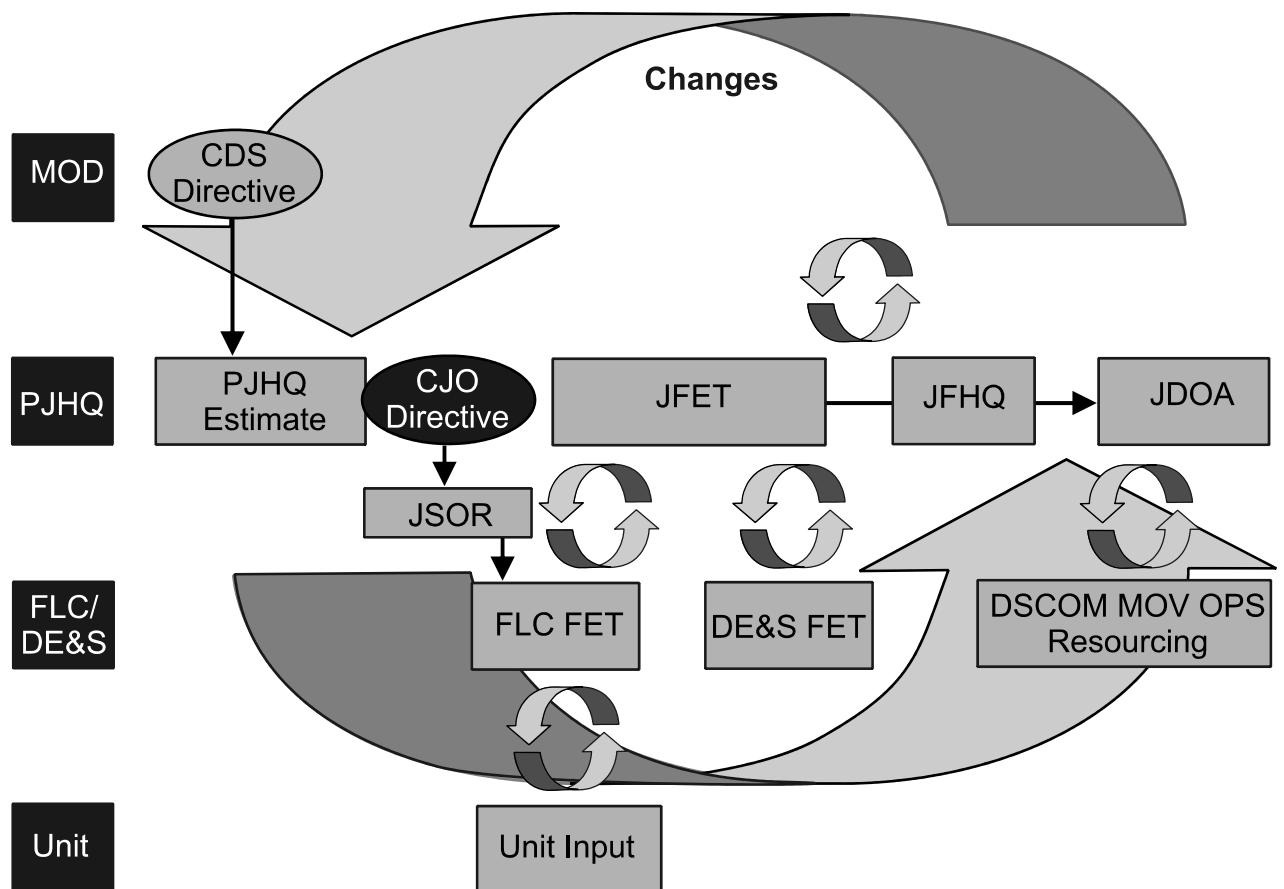


Figure 6.1 – Deployment Planning Process

612. **Strategic Lift Options.** A combination of air and sealift, which meets operational plans and speed requirements will normally conduct strategic lift for an operational deployment. Rail or road deployment would only be possible for the deployment of forces already located on the same land mass or where suitable transport links exist. Operational considerations will also impact on whether strategic lift is provided by organic or chartered assets. However, commercial charter will be used for all but the smallest deployments and the early phases of a medium scale deployment.

- a. **Shipping.** MOD owned shipping, for example, Royal Fleet Auxiliaries (RFAs) and MOD owned Roll-on/Roll-off Ferries (RoRos) may be prepared and pre-positioned in advance. This entails careful local planning to ensure that the right stocks and equipment are moved forward and held afloat until required. In such circumstances, the early deployment of MOD owned shipping is likely to allow materiel to arrive in theatre earlier than would be possible using chartered vessels. The latter ordinarily take at least 30 days to acquire on the commercial market, and that process cannot begin until there has been a definite decision to deploy. Although MOD owned shipping is a limited resource, it is the preferred option unless dictated otherwise by the size or scale of the load.

b. **Airlift.** Air transport will normally be allocated to high priority equipment and the selection of air as opposed to sea or surface modes of transport must always balance speed of response against volume and cost. Chartering of commercial airlift may be achieved at shorter notice than sealift; enabling arrangements normally allow 10-14 days for the leasing/contracting of large aircraft. The use of sealift may be preferred to chartered airlift as loads may arrive sooner by sea than if they were accorded medium or low priority for air freighting; a case of volume being balanced against speed.

613. **Personnel and Equipment.** Personnel issues and medical preparation are detailed in IJWP 1-00 '*Joint Operational Personnel Administration*'. The JMO and other deployment instructions, taking account of statutory and political requirements, are used to coordinate the preparation and mounting of personnel and equipment. The administrative preparation of personnel includes the issue of specialist clothing, fitness screening and the dispensing of inoculations and prophylactic drugs. In the latter case time may be needed before the drugs become effective and, therefore, medical issues may potentially delay any deployment.

614. **Training.** Pre-Deployment Training within the Strategic Base and in-theatre may be mandatory for all personnel deploying to a JOA. Detailed training requirements will be articulated in the Joint Commander's (Jt Comd's) Operational Directive for each individual operation, but FLCs remain responsible for the programming and direction of individual, collective and specialist training. The timing and content of training serials should not be underestimated and must be considered early in the planning process in order that it may be factored into the JTFC's overall priorities for mounting a force.

SECTION III - DEPLOYMENT EXECUTION

- PJHQ is responsible for allocating FE to strategic lift from the POE to the Port of Disembarkation (POD).
- FLCs are responsible for mounting FE from strategic bases to the POE.
- Changes to the JFET/JDOA/DDP can only be authorised by PJHQ OT through the J4 JM Cell.
- Movement Control Centres (MCCs) are essential for ensuring the smooth flow of FE through any CB choke points and for maximising route capacities.
- All FE should be tracked throughout the entire deployment process.
- The JFLogC has an important role in supplying the necessary information to both the FLCs and PJHQ concerning FE that have arrived in theatre.
- The Deployment Phase will overlap with the Sustainment Phase and a shift in emphasis will occur from Strategic Base 'Push' to JOA 'Pull'

615. **Responsibilities.** Approval for any reduction in Notice to Move (NTM) for the deployment of FE is the responsibility of MOD. This approval will normally be released as a signal and, once received, PJHQ will issue additional coordinating instructions in accordance with the DDP. The J4 JM Cell on behalf of the OT monitors, and adjusts as required, the deployment of the force through a series of FETs and LATs on behalf of J3 OT. The JFET/JDOA is effectively the first set of Call Forward Coordinating Instructions (CFCI) used by the FLCs and other OMP stakeholders. DSCOM Movement Operations creates a LAT from the latest JFET/JDOA. The LAT allocates individual line serials, which may vary from one individual through to an entire capability, to specific strategic lift. The LAT will also include details of re-supply and sustainment stocks allocated to strategic lift.

616. **Load Allocation Table.** During the deployment execution phase, it is anticipated that the LAT will be updated on at least a weekly basis or as often as amendments to the JFET require. The LAT looks as far forward as possible aiming to allocate lift up to a month in advance. The production of the LAT forms the second part of the CFCI process and defines a transfer of responsibility within the PJHQ mounting and deployment process. Once the LAT has been produced, the J4 Mov Cell becomes responsible for executing the movement of FE in conjunction with DSCOM. On receipt of the LAT, FLCs are responsible for adjusting the NTM of their own FE in accordance with PJHQ direction; FLCs are also responsible for issuing their own discrete Call Forward Instructions (CFI) and for moving formations, units, personnel and equipment from Strategic Base locations to the POEs.

617. **Execution Process.** Changes in the JTFC's priorities and changing circumstances will require considerable flexibility in the execution of the DDP. PJHQ J3 OT approve all changes to the DDP; any request for changes, whether they originate from the JTFC in the JOA or from FLCs, should be forwarded directly to PJHQ for approval. The JFET – JDOA – LAT process is iterative throughout deployment execution. There are likely to be frequent changes of movement dates, capability requirements and the allocation of units to provide the required capability throughout deployment execution. It is anticipated that the LAT will be updated on at least a weekly basis or as often as amendments to the JFET. The deployment execution process is shown at Figure 6.2.

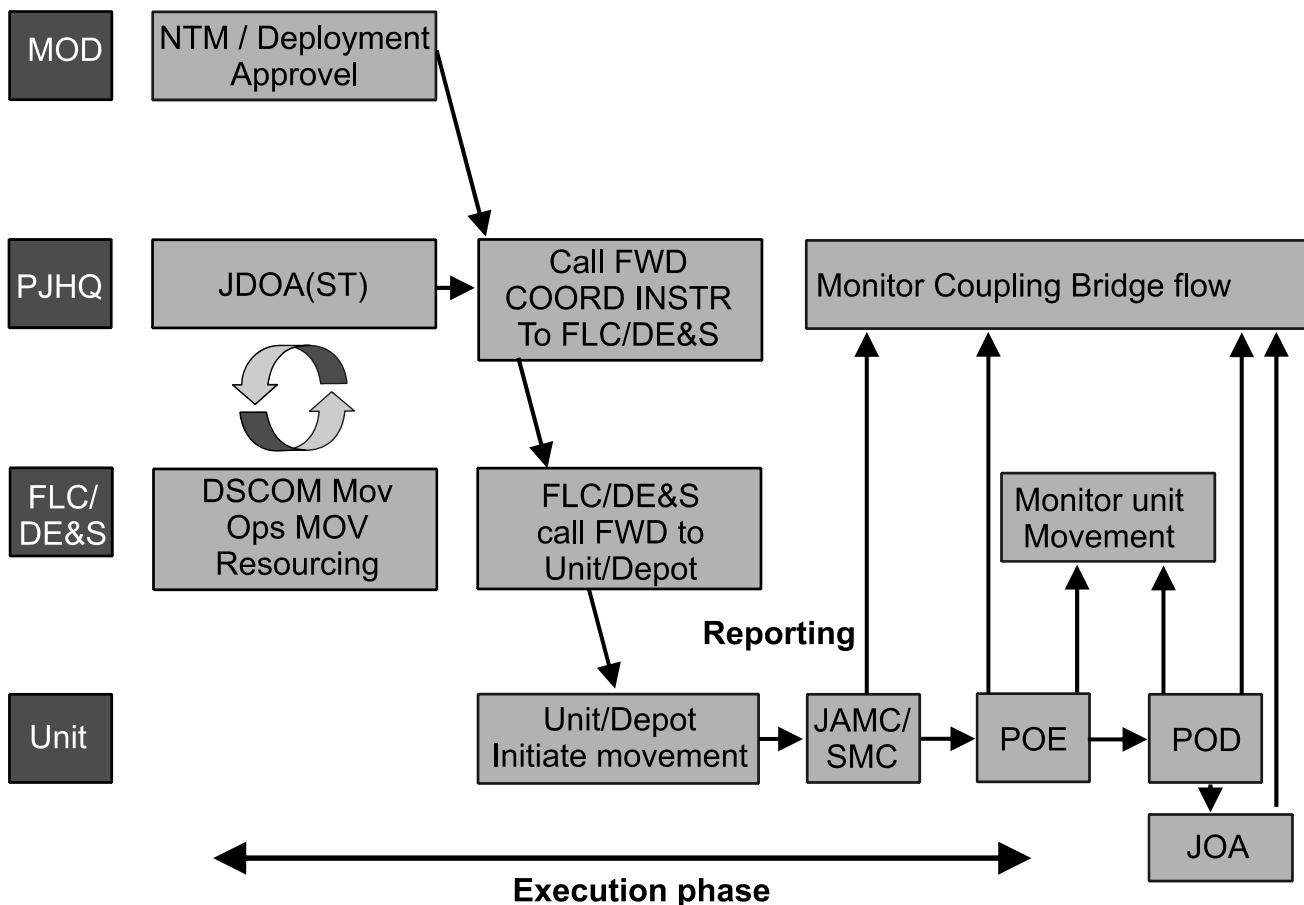


Figure 6.2 – Deployment Execution Process

618. **Strategic Movement Coordination.** The JDOA provides the authority for the sequence and loading patterns of departure. Moreover, it establishes movement priorities that must be supported and coordinated to ensure the delivery of a coherent plan that meets the operational requirement. Operational direction is provided by the J4 JM Cell, which manages the deployment of all FE under the authority of PJHQ J3. The JFHQ should form MCCs, both in the JOA and at the Forward Mounting Base (FMB) if one is used, in order to ensure the smooth flow of FE through any CB choke points and for maximising route capacities.

619. **Passage of Information.** The key to a smooth deployment, particularly effective RSOI, is the availability of accurate information regarding departures, delays, re-routing and arrivals. Details of the requirement will be defined in the SMI and Consignment Tacking Instruction, both of which are issued by the J4 JM Cell. Accurate information regarding the identity and arrival in theatre of FE can assist with their Readiness in Theatre (RIT) by allowing the JTFC to accurately schedule in-theatre training and preparation and ease the burden on the reception organisation. The JFLogC has an important role in supplying the necessary information to both the FLCs and PJHQ concerning FE that have arrived in theatre.

620. Sustainment of the Deploying Force. Logistic support to force deployment will overlap with the sustainment phase of an operation. The DLOC carries out the materiel support of a deploying force from the Strategic Base in accordance with operational direction. The sustainment requirements of a deploying force are identified by DSCOM and FLCs during the initial planning process and the DLOC will produce its own FET for inclusion in the JFET. Sustainment stocks will then be factored into the JDOA and Afloat Support (AFSUP) loading lists and allocated to strategic lift assets in the DDP. FE in theatre will begin to place demands for operational sustainment whilst initial sustainment stocks for FE in transit, are being delivered as part of the deployment phase. There will be a gradual change in emphasis from Strategic Base ‘Push’ of initial deployment sustainment to JOA ‘Pull’ of demands placed by operational FE based on usage accompanied by a natural transition in responsibility for sustainment from the J4 JM Cell to the J4 Mov Cell, this is shown at Figure 6.3. The exact timing of these transitions will differ for each operation, but will generally occur when all FE and initial sustainment stocks are in Theatre. There will be a similar change in emphasis as an operation is concluded with JOA ‘Pull’ being replaced by JOA ‘Push’ and the return of sustainment stocks to the Strategic Base.

