



Land Operations



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Suggestions for change or queries are welcomed and should be sent to Warfare Branch Editor, Headquarters Field Army, Land Warfare Development Centre, Imber Road, Warminster BA12 0DJ

Foreword

CGS Foreword to ADP Land Operations

ADP Land Operations is the British Army's core doctrine. It provides the framework of understanding for our approach to combat and to operations. It is the foundation for all of our tactical doctrine. It recognises that the nature of warfare remains constant: it remains visceral and violent, characterised by friction, in which the simplest things become difficult; its outcomes are more often about the effects on peoples' minds than they are about physical effects; and it is always about politics. This new edition is necessary because the character of conflict has evolved significantly due to the pervasiveness of information.

The context is complex and dynamic. We live and fight in a goldfish bowl. There are few secrets any longer. We have access to multiple audiences and they have access to us. No longer is there a clear distinction between war and peace. We live in an era of constant competition and confrontation in which our adversaries exploit the grey area short of combat operations to seek advantage. There is no boundary between what happens abroad and what happens at home. Success is more likely to be achieved through non-military or non-lethal means, and invariably it is the triumph of the narrative that is decisive, not necessarily the facts on the ground. The battlefield is increasingly decentralized with a premium placed on the talent of low level leadership and its understanding of the strategic context. And the expectations of military restraint, as well as the complexity of the legal context, constrain commanders as never before.

The two central ideas in British Doctrine remain constant. The requirement for Mission Command and the Manoeuvrist Approach has not changed, however the latter is focused on the enemy – and in this complex and dynamic environment manoeuvre has to take account of a much broader audience than simply the 'enemy'. A new idea is therefore required - this is called Integrated Action. It is a unifying doctrine that requires commanders first to identify their outcome; second to study all of the audiences that are relevant to the attainment of the outcome; third to analyse the effects that need to be imparted on the relevant audience; before determining the best mix of capabilities, from soft through to hard power, required to impart effect onto those audiences to achieve the outcome.

Put simply, doctrine is not just what is taught, it also captures a set of beliefs – the beliefs that underpin how we practise our profession. ADP Land Operations should be read by all, applied at the appropriate level, and used intelligently as the framework of understanding to inform our Army's development in this increasingly complex and dynamic context.

Preface

Army Doctrine Publication (ADP) Land Operations is the primary source of doctrine for UK land operations. Building on the foundations laid by higher-level North Atlantic Treaty Organisation (NATO) and Defence doctrine, it provides the philosophy and principles that guide land forces' approach to operations. As the capstone doctrine of UK land forces, its philosophy and principles inform the practices and procedures in the Army Field Manual (AFM) series, handbooks and aides-memoire.

ADP Land Operations is required reading for all land force commanders from sub-unit upwards and for staff officers working in the land environment. They must explain the doctrine to their subordinates and so ensure that the whole land force operates in accordance with its principles. It is also useful for allies, joint staffs, civil servants and civilians working alongside land forces.

Unless otherwise specified, all definitions used in ADP Land Operations are consistent with those of NATO Allied Administrative Publication (AAP) 06, *NATO Glossary of Terms*.

ADP Land Operations has three parts.

Part 1 establishes the context which informs the fundamentals of land doctrine.

Chapter 1 describes the nature of conflict, of the land environment and of land forces, how the character of conflict changes, and key aspects of contemporary conflict. It identifies important implications for land forces.

Chapter 2 examines the UK national context and describes the NATO framework of operations and relationships within which operations are conducted.

Chapter 3 describes the three components of land forces' Fighting Power: conceptual, moral and physical.

Part 2 describes the fundamentals of land doctrine.

Chapter 4 explains Integrated Action, a unifying doctrine, which guides the orchestration and execution of operations whether the task is any combination of fighting, engagement, security or support.

Chapter 5 describes the Manoeuvrist Approach, the British Army's fighting doctrine for the tactical level, specifically focused on the enemy.

Chapter 6 is concerned with Mission Command, the command philosophy of the British Army.

Part 3 introduces how operations are conducted. These subjects are covered in greater detail in the AFM series.

Chapter 7 explains interoperability, how land forces organise for operations, and how they support and are supported by other components.

Chapter 8 provides general guidance on how operations are planned and conducted to achieve Integrated Action. It explains the tactical functions, operational art, various doctrinal frameworks and provides a summary of the tactical activities that contribute to Integrated Action.

Chapter 9 describes wider aspects of command (in the context of Mission Command), the characteristics of the commander and staff, how operations are controlled and the operations process.

Chapter 10 is concerned with sustainment of land operations, its philosophy and principles and how it is planned and executed.

ADP Land Operations continues the evolution of modern land forces capstone doctrine, from British Military Doctrine (1989) and its associated five volumes of ADPs, to ADP Land Operations (2005) and ADP Operations (2010).

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PART 1

Context of operations

Part 1 provides the context from which flow the fundamentals of land doctrine. While the nature of conflict endures, the character evolves. Certain themes are likely to shape the character of contemporary conflict into the early 2020s. These include the continued proliferation and speed of information, and the instability of a world characterised by constant competition between an array of actors, many of whom seek to undermine the international rules-based order. As well as through traditional tactics and strategies in the physical domain, we and our opponents increasingly use and contest the virtual domain, through digital media and cyber. The information age allows adversaries – unconstrained by Western policy, ethical and legal codes – to exploit our vulnerabilities in novel ways. It also means that for UK land forces, and our allies and partners, tactical success is increasingly difficult to achieve in purely physical terms. Most importantly, it is not possible to translate tactical success into desirable political outcomes without gaining favourable consensus among multiple audiences.

Chapter 1 describes the nature and character of conflict and their implications for land forces. Chapter 2 summarises the national context and higher level conceptual frameworks, common across NATO, which aid understanding of the land force contribution to operations. Chapter 3 explains how the concept of Fighting Power is applied by UK land forces.

Part 1 – Context

- ▶ Nature and character of conflict
- ▶ National and operational context
- ▶ Fighting Power

Part 2 – Fundamentals

Integrated Action
Manoeuvrist Approach
Mission Command

Part 3 – Conduct of operations

Organising for operations
Orchestrating and executing operations
Commanding operations
Sustaining operations

ADP Land Ops Chapter 1



Nature and character of conflict



CHAPTER 1

Nature and character of conflict

Introduction

1-01. The nature and character of conflict are different. The fundamental nature of conflict does not change; it is adversarial, human and political. Yet each conflict has a different character.

1-02. The timeless aspects of land conflict are the nature of conflict, the land environment, and the inherent attributes of armies. The character of conflict changes continuously, as a consequence of a number of factors, including the politics and technology of the age, and each conflict's unique causes, participants, technology and geography.

When the UK is a participant, our particular political, economic, geographic and historical position becomes a factor in the character of the conflict that we experience. Because each conflict is unique, a single description of the character of contemporary conflict is not possible. But it is important to understand the factors that influence character, and the general implications of those factors.

Nature and character of conflict

- Introduction
- Nature of conflict
- Land environment
- Land forces
- Character of conflict
- Implications
- Annex
 - Principles of War

The first, the supreme, the most far-reaching act of judgement that the statesman and commander have to make is to establish...the kind of war on which they are embarking; neither mistaking it for, nor trying to turn it into, something that is alien to its nature.

Carl von Clausewitz

1-03. The concept of the nature and character of conflict informs our approach to doctrine, force design, education and training. Deductions from the nature of conflict inform enduring principles and ideas, while those from the character of conflict allow us to prepare appropriately for the requirements of contemporary operations. It is essential to draw on both in the right balance.

1-04. This chapter first describes the enduring nature of conflict, the land environment and armies. It then examines how the character of contemporary conflict is affected by three particular aspects: the way people communicate; the proliferation and power of weapons; and evolving strategies and tactics. It concludes with the implications of the nature and character of conflict for land forces, and, in Annex 1A, the Principles of War.

The nature of conflict

Unless you know the actual circumstances of war, its nature and its relation to other things, you will not know the laws of war, or how to direct war and how to win victory.

Mao Tse Tung

- 1-05.** Whether the belligerents are states or other entities, all armed conflict is essentially **adversarial, human** (involving friction, uncertainty, violence and stress) and **political**.
- 1-06.** Conflict is a **reciprocal contest of will**, in which multiple adversaries and actors act and react to each other, often unpredictably, in a struggle to succeed. Adversaries seek constantly to mitigate their own weaknesses, avoid opponents' strengths, and focus instead on aligning their strengths against weaknesses.
- 1-07.** As **human dynamics** lie at the heart of all conflict, it follows that the nature of conflict will continue to be influenced by and represent the entire spectrum of human behaviour, emotion and capability. As a human activity, it cannot be reduced to scientific templates and principles, but relies on initiative, enterprise and intelligence. Conflict will always be a violent contest between humans, marked by friction, uncertainty, chaos, violence, danger and stress, affecting the participants' will to fight and function. As social animals who respond to leadership and friendship, we tend to organise ourselves to fight in hierarchical groups. Our physiology limits what we can do physically; we cannot go for long without food, sleep and shelter, for example. Our psychology means that our decisions and behaviour are informed by our perceptions of what is happening. These subjective perceptions contribute to the enduring unpredictability of conflict on land.
- a. Friction frustrates action; makes the simple difficult; and the difficult seemingly impossible. Friction may be mental, perhaps caused by indecision, or physical, for example caused by the effects of violence. While friction can be imposed upon opponents with great effect, it can also be imposed on us by an adversary or the environment, or be self-induced, for example by a poor plan, process or organisational structure.
 - b. No matter how much information there is in conflict, a 'fog of war' that can lead to uncertainty and chaos will always descend. Chaos might be deliberately used by enemies, and presents opportunities for the bold to seize.
 - c. The threat or use of violence is the means by which one side in armed conflict ultimately seeks to impose their will upon the other. Violence can result in bloodshed, destruction and human suffering. Applying appropriate violence at the right time and place can be decisive.
 - d. Combat can be horrific, and violence, danger, stress, fear, exhaustion, isolation and privation, or their prospect, adversely affect the will of all those involved. Success in battle is as often decided by the psychological ability of each side to withstand these shocks as it is by physical results.
- 1-08.** The use or threat of violence to achieve **political objectives** has endured through the ages. Clausewitz's observation that "war is not merely an act of policy but a true political instrument, a continuation of political intercourse, carried on with other means"