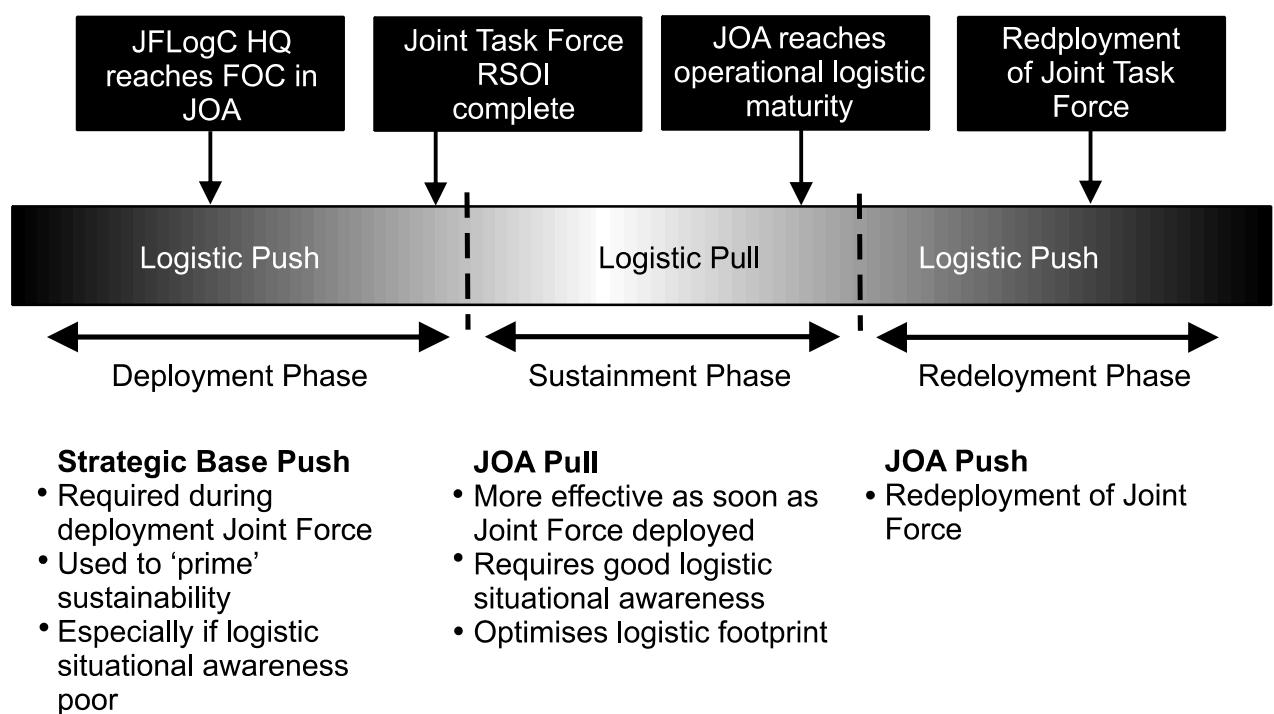


Figure 6.3 – Logistic Push/Logistic Pull

SECTION IV – COUPLING BRIDGE

- The CB comprises all the strategic assets, infrastructure and facilities used to convey personnel equipment and materiel between the Strategic Base and JOA.
- CJO exercises C2 over the CB and will appoint a CB Commander for each operation. CJO's directive will define what constitutes the CB and what support is required from the individual FLCs and Chief of Defence Materiel (CDM).

621. The CB is described in Chapter 1. The optimum, generic, starting point for the CB is the point of entry into Mounting Centres, Naval Bases, Air Stations and POEs. This allows the Jt Comd to generate maximum operational effect across the CB, by focusing upon the prioritisation of FE entering the CB, whilst minimising involvement in the force generation and Joint Supply Chain (JSC) operation processes. The optimum, generic termination points for the CB is the point at which materiel and FEs physically depart the POD⁴ and the points of arrival in the JOA for self-deploying maritime and air forces. The JFLogC, in accordance with priorities set by the JTFC, will normally control the flow of personnel and materiel into theatre. However, the Jt Comd retains the ability to influence the flow of materiel and FE into the JOA if required.

622. **Command and Control of the Coupling Bridge.** The Jt Comd exercises C2 of the CB and his Operational Directive will define its exact boundaries for the specific operation based on the generic CB model. The Operational Directive will appoint a CB Commander, normally Deputy Chief Joint Operations (Operations) (DCJO(Ops)), and outline what support is required from the FLCs and the DE&S in terms of CB inputs. The FLCs and CDM are Supporting Commands for the CB and retain Operational Command (OPCOM) of strategic movement assets transiting across the CB. CJO may need to provide strategic guidance, including prioritisation where required, where there is more than one CB providing support to geographically dispersed, but concurrent, operational theatres.

623. **Purple Gate.** The Purple Gate is the single point of entry from the Strategic Base into the Joint Supply Chain (JSC) ‘to ensure the regulation of materiel flow into the JSC for the Sustainment of operational Theatres’.⁵ All materiel provided directly from industry or Integrated Project Teams (IPTs) enters the CB via the Purple Gate, which is normally located at the Defence Storage and Distribution Agency (DSDA) at Bicester.⁶ This is to ensure that materiel provided directly from industry or through

⁴ POD refers to a Sea, Air or Rail Point of Disembarkation.

⁵ JSP886 ‘The Defence Logistics Support Chain Manual’.

⁶ HQ DSDA may nominate specialist storage areas to operate Purple Gate procedures for materiel that would not be appropriate to handle in Bicester; DSDC Ashchurch for vehicles and plant and Warehouse 33, DSDA (North), Donnington Site for medical items are examples. Munitions are always handled through a licensed ammunition storage area.

contractor logistic support (CLS) arrangements is properly regulated, equipment is given the right priority and that all items are tracked across the CB.

624. Force Protection across the Coupling Bridge. Appropriate Force Protection measures for the CB are determined through a threat-based risk assessment, as discussed in Chapter 3. Responsibility for implementing these FP measures lies with respective commands. The provision of FP across the CB follows the broader FP planning process covered in Chapter 3, Section V. This is a PJHQ J2 led threat assessment, the impact of which will be measured against mission and operational objectives. Management of the assessed risk will be conducted by PJHQ J3 with input from FLCs and deployed contingents/components.

(INTENTIONALLY BLANK)

CHAPTER 7 – RECEPTION, STAGING, ONWARD MOVEMENT AND INTEGRATION

SECTION I – RECEPTION, STAGING, ONWARD MOVEMENT AND INTEGRATION PROCESS

- Reception Staging Onward Movement and Integration (RSOI) includes both the logistic led Reception, Staging and Onward Movement (RSOM) activities and the J3 led Integration process.
- RSOI will often take place alongside other nations, but will be conducted on a national basis.
- RSOM is a Joint activity involving all Components, but is usually led by the Joint Force Logistic Component (JFLLogC).
- The coordination of RSOM procedures under one Joint organisation avoids duplication of effort and helps ensure that arrival priorities are set in accordance with the Joint Task Force Commander's (JTFC's) direction.

701. Reception, Staging, Onward Movement and Integration. RSOI describes the series of activities that enable Force Elements (FE), on arrival in theatre, to attain Full Operating Capability (FOC) as part of a Joint force. It is a complex, often prolonged and frequently dispersed process. Although in coalition or multinational operations, national forces may conduct RSOI concurrently, requiring coordination and deconfliction of real estate, resources and facilities, it remains a national responsibility unless specifically directed otherwise; for example when a Logistic Lead Nation (LLN) is given this responsibility. The Integration process will be J3 led and conducted within Components. The RSOI process is shown at Figure 7.1.

702. Reception, Staging and Onward Movement. RSOM is usually coordinated by logistic staff, normally the JFLLogC HQ, on behalf of the Joint Commander (Jt Comd). The Staging and Onward Movement elements of RSOM may include initial theatre arrival briefings, but these briefings do not encompass the full Integration process. Logistic staff will be responsible for the full range of activities involved in the RSOM process as directed by the Joint Task Force Headquarters (JTFHQ). To ensure an efficient and effective RSOM procedure, it is important that J4 staff are involved in reconnaissance and planning at the earliest possible stage of the planning process.

703. Operational Requirements. An important consideration in the early stage of an operation is the requirement to balance the competing demands placed upon the JFLLogC, in particular, as it becomes increasingly committed to force sustainment while still conducting RSOM. Such demands may require an initial surge in logistic

capability. Whilst RSOM relies heavily on logistic support, the full RSOI process is not conducted exclusively by logistic staff. If the eventual integration of operationally ready FE into the Joint force is to be successful, then the supporting functions of RSOM require clear JTFHQ direction to ensure that RSOM activities meet operational requirements.

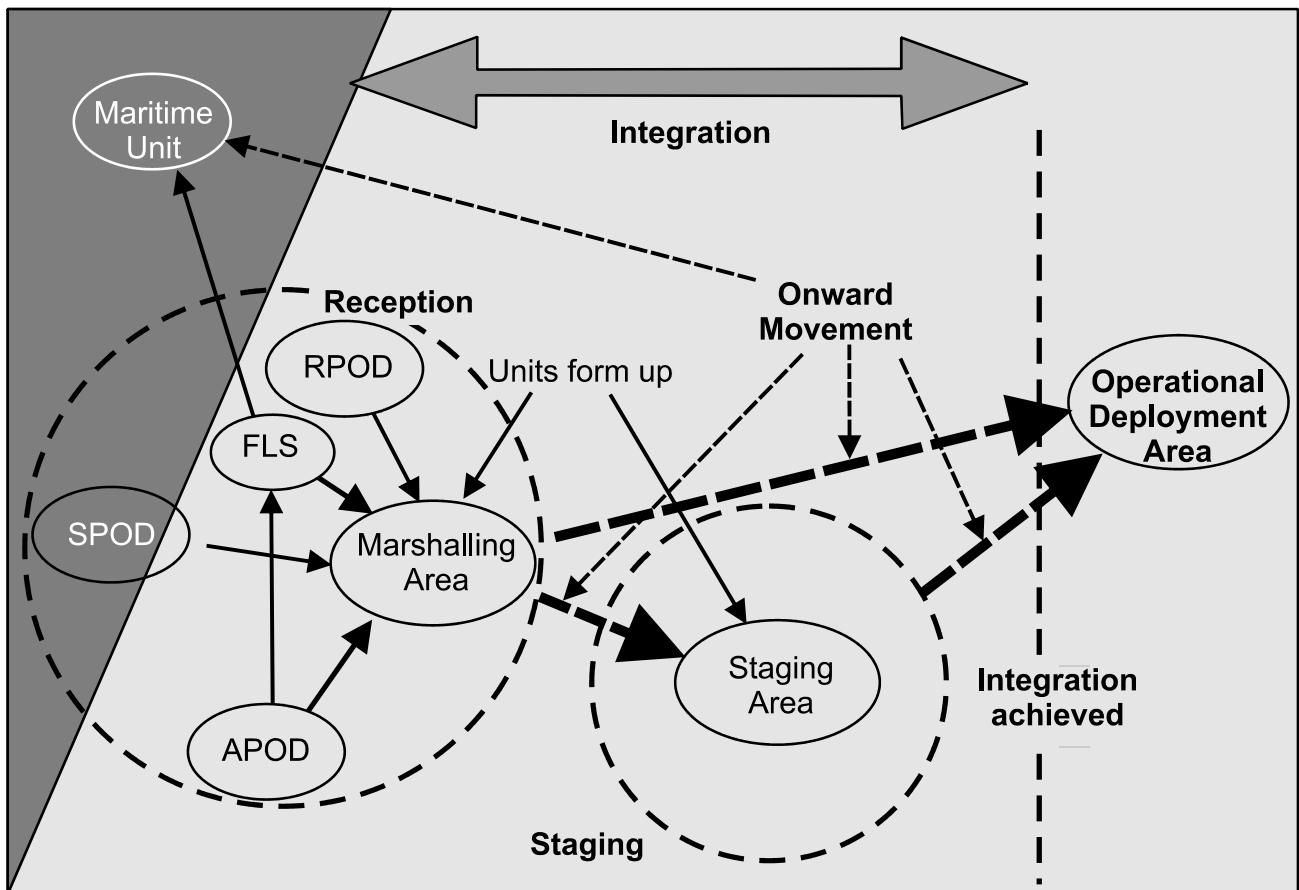


Figure 7.1 – RSOI Process

Reception

704. Reception is the process of receiving, offloading, marshalling, recording and transporting personnel, equipment and materiel from strategic or operational lift through sea, air, or rail Ports of Disembarkation (PODs). Reception is focused on Land FE and those Maritime and Air FE that do not self deploy. It involves the preparation of facilities, initial Force Protection (FP), administration and briefing of personnel and their subsequent transport away from the POD. In a large Joint Operations Area (JOA) with widely separated components, this may offer a significant challenge. The process can also involve time-consuming preliminary activities such as the building of camps, medical facilities, Theatre Reception Centres (TRCs) and logistic compounds in advance of main force deployment.

705. Role of the Joint Force Logistic Component. The JFLogC must be deployed sufficiently early and have the necessary administrative and logistic systems in place to support Reception activity including logistic information systems (IS), Joint Supply Chain (JSC) processes, including the Reverse Supply Chain (RSC), personnel, equipment and materiel tracking and aeromedical evacuation. Once the deployment has started, the flow of incoming personnel and materiel must be smooth and continuous so as not to obstruct subsequent arrivals.

706. Key Elements. Key elements of Reception are:

- a. The activation of PODs, depending on the operational requirement, for air (APOD), sea (SPOD) and rail (RPOD). The number and type of PODs will complicate Reception activities; therefore, the synchronisation of activities at each POD is a key issue.
- b. Reception starts at the point that deploying forces, equipment and materiel arrive into a POD.
- c. Reception activities continue until the point at which the onward movement of forces, equipment and materiel into the deployed operational area starts. This may be via a staging area if required.

Staging

707. Staging. Staging is the process of assembling, temporary holding, and organising arriving personnel, equipment and materiel, prior to their onward movement and further activities. Staging may involve both formed units and individuals and is a life support function that at its simplest, feeds and accommodates arriving personnel in a benign or protected environment.

708. Requirement. Staging can be a significant management task with forces flowing into PODs from several locations, possibly requiring prolonged periods in staging areas. Staging is not always required; ideally, FE will be moved straight to their operational deployment location. Staging requirements will depend on the size of the force, the need for integration, the speed of deployment and the availability of real estate, but can include:

- a. Provision of life support, whilst troop build-up takes place and troops are organised, reconfigured, acclimatised, trained and their equipment fitted with Urgent Operational Requirements (UORs).
- b. The holding of reinforcements until required.
- c. Carefully sequenced integration activity to produce the required flow of forces into the Area of Operations (AO).

Onward Movement

709. Onward Movement is the process of moving units, personnel, equipment and materiel from the Reception area or Staging Areas, if required, to their operational deployment location. Onward Movement may be to any of the components, including to vessels at sea and may utilise military, Host-nation Support (HNS) or locally hired transport assets. Onward Movement may not take place in a benign environment and may therefore require significant J3 input, which the JFLogC may not be equipped to deliver.

710. **Requirement.** Onward Movement requires:

- a. **Coordinated Movement Control.** Movements staff require total visibility of the operational situation across all Components, in order to ensure that personnel, equipment and materiel are transported to the required operating location.
- b. **Effective Transportation Network.** Onward Movement should, where possible, be along protected routes, with Convoy Support Centres (CSCs) established where necessary, though this will be increasingly difficult to achieve in the dispersed battlespace. Logistic and medical support must be available, together with appropriate FP, which may need to be self generated from within logistics units. The transportation network can utilise all forms of transport including intra-theatre air, sea, road and rail lift.

Integration

711. Integration is the synchronised transfer of operationally ready units into the Joint Force. Integration is designed to receive personnel into units, orientate them to the operational area and includes acclimatisation, training and situational awareness.

712. **Responsibilities.** The JTFC, or if not deployed, Permanent Joint Headquarters (PJHQ) J3 is responsible for directing integration activity. Integration is primarily a component activity. Therefore, the responsibilities of the JFLogC will be limited to the integration of its own forces and for enabling elements of integration training for the whole force, such as the provision of ranges in Reception and Staging Areas and providing some theatre orientation briefings. In multinational operations, the integration of UK forces into an Alliance or coalition framework will involve additional activity. Integration may be conducted outside the AO or at any stage of the RSOM process. It can be conducted as part of the Reception process or at a Staging area. The larger the force and the greater the number of nations involved both make achievement of effective integration more demanding.

713. **Completion.** Integration is completed when the Joint Force is assessed as being effective by the appropriate Commander.

SECTION II – RECEPTION, STAGING AND ONWARD MOVEMENT CAPABILITIES

- RSOM requires the deployment of a RSOM Reconnaissance (Recce) Group and an RSOM Activation Group.
- The Recce Group determines the required capabilities for the deployed Activation Group.
- The JFLLogC will be allocated a range of enabling capabilities to conduct RSOM.
- The availability of appropriate transport resources and infrastructure are key to effective RSOM.

714. Command, Control and Coordination:

- a. **Reception, Staging and Onward Movement Headquarters.** The establishment of a headquarters to command the RSOM process provides continuity from the early planning stages of an operation, establishes relationships between the RSOM commander and the other Component Commanders and allies and avoids the need to create ‘ad hoc’ headquarters.
- b. **Reception, Staging and Onward Movement Reconnaissance Group.** The RSOM Recce Group must make an assessment of a number of issues before the RSOM process can commence. The issues to be determined are:
 - (1) The prevailing tactical situation.
 - (2) The need for deconfliction and cooperation between national contingents. Where RSOM is being conducted within a multinational operation, there should ideally be a combined multinational Recce Group.
 - (3) The location, capacity and suitability of available PODs. The available infrastructure must be assessed to ensure it meets the operational requirement. This must be matched to the size of the deploying force and the throughput required at the PODs in order to meet deployment timelines.
 - (4) The suitability of real estate and the availability of support infrastructure, particularly the capacity, diversity and accessibility of the local transportation network. This must be assessed to confirm it is capable of meeting the requirement for reception, staging and onward movement activities including operational administrative requirements.