remains relevant today. Confrontation and conflict involve persistent political competition and disagreement, which from time to time are manifested in armed violence; all conflicts are blends of 'battlefield' and 'non-battlefield' engagements. Conflict is a means to an end, not an end in itself. The initiation, continuance and termination of conflict are all political decisions, and so the employment of the military instrument of power ought to be in pursuit of political objectives. The pervasive nature of politics in conflict shapes the manner in which operations are conducted by land forces.

The land environment

- 1-09. The land environment has **human, information and physical** aspects. Most people live in towns, cities and villages, and increasingly in coastal regions. There are very few areas in which no people live; even then, most apparently unpopulated space is a resource that supports the population in some way. People exist in linguistic, cultural, social, and political groups with specific identities, usually associated with particular territories. These territories typically take the form of states, or regions within or between them.
- 1-10. The significance of territory is, therefore, associated with group identity and access to resources; it is often rooted in deep cultural and historical factors as well as in governments' obligations to provide security for their people. Competition for territory and resources, and issues such as injustice and lack of representation are often at the root of conflict.
- 1-11. Because of its significance, the physical capture and occupation of territory, or the credible threat to do so, has often been regarded as decisive. But, the ultimate decision is political rather than physical; people have to decide whether or not to accept the facts on the ground. Land forces, by dint of their presence among and proximity to the people, provide an important and usually necessary contribution to achieving these political outcomes.
- 1-12. The land environment is also shaped by the way that information is exchanged between individuals, tribes, ethnic and interest groups, and countries. This communication can be verbal, directly between people, through radio, television, and online. Human interaction is expanding and accelerating as information flows in the virtual domain increase. In the new information landscape, any digitally connected person has the ability to shape public understanding of and consensus for (or against) a conflict, or be influenced by other actors who exploit these means.
- 1-13. Terrain in the land environment is varied and complex, with open grassland, cultivated land, forests, mountains, deserts, jungles, rivers, swamps, urban and littoral areas. Each creates constraints and freedoms, placing different demands on the people and equipment that operate within them. Terrain can block or enable communication, provide cover from detection or attack, and obstruct or enable movement. Movement on land is impeded by obstacles that land forces must overcome. Land forces have to be highly adaptable and resilient to operate in these different conditions.
- 1-14. The land itself can also be altered by human activity. Obstacles can be cleared and roads built to enable access. Globally, the phenomenon of urbanisation is creating physically, culturally and institutionally complex cities that are challenging for military forces operating in them. In the littoral, the complexities of the urban environment for land forces are amplified. Other strategic trends, including competition for resources, economic inequality and climate change continue to dictate where and how people live.

- 1-15. Climate accentuates the demands of terrain. It also affects visibility, movement and communication. Climate can bring danger and threaten our very survival, but it also brings opportunities that sustain life and provide protection. Night operations can provide cover and the element of surprise, but strain the ability to retain effective command and control.

Land forces

- 1-16. The capability of armed forces is often described using the concept of Fighting Power. Fighting Power consists of three components: conceptual (the ideas behind how to operate and fight); moral (the ability to get people to operate and fight); and physical (the means to operate and fight). Land, maritime and air forces all have Fighting Power, but they have different, yet complementary attributes.
- 1-17. The nature of conflict and the land environment are timelessly relevant to all land forces. They inform the concept of **land power**, and the **attributes of land forces** that inform doctrine and force design. Building on these attributes, a land force needs certain **qualities** if it is to be able to exercise land power effectively.
- 1-18. Military power is mainly divided into complementary maritime, land, air and space power, alongside cyber and information capabilities. **Land power** is the ability to exert control within the land environment and to influence the behaviour of actors and the course of events. Air and maritime power can be applied to the land, but cannot fully control the land; this can only be done from within the land environment by land forces (often with the essential support of maritime, air and space power).
- Land power**

The ability to exert control within the land environment and to influence the behaviour of actors and the course of events.
- 1-19. All land forces, regular or irregular, have four inherent **attributes**. Each attribute has advantages that can be used, but also disadvantages that have to be avoided or mitigated.
- a. The primary attribute of any land force is its **people**. Land conflict is a human activity, between individuals and groups of individuals. Each of these participants has their own perceptions and interpretations of the environment. Land forces, therefore, are complex organisations, requiring moral as well as structural cohesion and deep hierarchies of command. They can be difficult to direct, so decentralised command systems tend to work best. Large numbers of people can also be expensive and lead to competition with other sectors of society requiring skilled personnel. Land forces are particularly reliant on high quality leadership, education and training at all levels.
 - b. Land forces' **presence** on the ground means that they operate in close proximity to people and terrain. Soldiers are able to gain access to people and communicate directly with them. This gives them the potential to develop detailed understanding of the human, information and physical aspects of the environment. They can get close enough to distinguish between different people and groups, adjusting their approach accordingly. They present a particular kind of threat to adversaries, and are uniquely able to reassure and secure neutral and friendly people. Land forces can manoeuvre over ground, or via air or water, to take physical possession of terrain, or they can physically defend or secure it. The presence of land forces, therefore, is often essential for success which may only be achievable by fighting. The same presence, however,

can also disturb local relationships, cause people to feel threatened, and become a focus for resistance to which land forces are uniquely vulnerable. Sometimes this threat is mitigated by small or discreet deployments that contribute out of proportion to their size. To operate effectively, land forces must be able to understand and cooperate with local actors.

- c. The attribute of **persistence**, the capacity of land forces to extend their presence in an area for long periods of time, gives land forces the potential to deepen their understanding of the local context, and develop engagement, control and influence. Presence and persistence can be highly significant, if matched by political commitment. Persistent engagement requires sustainment and protection commensurate with the threats, the distance of the task from the home base and its duration.
 - d. Land forces have inherent **versatility** because they consist largely of organised groups that can relatively easily conduct a very wide range of military and non-military tasks. So even when optimised for warfighting, land forces can be adapted to support, for example, stability and non-conflict activities such as humanitarian assistance and disaster relief.
- 1-20. Although all land forces display these attributes, it does not follow that they are all effective on operations. To be effective, land (as well as maritime and air) forces require certain other qualities including: balance between their human and physical aspects; the ability to start operations at the appropriate time and place and to continue for as long as the operation demands; and the right level of force. The **key quality** which alters these properties so they are relevant in new and changing situations is **adaptability**.
- 1-21. Although land forces are inherently versatile, they must be adaptable to deal with new and changing situations. Future conflict cannot be predicted accurately, so land forces must prepare for the most complex and demanding operations but be able to adapt rapidly to specific operational requirements. Having adjusted to deal with the new situation, the force must adapt during conflict. Adversaries and enemies seek to deceive and surprise us, and themselves adapt: if we are to succeed we must adapt more quickly than they do. Adaptability is explained further in Chapter 3.

The character of conflict

- 1-22. No two conflicts are the same and none retains a fixed character. Each is the product of its era and of the particular conditions which apply at the time. The ever-changing character of conflict is influenced by global political, economic, social, and technological factors. Significant developments can cause marked changes to the general character of conflict. Examples include the growth of democracy and the invention of mass manufacturing. But the most significant impact has often been from changes in technology, such as gunpowder, the internal combustion engine, wireless communications, powered flight, nuclear weapons, computers and the Internet.
- 1-23. In addition, the goals of belligerents, their relative strengths and popular support, as well as their tactics and strategies, will always differ and so give each conflict its own unique character. Further, the character of any given conflict does not remain constant; as a contest of wills, conflicts change over their duration. Adversaries constantly adapt their tactics and strategies to gain advantage, whilst technologies evolve and new threats emerge.

No matter how clearly one thinks, it is impossible to anticipate precisely the character of future conflict. The key is to not be so far off the mark that it becomes impossible to adjust once that character is revealed.

Professor Sir Michael Howard

- 1-24.** It is not possible to predict the exact character of contemporary conflict, because it is constantly changing and each conflict is unique and evolves in its own way. Nevertheless, certain trends and developments are apparent,¹ of which global connectivity and the accelerating flow of information are currently the most important. Although each conflict must be examined in its own right, three inter-related aspects of contemporary conflict are clear: the way in which people communicate; the proliferation and ever-increasing power of physical weapons; and evolving strategies and tactics.

Initially, the Israeli military response to Hezbollah [in 2006] was widely seen as justified, but as time progressed and Hezbollah successfully manipulated print, broadcast, and online media, the world increasingly saw images of civilian casualties (both doctored and real) and the tide of public opinion turned. There was a widespread sentiment regarding Israel's "disproportionate response," and Israel was not successful in turning this tide.

*United States Joint and Coalition Operational Analysis
Decade of War, Volume 1. Enduring lessons from the past decade of operations (2012)*

- 1-25.** Rapid and broad **communication** of messages and ideas flow across physical boundaries through the virtual domain, energising the causes for which people fight. Adversaries can develop and exploit recruitment, manipulation, mobilisation and targeting opportunities, while promoting their own narratives of events, in competition with our own. Our adversaries can share information and adapt more quickly than in the past.
- 1-26.** Because of the proliferation of information, military activity is often immediately visible to a local and global audience. The local audience includes enemies, adversaries and a range of actors, from allies and partners to the local population. The global audience is unbounded. Each of these groups interprets our activity through their own lens, and each is influenced by others. Many actors are adept at presenting military activity to the audience, magnifying, mitigating or altering it to influence observers' understanding of what actually happened. This is critically important to us, our allies and adversaries, because the audience judges whether military action achieves its political objectives. The impact of physical military activity can have more immediate, wide-ranging consequences than in the past, for example more quickly deterring, demoralising or stiffening the resolve of other actors.
- 1-27.** As we and other actors become more and more reliant on sophisticated information services, so the threat of cyber attack increases. This novel threat has the potential to disrupt our information services and any systems that rely on electronic control systems.