(5) Access to life support services such as electrical power, compatible equipment, communications, fuel, water, food and waste disposal. If these are assessed as being inadequate, there will be a requirement to deploy resources that may delay the RSOI process.

b. **Reception, Staging and Onward Movement Activation Group.** The composition of the RSOM Activation Group will be tailored to match the requirements of RSOM process. The size and trade skills required by the Group will depend on the number and locations of PODs, the in-place logistic infrastructure, including the transportation network and the composition and size of the force to be deployed.

c. **Enabling Capabilities.** The requirement to coordinate RSOM for all but the smallest of operations requires the expertise of a bespoke joint tactical level staff with the necessary resources to carry out the function. The JFLogC will normally perform this task, exercising command and control (C2) over a wide range of specialist enabling assets. These assets will include Joint movements staff, port and airfield clearance units, engineers, infrastructure, labour, supply, transport, medical, provost, administrative and J8/J9 elements. Such assets may be assigned permanently to the JFLogC for ongoing activities in support of the force or be allocated for specific phases of an operation. It is, therefore, essential that the JFLogC and enabling assets feature early in the Joint Desired Order of Arrival (JDOA). If RSOM facilities, particularly PODs, are geographically dislocated, additional C2 structures built around suitable Component organisations may be required.

715. **Conduct of Reception, Staging and Onward Movement.** The conduct of RSOM is dependant on the operational environment, the availability of movement assets and arrangements for Transfer of Authority (TOA):

a. **Operational Environment.** The prevailing operational circumstances at the point of entry into the JOA will largely determine the conduct of RSOM. The availability of a secured area within the JOA will enable a more rapid build up of combat power than an operation that has to be launched from a more remote Forward Mounting Base (FMB). If RSOM activities are likely to be opposed then early entry forces will have to be sustained from a FMB or Joint Sea Base until a secure logistic base can be established in the JOA.

b. **Movement within the Joint Operations Area.** Careful coordination and planning is required to maximise the efficiency of scarce transport resources and an essential element of the RSOM process is to ensure that the necessary supporting infrastructure is in place to facilitate the efficient use of transport assets. Movement within the JOA will be largely dependent on the capacity and condition of the local road network, the availability of road

transport assets and FP requirements. The use of tactical Air Transport and aviation assets, however, will form part of the overall transport plan within the JOA, as could transport by sea and use of inland waterways. The demand for road capacity will be greatest during force deployment, possibly before the full complement of JDOA equipment has been discharged from shipping.

Transport assets need to be carefully controlled and it is important to establish the availability of HNS transport assets since it is likely that other nations will also seek to hire or procure the same assets. The use of routes must be carefully planned and controlled including liaison with the civil authorities and with other nations in order to ensure freedom of movement and to deconflict military and civilian use. Road conditions and geography are important factors and routes and capabilities may be limited, particularly when extreme environmental conditions prevail and engineer operations to improve the situation take time to complete.

c. **Transfer of Authority.** TOA for FE from respective Front Line Commands to the JTFC is a key element of the RSOM process. Nationally, TOA will normally take place for land forces once emplaned or embarked and for maritime and air forces on arrival in the JOA. However it is essential that the JFLogCC, acting with delegated authority from the JTFC, has sufficient authority over FE to manage the RSOM process as a fully Joint operation. For NATO operations TOA to the JTFC will take place at embarkation, for other multinational operations the timing of TOA to a non-national JTFC will be determined by the MOD, and communicated through PJHQ and the Jt Comd.

(INTENTIONALLY BLANK)



Part 4
Sustain

PART 4

Sustain

CHAPTER 8 – SUSTAIN

801. Sustainability is described in Chapter 1 and is defined as the ability of a force to maintain the necessary level of combat power for the duration required to achieve its objectives.¹ Sustainment, on the other hand, is defined as the activity and resources necessary to sustain a force.² Sustainment planning therefore focuses on identifying the quantity and type of resources, the ‘Sustainment Requirement’ that will sustain the deployed force.

802. Planning the Sustainment Requirement. Strategic logistic sustainment requirements are derived from Defence Planning Assumptions (DPAs) and the subsequent detailed planning identifies the extra logistic requirement that is needed to sustain operations in addition to that required to sustain routine activity levels. Defence Equipment and Support (DE&S) holds operational stocks as directed by the Defence Operational Stocks Working Group; these stocks include a limited operational sustainability capability and some long lead time spares for military specialist equipments, which could not otherwise be procured during the readiness cycle or have been procured as part of a whole fleet, such as pools of major assemblies for armoured vehicles. The resources required to generate Force Elements (FE) from their normal readiness (Rx) to the point at which they are ready to deploy (Ro), however, are found from maintenance stocks. Any specific force generation requirements should be included in Customer Supplier Agreements (CSAs) between the Front Line Commands (FLCs) and DE&S. There are no stocks that are held specifically to enable recuperation. The logistic sustainability element of the Operational Planning Cycle (OPC) is shown at Figure 8.1. This includes the requirement to carry out rehabilitation of the force as required, covered in Section III, and redeployment which is covered in Chapter 9.

803. Sustainment of Force Elements. Force Elements at Readiness (FE@R) produces a measure of the capability of FE against DPAs, but it does not measure the contingent capability to sustain operations. To address this omission, and also to provide a mechanism for maintaining logistic sustainability, Force Elements at Sustainability (FE@S) sets sustainability targets for each FE. This is a high level planning tool that is designed to capture potential shortfalls against contingent operations.

¹ AAP-6 ‘NATO Glossary of Terms and Definitions’.

² New definition for JDP 4-00.

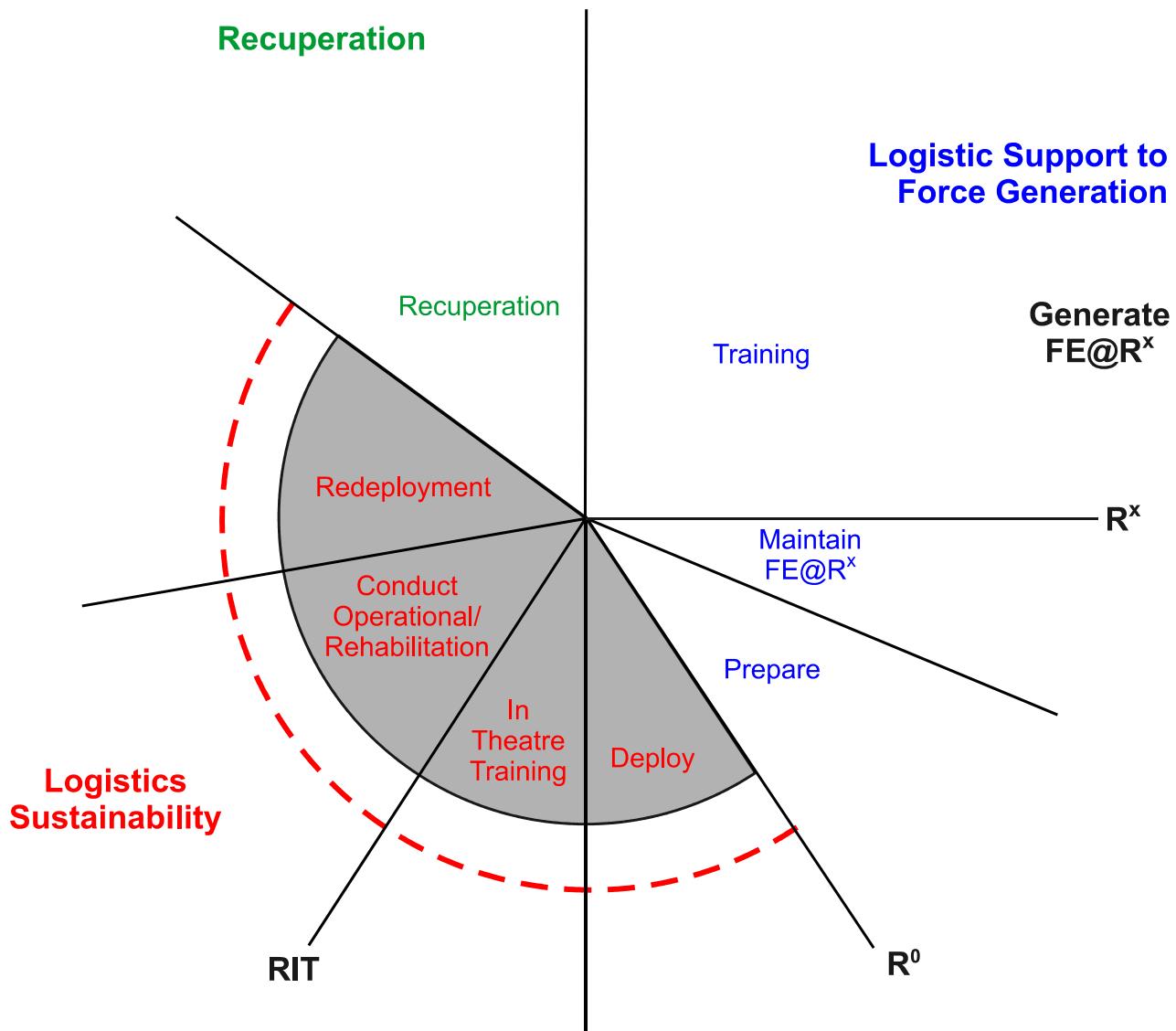


Figure 8.1 - Operational Planning Cycle: Logistic Sustainability

SECTION I - SUSTAINMENT REQUIREMENT

- The required levels of sustainment for a specific operation will be given in Sustainability Statements (SUSTATs).
- The sustainment requirement is determined using the ‘Four Ds’; Distance, Destination, Demand and Duration.

804. **Sustainability Statement.** The SUSTAT confirms the overall logistic resources required and provides the authority for the release and commitment of finance and materiel. It articulates anticipated demand predicted by analysis undertaken as part of the Logistic Estimate process and will be included as part of any operational directive. As the Permanent Joint Headquarters (PJHQ) retains ultimate responsibility for the sustainment of the force throughout an operation, the driving

document is the PJHQ SUSTAT contained within the Logistic Annex to the PJHQ Operational Directive. Subordinate commanders will also issue SUSTATs taking direction from PJHQ and adding further detail pertinent to their own allocated FE. The sustainment requirement, illustrated at Annex 5B, is determined using the ‘Four Ds’ shown in Figure 8.2.

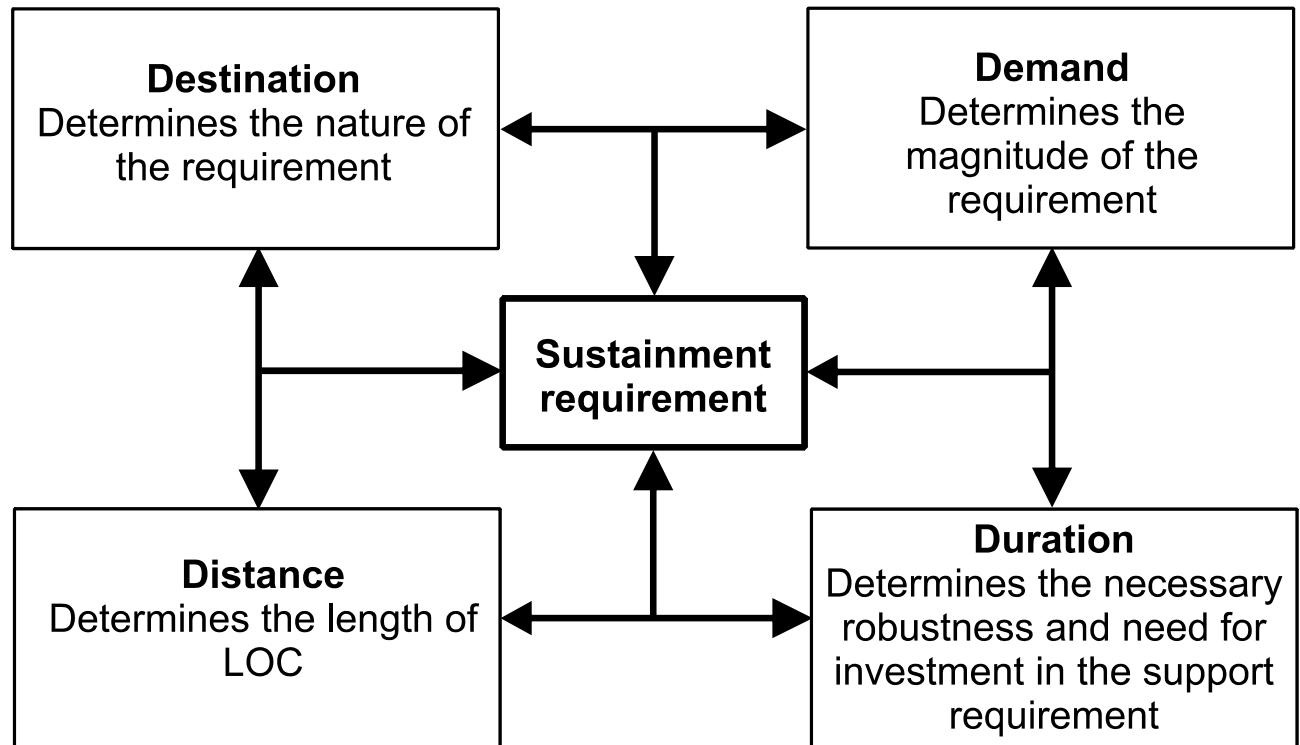


Figure 8.2 - The Four ‘Ds’

805. **Distance.** The distance from the Strategic Base to the Joint Operations Area (JOA) will dictate the length of strategic Lines of Communication (LOC). Distances between the Ports of Disembarkation (PODs), the Joint Supply Area (JSA) and Component Areas of Operation (AOs) will dictate the length of other LOC within the JOA. The influence of Distance on the sustainment requirement includes:

- a. The nature of LOC in terms of transit time, distance, capacity and topography will determine the size, shape, structure and balance of required logistic resources. In considering the nature of the LOC, the Reverse Supply Chain (RSC) should also be considered.
- b. The operating stock requirement will be determined by the volume of resources required to sustain the operation and those additional resources that must be held due to likely resupply times
- c. The requirement for a Forward Mounting Base (FMB) or intermediate staging bases.

806. **Destination.** The destination of an operation will determine the nature of the sustainment requirement. The environment, for example, climate and topography, will have a significant impact on the logistic support required for the deployed force. Other characteristics of the destination will influence the sustainment requirement as follows:

- a. Operating conditions will influence the pattern of wear and tear on equipment and the physiological demands on personnel.
- b. The destination will help to define the strategic LOC based on knowledge of resources available in the JOA or nearby.
- c. Factors such as language, culture, level of available infrastructure, likely attitudes of Host Nation (HN) authorities and availability of In-Country Resources (ICR) provide information that will influence deductions made when considering the other ‘Ds’. For example, the possibility of using contractors or Host-nation Support (HNS) as logistic support options.

807. **Demand.** The demand for logistic support will determine the magnitude of the sustainment requirement. Demand is dependent on the rate of consumption, but is inevitably influenced by the likely intensity and duration of the operation and distance from the Strategic Base. Rate of consumption is a combination of the steady state requirement, cyclical variations and periodic surges in demand, as dictated by operational circumstances:

- a. **Steady State.** Daily maintenance needs that have little variation such as the consumption of rations or the routine use of services. It can be determined fairly easily and accurately from historical records and is the easiest to pre-plan.
- b. **Cyclical.** Additional demand caused by predictable events such as training activities, or seasonal conditions. Cyclical demand will vary between resources and services depending on the nature of the activity.
- c. **Surge.** The greatest logistic challenge because it is the most difficult to predict and the most susceptible to variation such as responding to an opponent’s activity or seizing operational opportunities. There will be peaks and troughs and differing rates of demand will often occur with little warning time. Planning should anticipate the possibility of surge demand that will stretch the logistic organisation and should ensure that a highly responsive system is put in place with access to immediate reserves, rapid delivery means and the ability to switch priorities quickly. Surge demand cannot be maintained indefinitely.

808. **Duration.** The duration of an operation will determine the magnitude of the sustainment requirement, in conjunction with demand covered above, and also,

indirectly, dictate the necessary resilience of the logistic support infrastructure. Duration will influence sustainment as follows:

- a. A prolonged operation requires adequate provision to be made for any necessary roulement of FE, their vehicles and equipment.
- b. The force commander will need to assess the balance of operational risk between conducting a lightly supported operation with limited logistic resources and a fully resourced, possibly better prepared operation, with more robust logistic support that would take longer to mount.

SECTION II – REHABILITATION AND RELIEF IN PLACE

- Rehabilitation is a tactical level activity, following operational degradation, which is carried out within the JOA or FMB, which may be outside the JOA.
- Relief in place (RiP) is conducted during enduring operations where it is necessary to replace units that have completed an operational tour with fresh personnel.

809. **Rehabilitation.** Rehabilitation is defined in Chapter 1 and is a tactical level activity, carried out within the JOA or FMB, following operational degradation. Whilst the rehabilitation process predominantly involves the delivery of resources and the provision of assistance from the Strategic Base, some provision may also be made from within the JOA. Effective rehabilitation requires:

- a. The early engagement of the Strategic Base, through DSCOM, to prepare the equipment, materiel and strategic movement necessary to meet rehabilitation requirements.
- b. The removal of a unit or formation from operations. This is a command decision and will be determined by an assessment of risk, the urgency of need for redeployment either within the current operation or for a subsequent operation, and the availability of reserves.
- c. The designation of a dedicated rehabilitation commander to establish effective Command and Control (C2) of the rehabilitation process. This includes the task organisation of the required support elements.
- d. The establishment of a rehabilitation support organisation for the provision of life support facilities and Force Protection (FP). Life support facilities include: adequate shelter and facilities for resting, sleeping and eating; the conduct of administration and welfare; and medical care including casualty treatment, assessment of Post Traumatic Stress Disorder, disease prevention and

evacuation where necessary. For Maritime FE, it will include the availability of suitable berths and port facilities.

e. The re-establishment of unit strength through the allocation of reinforcement personnel to replace battle casualties, replenishment of unit stocks and replacement of lost materiel, and the repair, recovery and servicing of equipment. This will require heavy engineering support ships or the requisite shore capability for Maritime FE.

f. A stated requirement for the level of combat power that must be achieved, within a specified timeframe, in order to calculate and allocate the resources necessary to conduct rehabilitation.

g. The conduct of collective training to enhance skills and establish unit and formation cohesion; this is particularly important if rehabilitation is part of a wider redeployment activity involving new task organisations.

810. Relief in Place. For enduring operations it is necessary to replace units that have completed an operational tour with fresh personnel. This process may also involve the roulement of unit equipment providing the opportunity to conduct deep maintenance and repair. RiP is conducted in a controlled manner and, for long standing operations, against a predicted schedule. The planning process will be largely the same as that described in Chapter 5, although RiP will necessitate the scheduling of a tailored movements package, which will be coordinated by the Defence Supply Chain and Operational Movements (DSCOM). RiP may result in a distinctive cycle in the sustainment demand profile; demand will fall in the weeks immediately prior to a unit's replacement and remain at a lower level until the replacement unit has established itself in the JOA. DSCOM will adjust the movements schedule accordingly in line with PJHQ direction.

SECTION III – SOURCES OF LOGISTIC SUPPORT

- Initial sustainment will be provided from the materiel deployed with the force.
- The Joint Force Logistic Component (JFLogC) has the ability to reallocate stocks between FE in accordance with the Joint Task Force Commander's (JTFC's) operational priorities.

811. Initial sustainment will be provided from the logistic support deployed with the force and will be based upon the tactical, operational and strategic support as shown in Table 8.3:

Tactical	Operational	Strategic
<p>Logistic Support integral to Components as follows:</p> <ul style="list-style-type: none"> • Afloat support (AFSUP) • Consolidated Allowance List (CAL) • Priming Equipment Packs (PEPs) • Deployable Spares Packs (DSPs) 	<p>Coordination and possible reallocation of logistic support by JFLogC between FE/Components</p> <p>Additional Logistic Support using:</p> <ul style="list-style-type: none"> • HNS • ICR • Contractor Support to Operations (CSO) • PEPs • Multinational logistics 	<p>Logistic Support from the Strategic Base, through the Purple Gate, from:</p> <ul style="list-style-type: none"> • Defence Storage and Distribution Agency (DSDA) • Contractor Logistic Support (CLS) • Integrated Project Teams (IPTs) <p>Directed by Defence Supply Chain and Operational Movements (DSCOM)</p>

Table 8.3 - Sources of Logistic Support

Tactical

812. Tactical logistic support will be provided from initial deployment stocks held by individual Components.

Operational

813. **Joint Logistics.** The JFLogC commands the JSA providing for the receipt and storage of stocks and materiel. Logistic capabilities will be centrally marshalled to make best use of limited supply and distribution resources and to eliminate unnecessary duplication or inefficiency. Stocks, whilst often for the specific use of a single component, will remain the responsibility of the JFLogC until they are transferred to single component responsibility in accordance with component needs and JTFC's priorities. The JFLogC is responsible for ensuring that Joint operating stocks within the JSA are maintained in accordance with the SUSTAT and the JTFC's priorities. The reallocation of stocks between FE requires effective Situational Awareness (SA) between and across formations and components. Sustainment of Class I, food and water, non-specialist Class III, fuel and lubricants, and Class IV, construction materiel, stocks will, wherever possible, be met from a combination of HNS, ICR and, increasingly, by the use of CSO. Other classes such as Class II and V sustainment stocks will be replenished largely from the Strategic Base along the LOC as described in paragraph 815. In addition, the Maritime Component has the ability to provide most Classes of Supply to other components via Sea Basing, both planned and

unplanned. For example, when the Maritime Component includes an amphibious element, then Class V sustainment may be provided to the Land Component from stocks held afloat.

- a. **Host-Nation Support.** HNS is support offered from the nation(s) supporting UK forces within the JOA. Typical examples are fuel and infrastructure resources.
- b. **In Country Resources.** ICR is similar to HNS and describes sustainment that is obtained commercially from within the JOA. This may include indigenous sources and also contractors deployed by other nations.
- c. **Contractor Support to Operations.** CSO describes all those non-government civilian personnel contracted by the MOD and deployed alongside UK Forces. Contractors provide support services across the full range of logistic activity reducing the requirement for military logistic personnel. CSO is covered in detail in Chapter 4, Section III.

Strategic

814. **Support from the Strategic Base.** If sustainment requirements cannot be met from logistic support elements deployed within the JOA, demands will be raised by individual units or their supporting logistic elements, in accordance with JSP 886, to obtain sustainment from the strategic base. DSDA will deal with items that are available from within the military inventory. Those that are not available from the military inventory or are provided under CLS arrangements will be dealt with by the relevant IPT. In both cases, once sustainment items are available they will be passed to the appropriate Strategic Base supply systems and prepared for movement using the principles of the Purple Gate.³

815. **Coupling Bridge for Sustainment.** The Detailed Deployment Plan (DDP)⁴ will be used to ensure that movement assets are allocated to deploy all personnel, equipment and materiel in accordance with the JDOA. For sustainment purposes, PJHQ will task DSCOM with formulating a proposed sustainment movement plan. The movement plan will in effect be a timetable with regular scheduled departures and arrivals and will include both air and surface movement means. DSCOM Movement Operations (Mov Ops) will negotiate the provision of military and charter assets to move sustainment stocks. Director General Joint Supply Chain (DG JSC) is responsible for the ensuring the effective movement of materiel from depots to Ports of Embarkation (POEs) within the strategic base. PJHQ will ensure that the JFLogC and Component Commanders (CCs) have adequate resources to move materiel from PODs to its final destination in the JOA. DSCOM will establish alternative movement

³ The Purple Gate is covered in Chapter 6 and in detail in JSP 886 ‘*The Defence Logistics Support Chain Manual*’.

⁴ The DDP and CB are covered in Chapter 6.

means for those FE operating in the JOA, who are not easily served by standing LOC such as the use of standing commercial contracts for Naval units.

816. Reverse Supply Chain. The build up of unserviceable and surplus items in the JOA creates an unnecessary burden on stock managers and facilities and also wastes limited MOD resources. These items must be either disposed of locally or returned to the UK. Procedures for the RSC are detailed in JSP 886 '*The Defence Logistic Support Chain Manual*'. Logistic staff in the JOA will identify surplus items and seek disposal instructions from DE&S; in addition, IPTs will request that certain specific items or ranges of items be returned from the JOA when no longer serviceable. Items for return will be ascribed a movement priority in the JOA to meet IPT requirements and the Defence Logistics Operations Centre (DLOC) will amalgamate IPT inputs into a single DE&S Theatre Return Priority List. The DLOC will seek guidance from the Assistant Chief of Defence Staff (Logistic Operations) (ACDS (Log Ops) and PJHQ if necessary. If the movement assets moving materiel to the JOA are insufficient to satisfy RSC demand, the DLOC will negotiate additional movement assets.

SECTION IV – MAINTAINING SUSTAINMENT

- The Standard Priority System (SPS) contains 3 movement tiers: Immediate, Priority and Routine.
- Each operational location is given a Supply Chain Processing Time (SCPT) Matrix that is set by PJHQ.
- Priorities are assigned in accordance with the SPS to ensure that those items that are needed most urgently move ahead of less urgent items.
- The DLOC coordinates DE&S support for operations working on behalf of PJHQ to ensure that the JTFC's needs are met.

817. Standard Priority System. Details of the SPS are contained in JSP 886. The SPS contains 3 movement tiers; Immediate, Priority and Routine that for operational locations correspond to Standard Priority Codes (SPCs) 1, 2 and 3. Priorities are assigned by individual demanding units. In order to manage the SPS effectively, and negotiate freight space on limited strategic aircraft, the JFLogC will normally manage the Immediate movement tier on behalf of the JTFC and in consultation with DLOC.

818. Supply Chain Processing Time. Each operational location is given a SCPT Matrix that is set by PJHQ. The matrix details how long it should take for materiel to reach the demanding unit for each of the 3 SPCs. When PJHQ sets the SCPT for a particular location, it takes into consideration the time for the demand to be processed in the Strategic Base, the capacity and speed of the Coupling Bridge (CB) that it has authorised and the time required for onward distribution within the JOA. Typically, SPC 1 and 2 items will move by air and SPC 3 items will move by surface means.

Certain natures of materiel, such as ammunition, require specific diplomatic clearance in addition to that needed for routine flights. Obtaining the necessary clearance can take many days and, if not planned, causes considerable delay; therefore, these items move outside the SCPT.

Setting Priorities

819. Assigning Priorities. The urgency of sustainment needs will vary. Ideally, demands will be placed in a predictive manner in anticipation of a requirement; however, the dynamic nature of military operations dictates that unforeseen requirements are likely to arise that need urgent attention. Units and formations will assign priorities based upon urgency of need and the time predicted for materiel to travel along the CB in accordance with the SPS. Individual units may only place demands using Priority or Routine SPCs. Immediate demands may only be placed on the authority of the JTFC, who may delegate this authority to CCs.

820. Priority Lists. The capacity of the CB is designed to meet the likely need; however, demand is not constant and there will be surge activity. Priorities are assigned in accordance with the SPS to ensure that items needed most urgently move ahead first. Two forms of Priority Lists are drawn up to ensure that the most urgent items receive the necessary priority. They should be regularly reviewed:

- a. **Component Priority Lists.** CCs prioritise their needs and transmit regular Priority Lists to the JTFC to meet current operational requirements.
- b. **Theatre Priority List.** The JTFC prioritises needs across components. This is a J3 led task and the current situation and future operational plan will be used to decide a priority order for component requirements. The JFLLogC will use this priority order when assessing which materiel demands should be listed on the Theatre Priority List. This list, which is passed to DLOC to progress, specifies those items that should be given priority for movement into theatre should a need arise. It only contains the highest priorities, rather than every demand made from the theatre.

Meeting Priorities

821. Defence Logistics Operations Centre. The DLOC is part of DSCOM and coordinates DE&S support for operations working on behalf of PJHQ to ensure that the JTFC's needs are met. The DLOC will also ensure that materiel available for movement is handled in accordance with the priorities set in Theatre. The Theatre Priority List is the primary focus for this activity. The DLOC will recommend changes to movements schedules to ensure that freight moves across the CB within the set SCPT. A regular DLOC SITREP will provide feedback to the JOA.

822. **Consignment Tracking.** Consignment Tracking⁵ enables the movement of materiel to be tracked within the Joint Supply Chain, particularly across the CB. Consignment Tracking and the use of the Joint Demand Tracking System (JDTD) together help units plan in the knowledge their demands are being met. Achieving assured delivery provides the confidence to reduce JOA holdings and contributes to reducing pressure on the CB through the elimination of duplicate demands. All elements involved in the CB must ensure that Consignment Tracking is carried out comprehensively including the return of materiel using the RSC.

⁵ Details are contained in JWP 4-01.5 ‘*Consignment Tracking*’.

(INTENTIONALLY BLANK)



PART 5

Recover

Part 5
Recover

CHAPTER 9 – REDEPLOYMENT AND RECUPERATION

SECTION I – RESTORING COMBAT POWER

- Redeployment involves all the activities necessary for the relocation of units, equipment and materiel to a new destination.
- Recuperation is the replacement of resources; personnel, equipment and materiel, following operational activity in preparation for further operations.

901. Restoring combat power is described in paragraphs 103 and 104. Planning for redeployment and recuperation is an essential element of the overall planning process and must begin before initial deployment. Redeployment is part of the Logistic Sustainment requirement and training activities conducted within the recuperation process are included in Logistic Support to Force Generation. Redeployment and Recuperation within the Operational Planning Cycle (OPC) are shown at Figure 9.1.

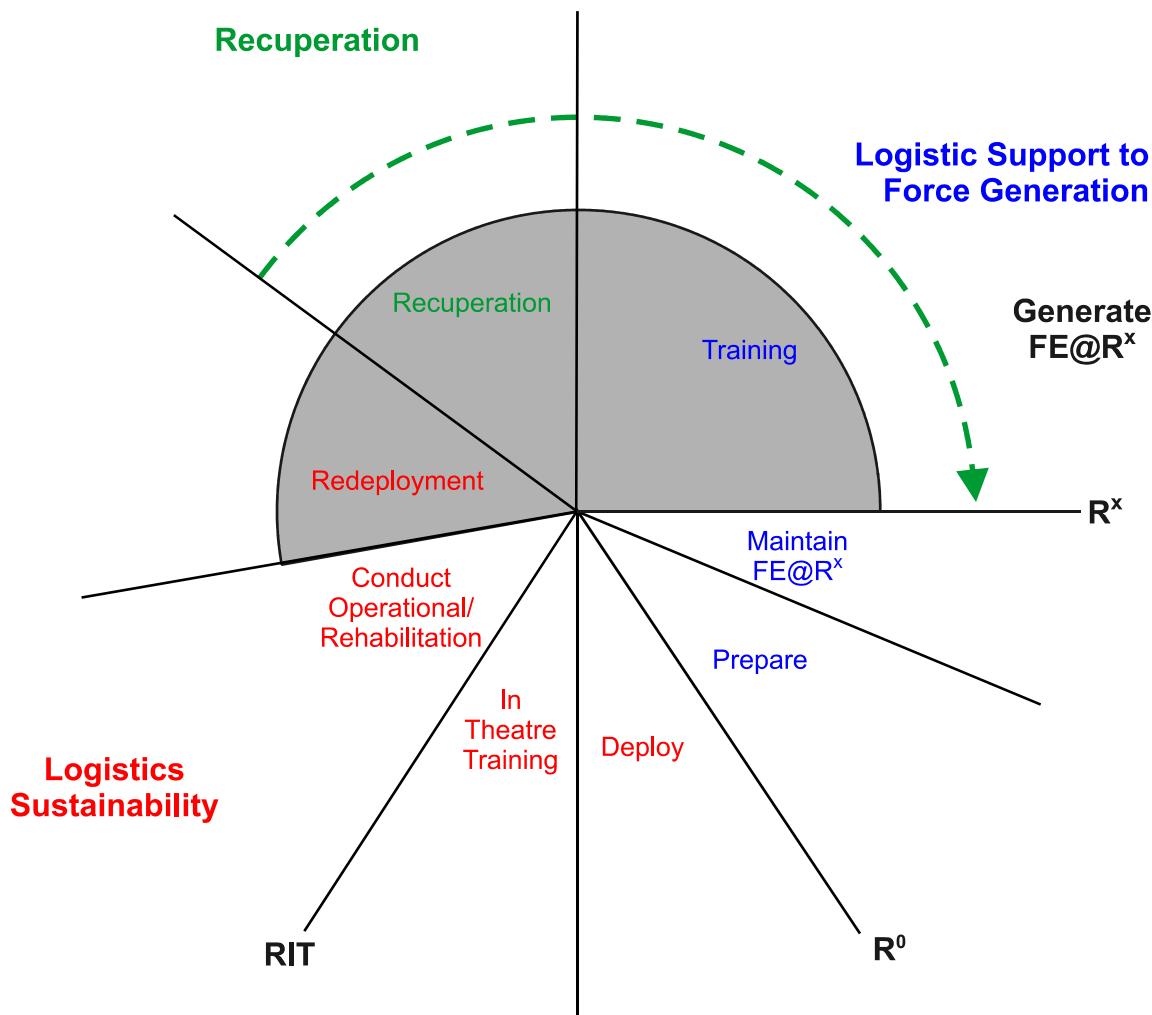


Figure 9.1 - Operational Planning Cycle: Redeployment and Recuperation

SECTION II – REDEPLOYMENT

- Redeployment is effectively Reception, Staging, Onward Movement and Integration (RSOI) in reverse.
- The Logistic HQ should become the supported commander during a redeployment phase in an operation.
- Permanent Joint Headquarters (PJHQ) is responsible for the planning and execution of redeployment.
- Front Line Commands (FLCs) and Defence Equipment and Support (DE&S) are responsible for the management and onward movement of Force Elements (FE) once arrived back at Points of Embarkation (POEs)¹ in the Strategic Base.