¹ DCDC's *Global Strategic Trends* and the Army's Agile Warrior programme provide detailed analysis of likely future trends.

- 1-28. As our military operations become more visible, and come under greater domestic and international scrutiny and criticism, there is a higher expectation of military restraint compared with the past. This often leads to legal and policy constraints on our use of force additional to the requirements of international law. Many of our actual and potential adversaries do not recognise international law, and do not have the same constraints. They are able to exploit this situation to their advantage by, for example, concealing themselves in the population, using tactics and weapons not available to us, or causing us to be restricted by our own (legitimate) rules.

All planning, particularly strategic planning, must pay attention to the character of contemporary warfare.

Carl von Clausewitz

- 1-29. The power of physical **weapons** continues to increase, and these weapons are often available to irregular forces. Chemical weapons are used and biological, nuclear and radiological weapons remain a threat. Fires and explosives continue to dominate and shape the tactical battlespace, whether, for example, delivered by long range rocket systems or in the form of improvised explosive devices. These are what destroy things and kill and injure people; therefore they have the greatest resonance in the eyes of the participants and observers of conflict.
- 1-30. Air power remains a critical factor in the successful application of land power, and space capability is increasingly important. Aircraft are a very powerful and effective means of delivering fires, and they are a key contributor to intelligence, surveillance and reconnaissance (ISR), and sustainment. Those states able to use space have particular strengths in ISR and communications.
- 1-31. The proliferation of commercially available technology means that secure communications, cyber capabilities, and surveillance systems including unmanned air systems are easily acquired or improvised, even by irregular forces.
- 1-32. The recent period has seen the emergence of the concept of **'hybrid warfare'**. This describes strategies that are not new, but which are increasingly employed by state and non-state actors. Potential adversaries are demonstrating the will and capability to undermine Western operational capability, resolve and legitimacy by blending conventional and unconventional forms of conflict, using both attributable and non-attributable methods. These include posturing, provocation and persuasion in the physical and virtual domains; subversion; and economic and cyber warfare, with or without the employment of conventional military forces. This 'hybrid' threat to the international rules-based order can be applied in a way that remains below formal Western military response thresholds.

Implications of the nature and character of conflict

(In spite of...changes), the task of the soldier in the front line remains as it has always been, and the soldierly virtues and skills he needs remain remarkably unchanged. He must be skilled in the use of his weapons and of ground; he must be alert, steadfast and brave, and must be able to endure hardship of every kind. He must be prepared to stay where he is or to move forward in the face of firepower...risking wounds or death, and himself be prepared to kill.

Field Marshal Carver

- 1-33. Certain implications for UK land forces and doctrine can be derived from the land environment, the nature and character of conflict and the attributes inherent in land forces.
- 1-34. There are four **functions of Land Power** – to fight, engage, secure and support. They draw on the attributes of Land Forces and can be exercised independently or in combinations.
 - a. The fundamental capability of land forces is to **fight** in the most demanding circumstances. This capability underpins the other three functions; gives credibility to deterrence, coercion and containment and other strategies; and is essential for interventions and territorial defence.
 - b. Land forces can **engage** with a range of actors and audiences, directly and indirectly, contributing to understanding, influence and conflict prevention.
 - c. Land forces are particularly able to **secure** and protect people and places persistently in the land environment. This includes providing security in support of inter-agency stabilisation and reconstruction.
 - d. Land forces can **support** and assist state and non-state institutions. They can provide mass and presence as well as specialist capabilities.
- 1-35. In a single conflict environment, land forces may simultaneously perform all four functions (fight, engage, secure, support), integrating different types of operation. For example, while one element of the force is conducting high intensity combat operations, others may be engaged in humanitarian relief, counter-insurgency or capacity building. Each type of operation may also contain the full range of tactical activities – offensive, defensive, enabling and stability. The relationship between types of operations, activities and conflict can be visualised as a **mosaic of conflict**, formed of small pieces, all of which are required to see the full picture. Each piece of the mosaic represents a tactical activity or group of activities. This is explained in full in paras 2-16 to 2-18.
- 1-36. Land conflict today requires a force and soldiers with **high contemporary skills**. Conflict involves new technologies, emerging threats, many potential operating environments, and adversaries and enemies who seek to deceive and surprise us. Within the land force, a broad range of skills are required, from highly sophisticated technical and cyber knowledge to proficiency in languages and psychology, to individual physical robustness.