902. Redeployment is defined in Chapter 1 and is a very similar process to initial deployment; it is essentially RSOI in reverse. Most of the principles and methodology covered in Chapter 5 ‘*Planning*’, Chapter 6 ‘*Logistic Support to Deployment*’ and Chapter 7 ‘*RSOI*’ apply equally to redeployment.

903. **Command and Control.** During the redeployment phase of an operation the Logistic HQ, either a Joint Force Logistic Component (JFLogC) or a National Support Element (NSE), will normally be the supported commander, although for a small scale operation this function may be exercised by the J4 staff of the Joint Force HQ (JFHQ). To coordinate and execute redeployment from a mature theatre, PJHQ may deploy a specialist HQ, either the Standing JFLogC (SJFLogC) or a Logistic Brigade, depending on the nature and scope of the redeployment task.

904. **Planning.** PJHQ and the Joint Commander (Jt Comd) must consider redeployment issues throughout an operation in order to ensure that FE are adequately prepared for redeployment activities. In most cases, a full redeployment estimate should be conducted at the strategic, operational and tactical levels, including where appropriate a Logistic Estimate and the use of Decision Support Tools (DSTs). For redeployment from a mature theatre, PJHQ would seek to issue a Jt Comd’s Directive, which would include a relevant Logistic Annex. The J4 Joint Mounting Cell (J4 JM Cell) would issue redeployment instructions that would include a Joint Mounting Order (JMO), Coupling Bridge (CB) Directive and a Strategic Movements Instruction (SMI) as covered in Chapter 6. Similarly, the Jt Comd and his Logistic HQ should generate and issue relevant theatre level orders and instructions to direct and coordinate redeployment activity.

905. **Factors.** The following factors should be considered:

¹ To avoid confusion the term POE is used for ports in the Strategic Base, and the term Port of Disembarkation (POD) for ports in the Area of Operations (AO) or Forward Mounting Base (FMB).

- a. **Joint Desired Order of Departure.** PJHQ and the Operational Commander will determine a Joint Desired Order of Departure (JDOD) taking account of continuing operational responsibilities and Force Protection (FP) requirements. FLC requirements for the return of key equipments and the ability of repair agents and base depots used by DE&S Integrated Project Teams (IPTs) to absorb equipment for repair should also be considered and this will be coordinated by Defence Supply Chain and Operational Movements (DSCOM). The JDOD may also be determined by the requirement to conduct follow-on or new operations and the input of Assistant Chief of Defence Staff (Logistic Operations) (ACDS (Log Ops)) is essential.
- b. **Synchronisation.** The run down of capabilities within the JOA requires careful synchronisation with the departure of personnel and equipment. A Synchronisation Matrix, normally constructed by the JFLogC, will assist in this evaluation. Planners must also take into account the fact that due to the force's operational posture and the need to maintain an irreducible minimum capability, the flow down the Reverse Supply Chain (RSC) may not be steady and inevitably there will be a surge as redeployment activity intensifies. The need to ensure that robust Consignment Tracking is in place along the length of the RSC is also paramount to ensure that synchronisation is maintained and the flow properly managed. This will be aided by good communications and the copying of load manifests between theatre, DSCOM and the base depots.
- c. **Movement Assets.** The availability of movement assets will have a major influence both on the JDOD and Synchronisation Matrix. A degree of redundancy should be built into the provision of movement assets, particularly if FE are being redeployed immediately to another operational location. Understanding the size of the redeployment task is essential in this respect and the capture of Force Element Table (FET) data must, therefore, be given an early priority.
- d. **Redeployment Enablers.** Specific enablers may be required to deploy to the JOA to facilitate the closure of locations, assist with the draw-down of support activities and to provide specialist assets and personnel for the redeployment of FE. Functions will include POE activities, the removal of temporary infrastructure, the repackaging of materiel and ammunition and the preparation of equipment for onward movement.
- e. **Hand-over of Infrastructure.** The hand-over of infrastructure and facilities to the Host Nation (HN) or a follow-on nation, as appropriate, must be considered at the outset of redeployment planning. This will include infrastructure that the UK has built or put in place, which it does not intend to recover and intends to hand-over. A definitive list of assets and infrastructure needs to be determined as soon as possible; it is therefore

imperative that accurate records are maintained from the outset of an operation. The synchronisation of the drawdown of infrastructure, while continuing to support combat FE, will also need to be considered. Engineering, estates, finance and contracts capabilities are likely to be essential to manage hand-over activities and resolve problems prior to hand-over.

f. **Gifting and Disposals.** The decision on what materiel and equipment can be gifted or disposed of in theatre and what must be returned to the Strategic Base will need careful and early consideration and will require J8 advice and guidance and the assistance of the Disposal Services Authority. This will include the disposal and recovery of infrastructure that the UK has built or put in place. Further guidance is given in JSP 886 '*The Defence Logistics Support Chain Manual*'.

g. **Closure of Accounts and Contracts.** The closure of contracts and accounts requires specialist personnel. Their deployment should be as early in the process as possible, preferably prior to the redeployment estimate. They should remain in the JOA beyond the final contract closure date, even if this requires special arrangements to be made for their life support.

h. **Sustainability.** Logistic sustainability is required throughout the redeployment process. The operational situation in the JOA and robustness of Lines of Communication (LOC) will determine the extent to which sustainment stocks can be reduced in line with personnel and equipment departures.

i. **Sensitive and Protectively Marked Items.** The redeployment of sensitive equipment and protectively marked items requires special attention to ensure that handling procedures and operations security (OPSEC) are not compromised. In addition, specific equipments, particularly scarce, specialist items, will have equipment support requirements that may influence their position on the JDOD.

j. **Waste Disposal and Remedial Works.** The requirement for waste disposal and remedial work on contaminated sites should not be underestimated.² Failure to make the necessary arrangements to carry out this activity can seriously delay redeployment activity.

k. **Biological Environmental Control.** Personnel, equipment and materiel redeployed from operations must not be permitted to introduce any biological hazard into the UK or any other nation. Assistant Chief of Defence Staff (Logistic Operations) (ACDS (Log Ops)) maintain a database of extant bio-security requirements for redeployments from a wide variety of

² Further detail on Waste Disposal is contained in JSP 418 '*Sustainable Development and Environmental Manual*'.

potential areas of operation. The responsibility for the completion of bio-security measures to the requisite standard rests with unit commanders, not with movements staff; it is the responsibility of the Joint Task Force Commander (JTFC) to ensure unit commanders are made aware of appropriate bio-security measures.

906. Front Line Command Responsibilities. PJHQ is responsible for the planning and execution of redeployment. DSCOM, acting on PJHQ's behalf, will coordinate the movement and flow of equipment and materiel back into the UK. FLCs and DE&S are responsible for the management and onward movement of units, personnel, equipment and materiel from PODs in the Strategic Base. Redeployment flow is shown in Figure 9.2. The roles and responsibilities of FLCs and DSCOM in relation to this activity should be clearly articulated in PJHQ Redeployment Instructions.

- a. **Personnel.** The rapid onward movement of personnel to home locations is a major J4 movements activity and should not be interrupted except in the most unusual operational circumstances. There will be an additional administration requirement for reserves and augmentees. This requirement is covered more fully in IJWP 1-00 '*Joint Operational Personnel Administration*'.
- b. **Equipment.** The onward movement of equipment from PODs is likely to require the employment of additional personnel and transport assets, including commercial support. Care must also be taken to ensure that vehicles returning from operations are in a condition in which they can be legally driven on public roads. Air and Maritime assets will also need to be 'de-operationalised', usually in theatre, and appropriate equipments removed or refitted in accordance with international civilian regulations and National security imperatives.
- c. **Port Clearance.** Clearance from POEs is a unit responsibility under the direction of FLCs. Reception and administrative arrangements should be flexible enough to allow the effective administration and processing of personnel and equipment. FLCs may be required to develop contingency quarantine arrangements and bio security decontamination procedures.

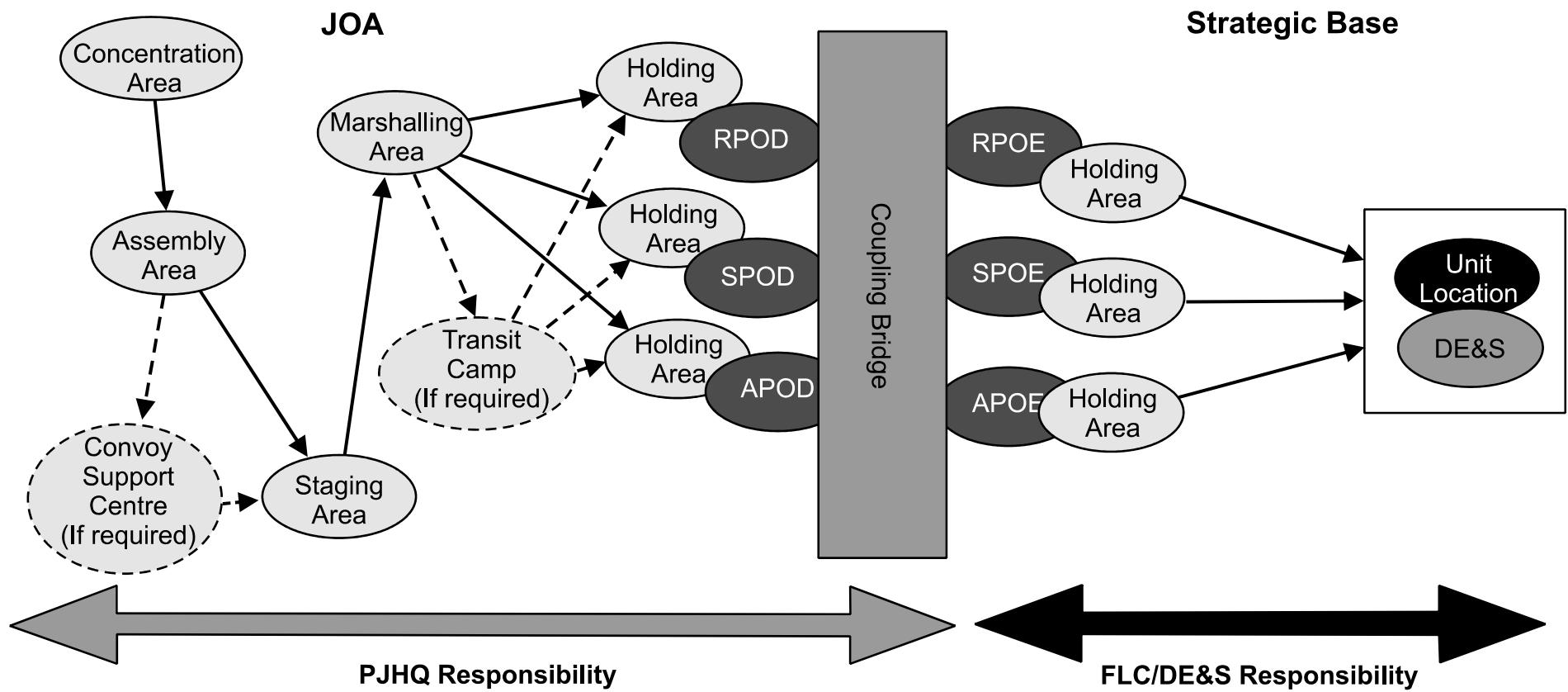


Figure 9.2 - Redeployment Flow³

³ Concentration, Assembly and Staging areas are covered in Chapter 6 ‘Logistic Support to Deployment’.

SECTION III – RECUPERATION

- Recuperation is designed to restore FE to their normal readiness level (R^x).
- Defence Strategic Guidance (DSG) sets out recuperation targets mandating the readiness requirements of FE, following Contingent Operations Overseas.
- The process of recuperation primarily takes place in the Strategic Base.

907. **Planning.** Recuperation is defined in Chapter 1. Planning for, and reporting on, recuperation must encompass all aspects of force generation and sustainability, specifically Manpower, Equipment, Training and Sustainability (METS):

- a. **Manpower.** The replacement of operational losses and achievement of harmony guidelines.
- b. **Equipment.** The replacement, repair and servicing of equipment.
- c. **Training.** The rebuilding of collective and individual performance.
- d. **Sustainability.** The replacement of logistic resources.

908. **Readiness.** Readiness is the time in which a force is to be made ready to carry out the tasks for which it is organised, equipped and trained, measured by its manpower strength, equipment state and collective performance training level.⁴ Recuperation is a precursor to achieving the required readiness criteria. DSG sets out recuperation targets mandating the readiness requirements of FE, following Contingent Operations Overseas, within which they must be capable of carrying out the full range of operations demanded by concurrency assumptions. These generic targets are only valid if FE are operating at or within routine concurrency levels.

909. **Process.** The process of recuperation primarily takes place in the Strategic Base and, as defined, is designed to bring FE and materiel back to their pre-operational readiness level (R^x) or in accordance with revised target levels. Action must be taken to ensure that where resources are double-earmarked other contingencies remain sustainable or are discounted from consideration as concurrent operations.

⁴ AAP-6.

(INTENTIONALLY BLANK)



PART 6

Multinational Issues

Part 6
Multinational Issues

CHAPTER 10 – MULTINATIONAL LOGISTICS AND HOST-NATION SUPPORT

SECTION I – NATO LOGISTIC SUPPORT

- NATO's logistic policy encourages member nations to cooperatively share the provision and use of logistic capabilities and resources to support forces effectively and efficiently.
- AJP-4(B) '*Allied Joint Doctrine for Logistics*', NATO's logistic doctrine, is designed to foster common understanding and cooperative logistic planning at all levels.
- Nations have the ultimate responsibility for providing the required logistic resources to support their forces assigned to NATO.

Policy, Doctrine and Guidance

1001. Strategic. The North Atlantic Council (NAC) and the Defence Planning Committee (DPC) provide broad strategic logistic policy and guidance through the International Staff (IS). The Military Committee (MC) translates this into NATO military logistic policy and guidance through the International Military Staff (IMS) in the form of MC documents. The Senior NATO Logisticians' Conference (SNLC) is the senior advisory body on logistics in NATO. It acts as NATO's coordinating authority on logistics and, on behalf of the MC and NAC, it is responsible for harmonising and coordinating the development of policy recommendations and co-ordinated advice on civil and military logistic matters, Alliance logistic interoperability, and cooperation in logistics. The Committee of the Chiefs of Military Medical Services (COMEDS) advises the MC and is the coordinating body on all military medical policies, procedures and techniques within NATO.

1002. Operational. Allied Command Operations (ACO), in coordination with participating nations, directs and provides guidance to either the Joint Force Command (JFC) or Combined Joint Task Force (CJTF) for the development of logistic and medical plans and logistic Command and Control (C2) arrangements. The Allied Movement Coordination Centre (AMCC) coordinates and de-conflicts national deployment plans producing a Multinational Detailed Deployment Plan (MN-DDP). The AMCC also tracks deployment execution using information provided by nations.

1003. Doctrine. Allied Joint Publication-01(C) (AJP-01(C)) '*Allied Joint Doctrine*' is NATO's capstone doctrine for the planning, execution and support of Allied Joint operations. AJP-4(B) is the keystone Allied Joint logistic doctrine publication. It sets

out NATO's overall logistic doctrine, articulating NATO logistic principles, with an operational level focus in order to foster common understanding and cooperative logistic planning among NATO commanders, nations and NATO agencies. It also provides a common perspective for the planning and conduct of multinational Joint logistic support for Allied operations to support the NATO Commander in the accomplishment of his mission. These publications are intended primarily for use by NATO forces. However, they can be applied, with amendments where necessary and agreed by participating nations, for operations under the umbrella of either the European Union (EU) or a coalition of NATO and non-NATO nations within the framework of a CJTF.

Multinational Operations

1004. Cooperation. NATO logistic support principles emphasise collective responsibility for multinational operations. They encourage members to share cooperatively the provision and use of logistic capabilities and resources in order to support the force effectively and efficiently. Standardisation, cooperation and interoperability in logistics help to build a basis for the flexible and efficient use of logistic support that contributes to operational success. Logistic responsibilities will usually be tailored to the specific circumstances of each operation, following agreement by the participating nations and commands involved.

1005. National Support Elements. Nations should make maximum use of multinational logistic support solutions and limit National Support Elements (NSEs) to the following functions:

- a. The provision of national logistic support and coordination of logistic support functions with other participating nations. NSEs are organised and located as dictated by their national authorities.
- b. Coordination with multinational logistic C2 organisations in order to ensure continuity of the total logistic effort.
- c. Coordination of political and military agreements and arrangements with non-participating nations for access, basing and overflight rights.

Responsibilities

1006. National. Nations have the ultimate responsibility for equipping their forces and for ensuring, individually or by cooperative arrangements, the provision of required logistic resources to support their forces assigned to NATO. If nations elect to support forces through a national support system, it remains vital that they interface with the appropriate NATO multinational logistic coordination body. Nations are

responsible for ensuring that units and formations assigned to NATO are properly supported by an effective and efficient mission tailored logistic structure. Nations retain control over their own resources, until such time as negotiated Transfer of Authority (TOA) arrangements releases them to NATO.¹ The NATO Commander assumes control of commonly provided resources as directed, and is responsible for their logistic support.

1007. NATO Command. The NATO Commander is responsible for determining the logistic requirements for all phases of an operation, and for the coordination of logistic planning and support within his area of responsibility. The Commander is also responsible for the development and promulgation of a logistic support plan that identifies the structures and procedures that will reduce competition for scarce resources by nations and NATO HQs. In addition he must ensure that the logistic force structure and the appropriate C2 arrangements have been established and are capable of supporting the operation. Finally, the Commander coordinates support among contributing nations and with the Host Nation (HN) and retains the responsibility for coordinating the overall logistic effort even when participating nations rely solely on national logistics.

SECTION II – NATO PRINCIPLES

- The NATO principles of logistics emphasise:
 - The collective responsibility of NATO and nations for the logistic support of multinational operations.
 - The authority granted to a NATO commander to control multinational logistic support.
 - The importance of multinationality in logistic provision.

1008. NATO principles of logistics emphasise the need for cooperation and trust between nations and provide guidance for a NATO Commander in executing responsibilities for logistics efficiently and effectively. These principles are in accordance with the general principles for Joint and combined operations, as defined in AJP-01(C), and are also consistent with agreed NATO logistic policy. Simplicity is both a UK and NATO principle; the remaining NATO principles reflect the specific challenges of logistic support for multinational operations and are of value when planning logistic support for any operation.

1009. **Collective Responsibility.** Nations and NATO authorities have a collective responsibility for the logistic support of NATO's multinational operations. This collective responsibility encourages nations and NATO to share the provision and

¹ NATO has no standing TOA agreements. TOA arrangements are negotiated for each operation.

use of logistic capabilities and resources. Standardisation, cooperation and interoperability in logistics are the basis for the flexible and efficient use of logistic support that contributes to operational success.

1010. Authority. There is an essential interdependence between responsibility and authority. Nations and NATO must match the responsibility assigned to any NATO Commander with the delegation of authority to allow the adequate discharge of responsibilities. The NATO Commander must be given sufficient authority to enable him to deploy, receive, employ, sustain and redeploy forces assigned to him by nations in the most effective manner.

1011. Primacy of Operational Requirements. All logistic efforts, from both the military and civil sector, should be focused to meet the operational requirements necessary to accomplish the mission. In order to achieve this, logistics must be fully integrated into the operational structure.

1012. Cooperation and Trust. Cooperation is also a UK principle, but trust between nations and NATO is essential for effective cooperation. Cooperation and trust contributes to the best use of limited resources and must be applied across the whole spectrum of logistics, including between the civilian and military sector within and between nations.

1013. Coordination. Logistics must be coordinated amongst nations and between NATO and nations at all levels. It must also be carried out with non-NATO nations and other relevant organisations as required. Generic and standing pre-arranged agreements help facilitate logistic coordination and cooperation. The overall responsibility for coordination lies with NATO and should be conducted as a matter of routine. This may require the appointment of national representatives or liaison officers at several levels within the logistic command structure to ensure that nations are aware of and react appropriately to both national and NATO priorities, and that such priorities are harmonised.

1014. Provision. Nations and NATO must ensure, individually or collectively, the provision of standardised/agreed logistic resources to support forces allocated to NATO for the full range of possible NATO operations.

1015. Sufficiency. NATO-led operations must have access to sufficient logistics for every phase of the operation. Operations must also be sustainable for the duration of the mission.

1016. Visibility and Transparency. Visibility and transparency of logistic resources is essential for effective logistic support. NATO Commanders require a timely and accurate exchange of information among nations and NATO to prioritise consignment movement into, from and within the JOA. Visibility and Transparency allows for

redirection in accordance with agreements between the Commander and NSEs, and the effective employment of logistic assets.

1017. Multinationality. The use of multinational logistics to support Alliance operations enhances NATO's credibility as a multinational organisation and also improves efficiency and effectiveness. The principles of efficiency and sufficiency make it imperative that agreements/arrangements between nations optimise the logistic capabilities of each member of the alliance reducing duplication and competition between nations. The NATO Commander must have sufficient authority to maintain sustained and effective logistic support throughout all phases of an operation.

SECTION III - MULTINATIONAL LOGISTIC PROVISION

- The type of operation will have a significant impact on the logistic concept of operations but the use of multinational logistic support options must be a consideration for all operations.
- National and multinational logistic activities must be coordinated.
- Cooperation and coordination must extend to non-NATO and non-military organisations.
- Multinational Logistic Provision may be carried out by:
 - Logistic Lead Nation (LLN).
 - Logistic Role Specialist Nation (LRSN).
 - Multinational Integrated Logistic Unit / Multinational Integrated Medical Unit (MILU / MIMU).
- Where the UK assumes the lead for multinational logistic activity on behalf of coalition partners, consideration must be given to how the UK can subsequently handover or transfer such responsibilities in an appropriate timeframe.

1018. Multinational logistics² is a means by which multinational operations can be made more efficient and effective, depending on operational requirements and the specific situation. The principles of multinational logistics are based on NATO procedures but they apply to any multinational operation. Although multinationality in logistics should not be an end in itself, the potential advantages of reducing the size of NSEs for both the multinational force and individual nations should not be underestimated. All nations contributing to the force should consider whether multinational arrangements would provide benefit or whether they would conflict with their national interest.

² Multinational logistic support options are covered in AJP-4.9(A) '*Allied Joint Doctrine for Modes of Multinational Support*'.

Cooperation and Coordination

1019. Operational Considerations. The type of operation will have a significant impact on the logistic concept of operations and the specific C2 structure that is implemented. In all cases the designated Commander, in conjunction with the HN, will coordinate the logistic operation. The early activation and deployment of a Multinational Joint Logistic Centre (MJLC)³ could be an effective force-multiplier, by facilitating the early adoption of multinational approaches to logistic support. In addition, for some operations there may be a need for increased coordination due to absence of an in-location command structure, adequate in-place infrastructure and Host-nation Support (HNS).

1020. National and Multinational Logistic Activities. The ability to coordinate a variety of national and multinational approaches under widely varying conditions should be reflected in the organisation of both static and deployed HQ structures. The primary aim is to provide sound arrangements for the coordination of logistic support available to an operation. In particular the requirement for logistic staff to provide timely, guaranteed support to an operational plan drawing on all available options is facilitated by the existence of robust logistic C2. Logistic staff includes J4 and combined Joint logistic staffs in static and deployed HQ and organisations such as the MJLC.

1021. Non-NATO Organisations. Operations may involve a large number of non-NATO organisations. There should be cooperation between NATO and non-NATO organisations particularly over the use of local resources, to which the military will often require access, particularly where NATO has pre-existing arrangements in place. NATO may also be required to provide some support to non-NATO organisations. An important requirement is to limit the negative effects of competition, which may range from inflationary pricing to exhaustion of scarce local resources. There may also be a necessity to de-conflict Lines of Communication (LOC). Every effort must be made to avoid adverse impact on local populations, economies, environment, infrastructure and the work of humanitarian organisations.

Arrangements for Multinational Logistic Provision

1022. Multinational Task Sharing. The planning process for each operation will consider the appropriate level of Multinational Task Sharing (MNTS). It will be dependent on the nature of the operation taking into account factors such as the composition of the force, the level of equipment and materiel standardisation and the expected duration of the operation. No prescriptive solutions can be nominated in advance although some supplies and services are better suited to provision by standing multinational arrangements. The planning process will identify the requirement and

³ For NATO Reaction Force (NRF) operations, a Joint Logistic Support Group (JLSG) rather than a MJLC may be established.

requests will then be made for force contributions. The Logistic Support Plan for the force will then reflect those supplies and services that nations have agreed can be provided on a multinational basis. The provision of multinational logistic and medical support may be carried out through a number of multi-lateral or bi-lateral arrangements, albeit these arrangements normally adopt one of the following organisational constructs:

- a. **Logistic Lead Nation.** A LLN may accept responsibility, or be designated as being responsible, for procuring and providing a broad spectrum of logistic support for all or part of a deployed force. A LLN assumes overall responsibility for organising and coordinating an agreed level of logistic support for all or part of a multinational force, including HQs, within a defined geographical area for a defined period. This responsibility may also include the procurement of goods and services. Compensation and reimbursement will then be subject to agreements between the nations and organisations involved. A LLN can also provide capabilities as a LRSN.
- b. **Logistic Role Specialist Nation.** A nation may have particular logistic strengths and capabilities that enable it to provide a service or supply a particular commodity for the whole or part of a force. A single nation may procure resources and provide specified support to the entire force, or a portion of the force, with supported nations compensating the LRSN for the support provided. A LRSN assumes responsibility for providing or procuring a particular class of supply or service for all or part of the multinational force. Responsibilities include the provision of assets needed to deliver the supply or service. Compensation and reimbursement are subject to agreement between the nations and organisations involved.
- c. **Multinational Integrated Logistic Unit/Multinational Integrated Medical Unit.** Integrated logistic and medical units are designed to synchronise the conduct of sustainment and logistic support to operations through the optimisation of all logistics capabilities available to the Joint Commander (Jt Comd). A MILU or MIMU is formed when 2 or more nations agree to provide logistic support to a multinational force under the Operational Control (OPCON) of a Force Commander. They are particularly attractive support options when a single nation is capable of providing the nucleus around which the whole unit can be formed.
- d. **NATO Agencies.** NATO agencies such as the NATO Maintenance and Supply Agency (NAMSA) and the NATO Consultation, Command and Control Agency (NC3A) may provide support for operations within their area of competence, in particular negotiating contracts and HNS.

SECTION IV – HOST-NATION SUPPORT

- HNS provides an additional logistic support method for the deployment and sustainment of forces.
- Provision must be based on the actual capabilities of the HN.
- Cooperation between the UK, coalition partners and International Organisations (IOs) for the use of HNS is essential to optimise the support that a HN may make available in order to facilitate activities.

1023. HNS⁴ is dependent on the government of a nation providing support from its own resources to one or more nations operating in or through that country and may include overflight and transit arrangements of their sovereign territory. The assistance may be free, loaned or provided on a repayment basis and may range from providing the political framework for ensuring forces are not hindered in their deployment to the provision of facilities and equipment. HNS does not include local contracting by the deploying force, but it can cover situations where the HN acts as an agent to obtain logistic support from commercial sources on behalf of the deploying force. Provision should be made for the fact that HNS cannot always be guaranteed.

1024. **Host-Nation Support Principles.** A number of principles should be observed if HNS is to make an effective contribution to the logistic support of a deployed force. These are consistent with NATO logistic principles outlined in Section II and reflect experience gained on operations and exercises. Application of these principles in planning for HNS will not guarantee success, but will establish a solid foundation for the development of a constructive HNS plan. The principles are:

- a. **Resources.** HNS is a fundamental source of support for deployed forces and provision must be based on the actual capabilities of the HN. Full account should be taken of national legislation and national priorities. HNs are encouraged to produce a National Capability Catalogue that lists the HNS available to aid logistics planners. However, in many of the locations that the UK may be required to deploy its Armed Forces, this will rarely be possible.
- b. **Cooperation.** Cooperation between the UK, the HN and coalition partners in the provision and use of HNS is essential. Cooperation should be aimed not only at eliminating competition for scarce resources, but also at optimising the support that the HN may make available in order to facilitate operations. The US/UK Acquisition and Cross-Servicing Agreement will form the basis for any such support within any coalition that includes the US.

⁴ Host Nation Support is covered in AJP-4.5(B) ‘Allied Joint Doctrine for Host-Nation Support’.

Cooperation should also extend to IOs and Non-Governmental Organisations (NGOs) that may be operating alongside UK and coalition forces.

c. **Coordination.** Coordination of HNS planning and execution between the UK, coalition partners and national authorities is essential for reasons of operational effectiveness, efficiency and the avoidance of competition for resources. It must be carried out at appropriate levels and may include IOs and NGOs where appropriate. This will require the appointment of a national representative or liaison officer to work alongside other organisations and, where appropriate, with the multinational commander responsible for coordinating HNS.

d. **Efficiency.** The planning and execution of HNS must reflect the most effective use of resources available to fulfil the requirement. In order to ensure that HNS resources are used in the most effective and efficient manner possible to meet operational imperatives, they should be utilised to achieve economies of scale and improve the overall availability of support.

1025. Planning. The use of HNS will have a major impact on logistic planning. It must be evaluated as a factor in the Military Strategic Estimate process and taken into consideration in the overall planning process for operations and exercises. HNS procedures have been developed over time, but HNS planning must be flexible and able to deal both with generic and specific planning assumptions. HNS planning, development and implementation must be properly coordinated in order to provide the services and resources required for operational effectiveness. Within NATO, and with some other major IOs or prospective nations with which there are frequent dealings, Host Nation Support Arrangements (HNSA) have been established. These arrangements include Memorandum of Understanding (MOU), Technical Arrangements (TA) and Implementing Arrangements (IA). The deployment of military forces on expeditionary operations, however, is more likely to involve nations and organisations where there are no existing HNSA. Expeditionary Operations require an ability to develop the necessary HNSA more rapidly and with greater flexibility.

a. **Memorandum of Understanding.** A MOU is usually an umbrella document providing a framework for subordinate documents. It is normally a bilateral arrangement between the HN and the nation wishing to make use of its facilities or resources. For some multinational operations, however, a MOU may be agreed between the HN and an IO such as NATO, the EU or the UN. An MOU will generally cover likely support requirements and address aspects such as responsibilities, finance and liability. Once signed, a MOU implies an intent or willingness of the HN to support forces on its territory. Jurisdiction may be covered in the MOU or in a separate Status of Forces Agreement

(SOFA). For small-scale operations or exercises, a MOU may deal with both principles and procedures and contain detailed requirements in separate Annexes.

b. **Technical Arrangement.** A TA is subordinate to a MOU and its specific purpose will depend upon the scale of the support requirement. In larger scale operations, the TA is likely to be a generic or intermediate document addressing the broad procedural aspects of support to an operation, providing the vehicle for the development of lower-level IAs. For smaller scale operations, the TA would act as an implementing document focusing on detailed support issues. The TA is widely used in NATO and could be a bilateral or multilateral document.

c. **Implementing Arrangement.** An IA is a subordinate document to either a MOU or a TA and can be used to execute the support requirements for a specific operation. The IA will incorporate the detailed information from the SOR for HNS that would have been validated by reconnaissance. In larger scale NATO operations and exercises, the document would be called a Joint Implementation Arrangement (JIA) supplementing a generic TA by covering functional or site specific issues such as base support requirements and procedures. For UK operations, the implementation of HNS plans will be managed and coordinated by the Joint Force Logistic Component (JFLogC) on behalf of the JTFC.