- 1-37. Land forces require highly effective **leadership**. Morale, will, adaptation and the ability to cooperate with others are all essential requirements of land forces, and are given strength by leadership throughout the hierarchy and in all elements of the force. Commanders must inspire confidence and be decisive and resilient in the face of adversity, judicious and flexible.

We had to arrange their minds in order of battle, just as carefully and as formally as other officers arranged their bodies; and not only our own men's minds, though them first; the minds of the enemy, so far as we could reach them; and thirdly, the mind of the nation supporting us from behind the firing line, and the mind of the hostile nation waiting the verdict, and the neutrals looking on.

TE Lawrence

- 1-38. As **the audience's** judgement is an increasingly significant factor in contemporary conflict, operations must be designed and conducted accordingly. No conflict has a purely military solution, and overall success requires favourable consensus among a diverse audience. How we say, how we behave and what we do, influence how we are seen must be consistent and appropriate. At the margin, a neutral or nearly neutral outcome of military action can be turned into a success or a failure by how it is perceived.

Loss of hope rather than loss of life is the factor that really decides wars, battles and even the smallest combats. The all time experience of warfare shows that when men reach the point where they see, or feel, that further effort and sacrifice can do no more than delay the end, they commonly lose the will to spin it out, and bow to the inevitable.

BH Liddell Hart

- 1-39. Because military force is used to achieve political outcomes, it should be consciously aimed at altering people's **behaviour**. The application and threat of force, and the gaining and retention of physical objectives should be used to affect people's decision making in ways consistent with our goals. For this reason, in combat physical destruction and damage is used to achieve two things: an immediate local reduction in enemy capability; and more importantly, wider damage to the enemy's will and cohesion. The most efficient and often most effective way to achieve this is by creating and attacking weaknesses to demoralise and disintegrate the enemy, rather than attacking strength head-on to destroy as much equipment, manpower and materiel as possible.
- 1-40. As well as fighting and providing security, land forces are in a position to communicate directly with individuals and groups involved in a conflict. To change or maintain the behaviour of these actors, land forces should **integrate** the use of force with communications in a mutually reinforcing way. In turn, to achieve political outcomes, they must integrate their activity with that of the diplomatic and economic instruments of power.
- 1-41. The particular nature of friction in land conflict, coupled with the necessary organisation of land forces, has implications for the way in which command is best conducted. There are a number of methods, but **decentralised command** is highly effective in hierarchical land forces operating in a context of friction, uncertainty and chaos. It

empowers leaders down to the lowest level, enabling subordinate commanders to rapidly identify and exploit opportunities to achieve their commander's intent.

- 1-42. If operations are to be effective, land forces must develop a good **understanding** of the important aspects of the operating environment. This requires them to comprehend the relevant human, information and physical aspects of a given situation. It is particularly important to understand how to influence and assess behaviour, and how the audience is likely to perceive our actions.
- 1-43. Land forces must develop **interoperability** at a number of levels. Within the force, different specialist branches must cooperate in the field. The land force must also cooperate with maritime and air forces, as well as with allies and other agencies.
- 1-44. It is essential that forces are held at the appropriate **readiness** so that they can be prepared appropriately and applied at the right time and place.
- 1-45. The relative ease with which our activities can be observed, commented on and interpreted by multiple audiences makes **previous operational and non-operational distinctions less valid**. Even relatively minor armed conflicts have potentially global consequences, for example through diaspora of people with common identities or transnational economic dependencies. Actions and challenges at home can have repercussions for deployed forces. Threats overseas can rapidly migrate to the home base, requiring increased focus by land forces on homeland resilience and security tasks in support of the civil authority. Moreover, how our armed forces are perceived when they conduct 'non-operational' activity, for example, training or recruiting, is increasingly likely to influence the operational audience.

The supreme art of war is to subdue the enemy without fighting.

Sun Tzu

- 1-46. Since the effects of even distant conflicts have consequences domestically and for the international rules-based order, there is a strategic imperative for land forces to contribute to **improved security** in relevant parts of the world. Military power, complementary to other instruments of state power, can contribute through early and persistent engagement overseas, capacity building of local security forces, and by deterrence. In doing so, land forces can develop the understanding, relationships and outlook necessary should conflict occur.
- 1-47. Above all, as each of these implications imply, the general character of conflict is changing rapidly, and the conflicts in which we might be involved are many and varied, it follows that to be effective, our land forces must be highly **adaptable**.

Principles of War

- 1-48. Throughout history, many military thinkers have proposed enduring **Principles of War**, based on their assessment of the nature of warfare. These were intended as guidelines to warfighting. Some thinkers thought that these could be followed as if they were scientific rules, but the longstanding view now is that effective land operations, deeply human as they are, are as much of an art as a science. It follows that there are no rules that guarantee military success, only guidelines. Despite the changes in the character of conflict, the UK's Principles of War remain highly relevant. They are listed and explained at Annex 1A.