1026. Host-Nation Support Procedures. HNS provides an additional method through which UK forces can be deployed and sustained. This support is dependent on cooperation and coordination between the UK, coalition partners and national authorities. HNS should be considered from the start of the operational planning process with security, efficiency and cost effectiveness the key factors. HNS arrangements should be based upon the best use of available HN resources in order to reduce the amount of organic support required. The coordinated planning and provision of HNS is a key element in the development of logistic support options and requires the development of a range of HNSA.

LEXICON

The Lexicon contains acronyms/abbreviations and terms/definitions relevant to JDP 4-00 and is not intended to be exhaustive. Definitive and more comprehensive details are to be found in JDP 0-01, AAP-6 and AAP-15 respectively.

PART 1 - ACRONYMS AND ABBREVIATIONS

A/R/SPOD	Air/Rail/Sea Port of Disembarkation
A/R/SPOE	Air/Rail/Sea Port of Embarkation
ACDS(Log Ops)	Assistant Chief of Defence Staff (Logistic Operations)
ACO	Allied Command Operations
ACOS	Assistant Chief of Staff
ACS(1)	Air Component Support
ACS(2)	Aircraft Cross Servicing
ACSSU	Air Combat Service Support Unit
ACSU	Air Combat Support Unit
AFSUP	Afloat Support
ALSS	Advanced Logistic Support Site
AMC	Air Mounting Centre
AMCC	Allied Movement Coordination Centre
AML	Augmentation Manning List
AO	Area of Operations
APW	Air Portable Workshop
APAW	Air Portable Avionics Workshop
AT	Air Transport
ATG	Amphibious Task Group
BSG	Brigade Support Group
C2	Command and Control
CAG	Contingency Action Group
CAL	Consolidated Allowance List
CAOC	Commander Air Operations Centre
CAS	Close Air Support
CB	Coupling Bridge
CBRN	Chemical, Biological, Radiological and Nuclear
CCIR	Commander's Critical Information Requirement
CCT	Current Commitments Team
CDI	Chief of Defence Intelligence
CDM	Chief of Defence Materiel
CDS	Chief of Defence Staff

CFCI	Call Forward Coordinating Instruction
CFI	Call Forward Instruction
CHE	Controlled Humidity Environment
CIMIC	Civil-Military Co-operation
CIS	Communications and Information Systems
CJFLogO	Commander Joint Force Logistic Operations
CJO	Chief of Joint Operations
CJTF	Combined Joint Task Force
CLS	Contractor Logistic Support
CoA	Course of Action
COG	Current Operations Group
COMMEDS	Committee of the Chiefs of Military Medical Services
CONLOG	Contractor Logistics
COP	Common Operating Picture
COS	Chiefs of Staff Committee
CSC	Convoy Support Centre
CPT	Contingency Planning Team
CSA	Customer Supplier Agreement
CSO	Contractor Support to Operations
CSS	Combat Service Support
DAC	Defence Augmentation Cell
DACOS	Deputy Assistant Chief of Staff
DAS	Defensive Aid Suite
DCDS(C)	Deputy Chief of the Defence Staff (Commitments)
DCJO (Ops)	Deputy Chief of Joint Operations (Operations)
DCMO	Defence Crisis Management Organisation
DCOS	Deputy Chief of Staff
DCR	Daily Consumption Rate
DCSA	Defence Communication Services Agency
DDP	Detailed Deployment Plan
DE&S	Defence Equipment and Support
DELBOY	Delivery Boy
DFG	Defence Fuels Group
DFID	Department for International Development
DG JtSC	Director General Joint Supply Chain
DI	Deliberate Intervention
DII	Defence Information Infrastructure
DIS	Defence Industrial Strategy
DJC	Director of Joint Commitments
DLB	Defence Logistic Board

DLOC	Defence Logistics Operations Centre
DMB	Defence Management Board
DNBI	Disease and Non-Battle Injury
DOB	Deployed Operating Base
DOS	Day of Supply
DPAs	Defence Planning Assumptions
DPC	Defence Planning Committee
DSCOM	Defence Supply Chain and Operational Movements
DSSDA	Defence Storage and Distribution Agency
DSF	Director Special Forces
DSG	Defence Strategic Guidance
DSP	Deployable Spares Pack
D Strat Plans	Director Strategic Plans
DST	Decision Support Tool
DTIO	Directorate of Targeting and Information Operations
E2E	End to End
EAG	Expeditionary Air Group
EAW	Expeditionary Air Wing
ECI	Expeditionary Camp Infrastructure
EFI	Expeditionary Forces Institute
ELSC	Engineer Logistic Staff Corps
ES	Equipment Support
EU	European Union
FCO	Foreign and Commonwealth Office
FE	Force Elements
FE@R	Force Elements at Readiness
FE@S	Force Elements at Sustainability
FET	Force Element Table
FI	Focused Intervention
F&L	Fuels and Lubricants
FLC	Front Line Command
FLS	Forward Logistic Site
FMB	Forward Mounting Base
FMCC	Force Movement Control Centre
FMCU	Force Movement Control Unit
FOB	Forward Operating Base
FOC	Full Operating Capability
FP	Force Protection
FRP	Forward Repair Pack
FRS	Forward Repair Ship
FSA	Forward Supply Area

FSG	Forward Support Group
GCHQ	Government Communications Headquarters
GLC	Group Logistics Coordinator
HDS	Helicopter Delivery Service
HIC	High Intensity Combat
HN	Host Nation
HNS	Host-nation Support
HNSA	Host-nation Support Arrangements
HRR	High Readiness Reserve
IA	Implementing Arrangement
ICR	In-Country Resources
IER	Information Exchange Requirement
IMS	International Military Staff
IO	International Organisation
IOC	Initial Operating Capability
IPT	Integrated Project Team
IS	Information Systems
IT	Information Technology
ITT	In-Theatre Training
JAMC	Joint Air Mounting Centre
JDOA	Joint Desired Order of Arrival
JDOD	Joint Desired Order of Departure
JDP	Joint Doctrine Publication
JDTS	Joint Demand Tracking System
JFAC(C)	Joint Force Air Component (Commander)
JFC	Joint Force Command
JFET	Joint Force Element Table
JFLC(C)	Joint Force Land Component (Commander)
JFLogC(C)	Joint Force Logistic Component (Commander)
JFMC(C)	Joint Force Maritime Component (Commander)
JHC	Joint Helicopter Command
JIA	Joint Implementation Arrangement
JIC	Joint Intelligence Committee
JLP	Joint Logistic Picture
JLSG	Joint Logistic Support Group
JLSPAs	Joint Logistic Sustainability Planning Assumptions
JLU	Joint Logistics Unit
JM	Joint Mounting
JMO	Joint Mounting Order

JOA	Joint Operations Area
JOP	Joint Operating Picture
JRRF	Joint Rapid Reaction Force
JSA	Joint Supply Area
JSB	Joint Sea Basing
JSC	Joint Supply Chain
JSCETS	Joint Supply Chain Estimate Team Site
JSOR	Joint Statement of Requirement
JSP	Joint Service Publication
Jt Comd	Joint Commander
JTFC	Joint Task Force Commander
JTFHQ	Joint Task Force Headquarters
LAT	Load Allocation Table
LC	Land Component
LCSG	Land Component Support Group
LF	Landing Force
LIM(1)	Linear Metre
LIM(2)	Logistic Information Management
LLN	Logistic Lead Nation
LOC	Lines of Communication
LOGFAS CP	Logistic Functional Area Services Capability Packages
Log IS	Logistic Information Systems
LOT	Logistic Operations Team
LPH	Landing Platform Helicopter
LPT	Logistic Planning Team
LRSN	Logistic Role Specialist Nation
LS	Large Scale
LSR	Logistic Support Regiment
MC	Military Committee
MCC	Movement Coordination Centre
MEDEVAC	Medical Evacuation
MEE	Mission Essential Equipment
METS	Manpower, Equipment, Training and Sustainability
MILO	Military Intelligence Liaison Officer
MILU/MIMU	Multinational Integrated Logistic/Medical Unit
MIS	Minimum Information Set
MJLC	Multinational Joint Logistic Centre
MN	Multinational
MN-DDP	Multinational Detailed Deployment Plan
MNTS	Multinational Task Sharing
MOB	Main Operating Base

MOU	Memorandum of Understanding
MPS	Military Provost Staff
MS	Medium Scale
MSA	Main Supply Area
MSE	Military Strategic Estimate
MSFITS2	Modularised Support Force – Packaging IT System
MS NE	Medium Scale Non-Enduring
NAC	North Atlantic Council
NCC	National Contingent Commander
NEC	Networked Enabled Capability
NGO	Non Governmental Organisation
NHS	National Health Service
NSE	National Support Element
NEO	Non-Combatant Evacuation Operation
NRF	NATO Response Force
NTM	Notice to Move
OC(1)	Operational Capability
OC(2)	Other Combat
OGD	Other Government Department
OLRT	Operational Liaison and Reconnaissance Team
OMAR	Operational Maintenance and Repair
OMP	Operational Mounting Process
OPC	Operational Planning Cycle
OPCOM	Operational Command
OPCON	Operational Control
OPDEF	Operational Defect
OPG	Operational Planning Group
OPLAN	Operational Plan
OPSEC	Operational Security
ORA	Operational Re-Arming
ORC	Operational Readiness Cycle
ORP	Operational Ration Pack
OT	Operations Team
OTG	Operational Tasking Group
PCRF	Primary Casualty Receiving Facility
PCS	Postal and Courier Service
PE	Peace Enforcement
PEP	Priming Equipment Pack
PHC	Primary Health Care
PHEC	Pre-Hospital Emergency Care

PJHQ	Permanent Joint Headquarters
PJOB	Permanent Joint Operating Base
PK	Peacekeeping
PM	Performance Management
PMC	Personnel, Mail and Cargo
PMS	Performance Management System
POD	Port of Disembarkation
POE	Port of Embarkation
PP	Power Projection
PSA	Political Strategic Analysis
PW	Prisoner of War
RFA	Royal Fleet Auxiliary
RFA 96	Reserve Forces Act 1996
RFI	Request for Information
RiP	Relief in Place
RIT	Readiness In-Theatre
RLC	Royal Logistic Corps
RM	Royal Marines
RMP	Royal Military Police
RoRos	Roll on Roll off Ferries
RP	Resources Plans
RSC	Reverse Supply Chain
RSOI	Reception, Staging, Onward Movement and Integration
RSOM	Reception, Staging and Onward Movement
RTLP	Recognised Theatre Logistic Picture
SA	Situational Awareness
SCP	Strategic Campaign Plan
SCPT	Supply Chain Processing Time
SDA	Service Delivery Agreement
SF	Special Forces
SG	Surgeon General
SH	Support Helicopters
SHC	Secondary Health Care
SIB	Special Investigations Branch
SIS	Secret Intelligence Service
SJC UK	Standing Joint Command UK
SJFLogC	Standing Joint Force Logistic Component
SMC	Sea Mounting Centre
SME	Subject Matter Expert
SMI	Strategic Movement Instruction
SNLC	Senior NATO Logisticians Conference

SOC	Special Operations Code
SOP	Standard Operating Procedure
SOR	Statement of Requirement
SPC	Standard Priority Code
SPG	Strategic Planning Group
SPS	Standard Priority System
SS	Steady State
SSE	Support Solutions Envelope
SSFI	Small Scale Focussed Intervention
SSR	Security Sector Reform
Strat AE	Strategic Air Evacuation
SUSTAT	Sustainability Statement
TA	Technical Arrangement
TACOM	Tactical Command
TAG	Tailored Air Group
TDA	Temporary Deployed Accommodation
TG	Task Group
TLR	Total Logistic Requirement
TOA	Transfer of Authority
TRC	Theatre Reception Centre
UOR	Urgent Operational Requirement
VCDS	Vice Chief of the Defence Staff
VHR	Very High Readiness
WIA	Wounded in Action

PART 2 – TERMS AND DEFINITIONS

Administration

1. The management and execution of all military matters not included in tactics and strategy.
2. The internal management of units. (AAP-6)

Area of Operations

An operational area defined by a joint commander for land or maritime forces to conduct military activities. Normally, an area of operations does not encompass the entire joint operations area of the joint commander, but is sufficient in size for the joint force component commander to accomplish assigned missions and protect forces. (AAP-6)

Civil Military Co-operation

The coordination and cooperation, in support of the mission, between the NATO Commander and civil actors, including the national population and local authorities, as well as international, national and non-governmental organisations and agencies. (AAP-6)

Combat Service Support

The support provided to combat forces, primarily in the fields of administration and logistics. (AAP-6)

Contractor Support to Operations

Includes all forms of contractor support replacing what was previously known as Contractors on Deployed Operations (CONDO). Contractor Support to Operations encompasses CONDO, Contractor Logistic Support (CLS), where in-service equipment is maintained under contract with the equipment provider and the use of contractors through the PJHQ Contractor Logistic (CONLOG) contract where a range of services can be provided from a long term commercial contract. (JDP 4-00)

CONLOG

A service provision enabling contract managed through PJHQ that can provide a wide range of services including food supply and catering, accommodation and facilities management, infrastructure construction, conservancy services, communications services and facilities, airfield management and support services, and interpreters. (JDP 4-00)

Consignment tracking

The ability to track all items at all times moving in all directions between manufacturer and end user. (JDP 4-01.5)

Cooperation

Joint and multinational operations require a co-operative approach to logistics from planning to execution. (JDP 4-00)

Coupling Bridge

The series of activities through which Force Elements, equipment and materiel are delivered from the Strategic Base to the Joint Operations Area, specifically from Air and Sea Ports of Embarkation to Air and Sea Ports of Disembarkation, and returned, in accordance with the Joint Task Force Commander's priorities. It involves all the strategic assets, infrastructure and facilities required. (JDP 4-00)

Days of Supply

A calculated quantity of combat supplies each formation can be expected to consume on a daily basis dependent upon the theatre of operations. (JDP 4-00)

Defence Supply Chain Operations and Movements Combines the functions of the Defence Transport and Movements Agency with those of the Defence Logistics Operations Centre. It provides Defence and other authorised users with agreed transport and movements services worldwide. It provides PJHQ with a single DE&S operational focus for mounting and sustaining operations. (JDP 4-00)

Defence Industrial Strategy

Promotes a sustainable industrial base that retains in the UK those industrial capabilities, including infrastructure, skills, knowledge and capacity, needed to ensure the appropriate level of industrial support for Defence. (JDP 4-00)

Deployment Operating Base

A base, other than the peacetime base, having minimum essential operational and support facilities, to which a unit or part of a unit will deploy to operate from in time of tension or war. (AAP-6)

Detailed Deployment Plan

The practical coordination of tasks in support of mounting an operation. The Plan encompasses all orders and directions that allocate strategic lift assets and detail the embarkation of personnel and cargoes. Production of the Plan denotes the point in the mounting process where there is a change in emphasis from deployment planning to deployment execution. (JDP 4-00)

Equipment

All non-expendable items needed to outfit/equip an individual unit or organisation. (AAP-6)

Force Generation

The process of providing suitably trained and equipped forces, and their means of deployment, recovery and sustainment to meet all current and potential future tasks, within required readiness and preparation times. (JDP 0-01.1)

Force Protection

The means by which operational effectiveness is maintained through countering the threats from adversary, natural and human hazards, including fratricide, in order to ensure security and freedom of action. (JDP 0-01.1)

Forward Mounting Base

A base (also deployment operating base) established within the operational area to support tactical operations at forward operating bases. It will be resourced to a greater level than a forward operating base, including C2, logistics and administrative support elements. (JDP 0-01.1)

Host Nation

A nation which, by agreement:

1. receives forces and materiel of NATO or other nations operating on/from or transiting through its territory;
2. allows materiel and/or NATO organisations to be located on its territory; and/or
3. provides support for these purposes. (AAP-6)

Host-Nation Support

Civil and military assistance rendered in peace, crisis or war by a host nation to NATO and/or other forces and NATO organisations which are located on, operating on/from, or in transit through the host nation's territory. (AAP-6)

Host-Nation Support Arrangements

Those documents which detail the support, political, legal and/or financial arrangements agreed upon by national and NATO authorities and which are necessary to provide Host-nation Support to operations and exercises. (AJP-4.5(B))

Implementing Arrangement

Follow-on documents which establish the commitment between the participants concerning the provision and receipt of Host Nation Support (HNS). It includes the most detailed information on the required and offered support, the site specific procedures to implement the support arrangements and the reimbursement details. (AJP-4.5(B))