ANNEX 1A

Principles of War

- **The Principles of War provide comprehensive considerations at all levels for planning and executing campaigns and operations.** They are not absolute or prescriptive, but provide a foundation for adversary-focused military activity and doctrine. With the exception of the master principle, which is placed first, the relative importance of each may vary according to context, and their application according to judgement, common sense and intelligent interpretation. While the UK's Principles of War are consistent with the Principles of Operations applied by NATO, there are some differences. Allied Joint Publication 01 Allied Joint Doctrine lists the principles of Allied joint and multinational operations.
- **Selection and maintenance of the aim.** Selection and maintenance of the aim is the master Principle of War. When conducting military operations, at every level, it is essential to select and define the aim clearly. The aim provides a focus for coordinated effort and a reference point against which to assess progress. A hierarchy of aims at different levels is required. There should be a strategic aim supported by a number of operational aims, themselves supported by an array of tactical aims which are steps on the path towards that strategic aim. Following this principle prevents unnecessary activity and conserves resources. The overall aim must pervade subordinate operations so that they contribute to achieving the desired outcome. In practice, uncertainty, political reality and insufficient initial understanding of a situation frequently conspire against setting an unambiguous aim from the outset. Nevertheless, military commanders have an obligation to their subordinates, partners, allies and political leaders to define a mission appropriate to their level of command, based on their detailed understanding of the operational requirement and context. This same understanding will also avoid blinkered rigidity. It also enables, through Mission Command, identification of when a fresh aim is required as well as, exploitation of success and adaptation to the ever evolving environment. The maintenance of the aim ensures that the whole force remains focused on the outcome and every subordinate on their commander's intent.
- **Maintenance of morale.** Morale is a positive state of mind – a will to win – which depends on strong leadership. It consists of fighting spirit, moral cohesion, discipline, comradeship, pride in self and unit, confidence in equipment and sustainment, and a firm spiritual foundation. High morale enables a land force to fight offensively and overcome the privations of conflict, not only for a single battle or engagement, but for a campaign. It can inspire an army from the highest to the lowest ranks. Success in land operations depends as much on moral factors as physical ones.

- **Offensive action.** It is through offensive action that a commander seeks to gain advantage, sustain momentum and seize and retain the initiative. As it is an active rather than passive approach, it is the primary means open to a commander to influence the outcome of a campaign or a battle. Defensive operations that do not include offensive action are often unsuccessful and rarely tactically decisive. Effective offensive action relies on high morale and is often a way of gaining ascendancy over the enemy and the confidence of allies and partners.
- **Security.** An appropriate degree of physical security and information denial is essential to all military operations. Security enables (and is in turn enhanced by) surprise and deception, and is essential in preserving the capability of the force; ultimately it helps to provide freedom of action. It involves the judicious management of risk, because in conflict it is not possible to protect everything all of the time.
- **Surprise.** Surprise is a potent psychological weapon, causing shock through unexpected action in time, space and method. Enabled by security, surprise involves using secrecy, concealment, deception, originality, audacity or tempo to confuse, paralyse or disrupt effective decision-making, and undermine an adversary's cohesion and morale. Surprising an adversary is a significant way of seizing the initiative and must be central to the design of all combat operations. Surprise is by nature transient, as shock and confusion recede over time, so its effects should be exploited rapidly and aggressively. Commanders should anticipate the effects of being surprised themselves and make appropriate plans to safeguard their freedom of action.
- **Concentration of force.** Concentration of force requires the decisive, synchronised application of effort and resource at the critical point in time and space to achieve the commander's intent. The nature of the force concentrated will depend on the mission and will include elements of manoeuvre, fires, information activities and capacity building. The main effort describes the activity where a commander assigns the greatest concentration of force. Commanders must accept that concentration of force on the main effort can, however, create vulnerabilities and will entail economy of effort elsewhere.
- **Economy of Effort.** The consequence of concentration of force is economy of effort. It is impossible to be strong everywhere, so if decisive strength is to be concentrated at the critical time and place there must be no wasteful expenditure of effort where it cannot significantly affect the issue.

- **Flexibility.** Flexibility is the ability to change rapidly, appropriately and effectively to new circumstances. It comprises the versatility, responsiveness, resilience and adaptability of the whole force. Versatility is the physical and structural ability to perform many functions. Responsiveness is a measure of speed of action, reaction and of how quickly the initiative can be seized or regained. Resilience is the degree to which people and their equipment remain effective under arduous conditions or in the face of hostile action. Adaptability embraces the need to learn quickly, to adjust to changes in a dynamic situation, and to amend plans that, in the light of experience, seem unlikely to lead to a suitable outcome.
- **Cooperation.** Military operations are joint enterprises. Their success requires cooperation between all participants. These include individuals and groups of actors who may be military or civilian, governmental or non-governmental, national, allied or from host nations. Within the land force, the cooperation of all arms in combined arms forces is critical. Cooperation is best engendered through shared training, which develops interoperability, team spirit and cohesion. It relies upon: mutual trust and goodwill; unity of purpose, if not command; and common understanding of responsibilities, capabilities and limitations.
- **Sustainability.** Sustainability is the ability of a force to maintain the necessary level of combat power for the duration required to achieve its objectives without culmination. Fighting Power, freedom of action and operational success rest on the sustainability of the force through every stage of a campaign, from force preparation through to redeployment and recuperation. A rigorous assessment of logistic realities is essential to operational planning; indeed, it is often the deciding factor in assessing the feasibility of an operational choice.