In Country Resources

Resources provided to a force from the non-governmental infrastructure of a country. (JDP 4-00)

Infrastructure

A term generally applicable for all fixed and permanent installations, fabrications or facilities for the support and control of military forces. (AAP-6)

Integrated Logistics

Describes the involvement of external organisations working in partnership with the military to provide logistic support to deployed forces and in the Strategic Base. These organisations include industry, Contractor Support to Operations, Other Government Departments and, where appropriate, Host-nation Support and multinational logistic support. (JDP 4-00)

Integration

The synchronised transfer of operationally ready units into the Joint Force. Integration is designed to properly orientated troops to the operational area and includes acclimatisation, training, tactical configuration and situational awareness. (JDP 4-00)

Interoperability

The ability to operate in synergy in the execution of assigned tasks. (AAP-6)

Joint Force Logistic Component

A task-organised, Joint logistic command and staff organisation that provides a single Joint focus for all logistic activity in support of a deployed Joint force. It has particular responsibility for the Reception, Staging and Onward Movement of Force Elements in the Joint Operations Area and the sustainment of the operation. It commands the theatre end of the Coupling Bridge and ensures that FE and sustainment stocks arrive in theatre in accordance with the JTFC's priorities and are deployed to Components as required. (JDP 4-00)

Joint Operations Picture

The total set of shared information on a particular operation, or Joint Operations Area, available through a secure information environment on CIS networks to support situational awareness and decision-making by UK commanders, and to facilitate information sharing with allies and partners. (JDP 0-01.1)

Joint Operations Area

An area of land, sea and airspace, defined by higher authority, in which a designated Joint Task Force Commander plans and conducts military operations to accomplish a specific mission. A Joint Operations Area including its defining parameters, such as time, scope and geographic area, is contingency/mission-specific. (JDP 0-01.1)

Joint Sea Basing

Use of the sea as a base within Joint Operations in order to contribute to an optimum footprint ashore. (JDP 0-01.1)

Joint Supply Chain

The network of nodes comprising resources, activities and distribution options that focus on the rapid flow of information, services and material between the Strategic Base and deployed Force Elements in order to generate, sustain and redeploy operational capability. (JDP 4-00)

Joint Supply Chain Blueprint

A design framework that facilitates the provision of an operation-specific Joint Supply Chain capability. It sets out a number of key principles and supporting activities that ensure the effective operation of a particular JSC design. (JDP 4-00)

Lead Service

Analogous to Logistic Lead Nation – where a Service undertakes the procurement and provision of a range of materiel and services for the benefit of all, e.g. fuel, rations, common user equipment. (JDP 0-01.1)

Lines of Communication

All the land, water, and air routes that connect an operating military force with one or more bases of operations, and along which supplies and reinforcements move. (AAP-6)

Logistics

The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, those aspects of military operations which deal with:

1. Design and development, acquisition, storage, movement, distribution, maintenance, evacuation and disposal of materiel.
2. Transport of personnel.
3. Acquisition or construction, maintenance, operation and disposition of facilities.
4. Acquisition or furnishing of services
5. Medical and health service support. (AAP-6)

Logistic Agility

The utilisation of whatever resources are available in the most appropriate way to meet the demands of a specific operational circumstance. A balance must be struck between the use of rigid systems and structures, which can meet the requirement for simplicity and assist with co-operative measures and the need for functional agility. (JDP 4-00)

Logistic Efficiency

The achievement of the maximum level of support for the least logistic effort, making the most efficient use of finite resources, transportation assets and Lines of Communication. Logistic efficiency ultimately determines the most appropriate organisational structures and necessary resources to support an operation, in some cases employing alternative, possibly non-military, support arrangements. (JDP 4-00)

Logistic Footprint

The impact of logistic activity in the Joint Operations Area. It identifies the utilisation of real estate and the consumption of resources, including manpower, equipment, infrastructure, supplies and Host-nation Support that logistic activity in support of an operation will require. It includes those resources that are deployed along Lines of Communication, where they are required for logistic activity and any liability for additional Force Protection assets. (JDP 4-00)

Logistic Foresight

The ability to predict and circumvent critical logistic constraints to the Commander's freedom of action. Logistic planners, at all levels, must analyse the probable course of future operations, in conjunction with operational planners, and forecast the likely requirement for personnel, materiel, equipment and services. (JDP 4-00)

Logistic Functional Control

The authority to direct the method and processes employed to conduct logistic functions in order to ensure commonality and efficient use of resources. (JDP 4-00)

Logistic Information Management

The combination of structures, systems, processes, data and terminology used to generate, store, distribute and dispose of Logistic Information within NATO and between NATO and nations in a secure, timely, efficient and effective way. (MC 319/2)

Logistic Lead Nation

One nation assumes overall responsibility for organising and coordinating an agreed broad spectrum of logistic support for all or part of a multinational force, including headquarters, within a defined geographical area for a defined period. The Logistic lead Nation can also provide capabilities as Logistic Role Specialist Nation at the same time. (MC 319/2)

Logistic Planning Team

A PJHQ J1/J4 Team that is formed at the outset of planning and meets as necessary either physically, through VTC or virtually. It acts as the vehicle for coordinating all logistic planning activity for contingencies or operations, depending on the scale of the operation. (JDP 4-00)

Logistic Process Owner

The logistics process is owned by Chief of Defence Materiel on behalf of the Defence Management Board to ensure coherence across the logistics process. (JDP 4-00)

Logistic Role Specialist Nation

One nation assumes the responsibility for providing or procuring a specific logistic capability and/or service for all or part of the multinational force within a defined geographical area for a defined period. Compensation and/or reimbursement will then be subject to agreement between the parties involved. (MC 319/2)

Maintenance

1. All actions taken to retain equipment in or to restore it to a specified condition, including inspection, testing, servicing, classification as to serviceability, repair, rebuilding and reclamations.
2. All supply and repair action taken to keep a force in condition to carry out its mission.
3. The routine recurring work required to keep a facility (plant, building, structure, ground facility, utility system, or other real property) in such condition that it may be continuously utilised, at its original or designed capacity and efficiency, for its intended purpose. (AAP-6)

Materiel

The stores and equipment (as opposed to personnel) available or required for an undertaking. (JDP 0-01.1)

Memorandum of Understanding

A written overarching bilateral or multilateral agreed document which implies an intent or responsibility to support allied forces and organisations. (MC 334/2).

Movement

The activity involved in the change in location of forces, equipment, personnel and stocks as part of a military operation. Movement requires the supporting capabilities of mobility, transportation, infrastructure, movement control and support functions. (MC 319/2)

Mounting

All preparations made in areas designated for the purpose, in anticipation of an operation. It includes the assembly in the mounting area, preparation, and maintenance within the mounting area, movement to loading points, and subsequent embarkation into ships, craft, or aircraft if applicable. (AAP-6)

Multinational Integrated Logistic Unit

A Multinational Integrated Logistic Unit is formed when two or more nations agree, under the Operational Control of a Force Commander at joint force or component level, to provide logistic support to a multinational force. (MC 319/2)

Multinational Logistics

The full spectrum of modes used to logically support operations other than purely national, such as multinational integrated logistic support, role specialisation support and lead nation logistic support. (JDP 0-01.1)

National Support Element

Provides the national logistic focus to a Joint Commander within a multinational operation. It delivers a coordination and liaison function between the UK, other deployed coalition forces and the Jt Comd. (JDP 4-00)

Onward Movement

The process of moving units, personnel, equipment and materiel from the Reception area, or Staging Areas if required, to their operational deployment location. Onward Movement may be to any of the Components, including to vessels at sea and may utilise military, Host-nation Support or locally hired transport assets. (JDP 4-00)

Operational Command

The authority granted to a commander to assign missions or tasks to subordinate commanders, to deploy units, to reassign forces, and to retain or delegate operational and/or tactical control as may be deemed necessary. It does not include responsibility for administration. (AAP-6)

Operational Control

The authority delegated to a commander to direct forces assigned so that the commander may accomplish specific missions or tasks which are usually limited by function, time or location; to deploy units concerned, and to retain or assign tactical control of those units. It does not include authority to assign separate employment of components of the units concerned. Neither does it, of itself, include administrative or logistic control. (AAP-6)

Operations Security

The process which gives a military operation or exercise appropriate security, using passive or active means to deny the enemy knowledge of the dispositions, capabilities and intentions of friendly forces. (AAP-6)

Pre-position

To place military units, equipment, or supplies at or near the point of planned use or at a designated location to reduce reaction time, and to ensure timely support of a specific force during initial phases of an operation. (AAP-6)

Purple Gate

The single point of entry into the Joint Supply Chain to ensure the regulation of materiel flow into the JSC for the Sustainment of operational Theatres. (JDP 4-00)

Readiness

The period of time measured from an initiation order to the moment when the HQ or unit is ready to perform its task from its peacetime location (permanent or forward deployed) or ready for deployment. (MC 317/I)

Reception

The process of receiving, offloading, marshalling and transporting personnel, equipment and materiel from strategic or operational lift through sea, air, or land transportation Ports of Disembarkation. It involves the preparation of facilities, initial administration and briefing of personnel and their subsequent transport away from the point of disembarkation. (JDP 4-00)

Reception, Staging and Onward Movement

The phase of the deployment process that transitions units, personnel, equipment and materiel from arrival at Ports of Disembarkation to their final destination. (MC 336/2)

Reception, Staging, Onward Movement and Integration

The series of activities that enable Force Elements, on arrival in theatre, to attain Full Operating Capability as part of a Joint force. It is a complex, often prolonged, and frequently dispersed process, usually coordinated by the JFLogC Commander on behalf of the Joint Commander. (JDP 4-00)

Recognised Theatre Logistic Picture

The aggregation of logistic data on quantities, location, condition and transit status to provide a near real time disposition of logistic resources, which can be compared with rates of demand and replenishment to inform logistic planning. (JDP 4-00)

Recuperation

The replacement of resources, including personnel, equipment and materiel, following operational activity in preparation for further operations. It includes the training necessary to restore FE to their normal readiness level (R^x). (JDP 4-00)

Redeployment

The process of preparing and executing the relocation of units, equipment and materiel to a new destination. This may be to a new deployment area or to peacetime locations where recuperation will take place. (JDP 4-00)

Rehabilitation

The processing, usually in theatre in a relatively quiet area, of units, individuals and equipment recently withdrawn from combat operations. The processing involves resting units and personnel, restoring equipment and personnel to operational fitness, issuing replacement personnel, supplies and equipment, undertaking training and generally being made ready for re-employment in combat operations. (JDP 4-00)

Relief in Place

An operation in which, by direction of higher authority, all or part of a unit is replaced in an area by the incoming unit. The responsibilities of the replaced elements for the mission and the assigned zone of operations are transferred to the incoming unit. The incoming unit continues the operation as ordered. (AAP-6)

Repair

Technical operation to restore operational functions to an equipment or repairable damaged parts by adjustment, manufacture or the replacement of defective components. (JDP 0-01.1)

Reverse Supply Chain

Returns unserviceable and surplus items from the Joint Operations Area. Logistic staff in the JOA will identify surplus items and seek disposal instructions from Defence Equipment and Support and, in addition, Integrated Project Teams will request that certain specific items or ranges of items be returned from the JOA when no longer serviceable. (JDP 4-00)

Simplicity

In order to ensure that logistic arrangements are as practically robust and as readily understood, as possible, they must be simple, both in their concept and execution. (JDP 4-00)

Staging

The process of assembling, temporary holding, and organising of arriving personnel, equipment and materiel into formed units, as they prepare for onward movement and further activities. Staging is a life support function which, at its simplest, feeds and accommodates arriving personnel in a benign or protected environment. (JDP 4-00)

Strategic Base

Comprises military assets, industrial capacity both national and international, civilian contractors and NHS hospitals. Military assets include elements owned by all 3 Services and the DLO. (JDP 4-00)

Supplies

All materiel and items used in the equipment support and maintenance of military forces. (AAP-6)

Supply Chain Processing Time

The time that it will take for demanded materiel to reach the demanding unit. This is based on the Standard Priority Code of the demand, the time it takes for the demand to be processed in the Strategic Base, the capacity and speed of the Coupling Bridge and the time required for onward distribution within the Joint Operations Area. (JDP 4-00)

Sustainability

The ability of a force to maintain the necessary level of combat power for the duration required to achieve its objectives. (AAP-6)

Sustainment

The activity and resources necessary to sustain a force. (JDP 4-00)

Tactical Command

The authority delegated to a commander to assign tasks to forces under his command for the accomplishment of the mission assigned by higher authority. (AAP-6)

Technical Arrangement

A written bilateral document for a specific operation or exercise. It provides the concept, responsibilities, procedures and the detailed financial and legal aspects for the provision of Host-nation Support by the Host Nation to the Sending nation /NATO Commander. The Arrangement supplements the Memorandum of Understanding and supports the development of concise Implementing Arrangements. (AJP-4.5(B))

Total Logistic Requirement

Combining the requirements for logistic support to force generation and logistic sustainability produces the Total Logistic Requirement. (JDP 4-00)

Transfer of Authority

Within NATO, an action by which a member nation or NATO Command gives operational command or control of designated forces to a NATO Command. (AAP-6)

(INTENTIONALLY BLANK)

REFERENCE PUBLICATIONS

1. The following publications include non-logistic doctrine publications referred to in JDP 4-00 and more specialist logistic doctrine publications that should be used in conjunction with JDP 4-00.

2. **UK and NATO Non-Logistic Publications:**

- a. **AAP-6** ‘*NATO Glossary of Terms and Definitions*’.
- b. **AAP-15** ‘*NATO Glossary of Abbreviations*’.
- c. **JDP 0-01.1** ‘*UK Glossary of Joint and Multinational Terms and Definitions*’.
- d. **JDP 01** ‘*Joint Operations*’.
- e. **JWP 3-00** ‘*Joint Operations Execution*’.
- f. **JWP 5-00** ‘*Joint Operations Planning*’.
- g. **AJP-3.14 (JDP 3-64)** ‘*Allied Joint Doctrine for Force Protection*’.
- h. **IJWP 1-00** ‘*Joint Operational Personnel Administration*’.

3. **UK Logistic Publications:**

- a. **JWP 4-01** ‘*Logistic Enablers for Joint Operations*’. This publication contains 7 JTTPs that deal with specific Joint logistic enablers that are delivered to a deployed force; Water, Fuel, Consignment Tracking, Air Despatch, Operational Feeding, Mounting and Power.
- b. **JDP 4-03** (2nd Edition) ‘*Medical Support to Joint Operations*’.
- c. **JWP 4-05** ‘*Infrastructure Management on Joint Operations*’. This publication contains 7 JTTPs that cover the design, construction and management of operational infrastructure.

4. **NATO Logistic Publications:**

- a. **AJP-4(B)** ‘*Allied Joint Doctrine for Logistics*’. This is the capstone NATO logistic doctrine publication. It should be used in conjunction with JDP 4-00 when deployed on multinational operations involving NATO countries or using NATO procedures. There are a number of subordinate publications as follows:
 - (1) **AJP-4.4(A)** ‘*Allied Joint Movement and Transportation Doctrine*’.

- (2) **AJP-4.5(B)** ‘*Allied Joint Host Nation Support Doctrine*’.
- (3) **AJP-4.6(A)** ‘*Multinational Joint Logistic Centre (MJLC) Doctrine*’.
- (4) **AJP-4.7** ‘*Allied Joint Petroleum Doctrine*’.
- (5) **AJP-4.9(A)** ‘*Allied Joint Doctrine for Modes of Multinational Support*’.
- (6) **AJP-4.10(A)** ‘*Allied Joint Medical Support Doctrine*’.
- (7) **ALPs-4.1, 4.2 and 4.3**, which set out NATO Maritime, Land and Air Component logistics in a joint framework.

5. NATO Military Committee (MC) Logistic Publications:

- a. **MC 319/2** ‘*NATO Principles and Policies for Logistics*’.
- b. **MC 326/2** ‘*NATO Principles and Policies of Operational Medical Support*’.
- c. **MC 334/1** ‘*NATO Principles and Policies for HNS Planning*’.
- d. **MC 336/2** ‘*NATO Principles and Policies for Movement and Transportation*’.
- e. **MC 526** ‘*NATO Response Force Logistic Concept*’.

6. Joint Service Publications (JSPs):

- a. **JSP 418** ‘*Sustainable Development and Environmental Manual*’.
- b. **JSP 567** ‘*Contractors on Deployed Operations*’.
- c. **JSP 886** ‘*The Defence Logistics Support Chain Manual*.’