ADP Land Ops **Chapter 2**



National and operational context



CHAPTER 2

National and operational context

Introduction

- 2-01.** Chapter 2 expands on the UK national context, introduces the important concepts of campaign authority, legitimacy and legality, and describes the North Atlantic Treaty Organisation (NATO) framework of operations and relationships within which operations are conducted. It concludes with a summary of the contribution of UK land forces to strategy and joint operations.

UK context

- 2-02.** The UK is a liberal democracy, an island nation in Europe, and a member of many international political, economic and security-orientated organisations. Notably, from a security perspective, the UK is a permanent member of the United Nations Security Council and a member of NATO. Relatively small in size and population, the UK has global economic, social and political responsibilities, including for UK dependencies and citizens. Security threats include: terrorism, cyber attack, international military conflict and the re-emergence of state based threats, overseas instability, environmental, health and natural hazards.
- 2-03.** In tackling these challenges, the UK government employs three instruments of power: diplomatic, economic and military, all underpinned by information.² The military instrument can be costly and is relatively small; its resilience depends on its ability to regenerate; and it is increasingly reliant on global partners rather than on a national, strategic industrial base.
- 2-04.** These geopolitical factors, as well as deductions from the nature and character of conflict, inform the ways in which UK land forces approach and conduct operations.
- a.** UK land operations at any scale are almost always multinational, reflecting relationships with allies and partners, and mitigating the relatively small size of our land forces. Although capable of acting independently, alliances and partnerships are fundamental to our approach to defence and security. Collective security is promoted primarily, but not exclusively, through NATO and enduring bilateral relationships with, for example, the United States and France. UK land doctrine, therefore, must be coherent with NATO's, with exceptions made clear.
 - b.** The UK, like any country, cannot afford to lose the force. A warfighting division constitutes the centre of gravity of the UK's land forces. We must seek to apply strength against vulnerabilities, always protecting the will and cohesion of the force.
 - c.** UK land forces must be ready to deal with a wide variety of threats and conflict situations. They must be able to adapt rapidly to new challenges, while supporting Government strategy to prevent conflict and instability. They must be maintained

² Note that NATO views information as a separate instrument of power. See Allied Joint Publication (AJP) 01, *Allied Joint Doctrine*.

at the right level of competence and readiness. Major operations will be overseas and almost always multinational. UK land forces must be effective operating within formations larger than they possess, requiring understanding of and influence within higher level allied formations.

Campaign authority, legitimacy and legality

- 2-05.** UK Armed Forces are subject to political direction, democratic oversight, and national and international law. For military actions to be effective in this context, they must be legitimate and lawful, and be perceived as such.
- 2-06. Campaign authority** is the authority established by international forces, agencies and organisations within a given situation. It comprises four interdependent factors: the perceived legitimacy of the mandate; the manner in which those exercising the mandate conduct themselves, individually and collectively; the extent to which factions, local populations and others consent to, comply with, or resist the authority of those executing the mandate; and the extent to which the audience's expectations are met by those executing the mandate. Campaign authority is not simply granted to the mission, but has to be earned and maintained. Without campaign authority, it is difficult, if not impossible, to convert military success into desired political outcomes.
- 2-07. Legitimacy** encompasses the legal, moral, political, diplomatic and ethical propriety of the conduct of military forces. As the justification for using force, and the manner in which it is applied, legitimacy has collective and individual aspects, both of which directly affect the utility of force. Legitimacy is based upon inter-related subjective factors, such as the perceptions and beliefs of audiences, and objective legal matters. For example, operations are increasingly subject to judicial oversight, reflecting political responses to domestic expectations, themselves informed by regulated and unregulated media reporting of military activities. When preparing for and conducting operations, land forces must understand how their actions may be perceived by a global as well as a domestic and local audience, ensuring that they act lawfully and ethically at all times.
- 2-08.** The most fundamental and enduring requirement for campaign authority and legitimacy is that our actions are **lawful**. The increasing incorporation of evolving Western civilian norms into our legal system, resulting in increased judicial scrutiny of military conduct, makes the legal dimension of operations both complex and potentially constraining. The legal aspects described below are only an introduction to this important subject, which requires focused study and training prior to and during operations³
- a. Law and policy** are different. Sometimes, constraints are imposed on commanders as matters of policy, rather than law. Examples of these are rules of engagement (ROE), and directives for targeting and the handling of captured personnel, which may restrict military activity even though the law may be more permissive.
 - b. UK forces, whether overseas or in the UK, operate within a legal framework.** All service personnel, wherever they serve, are subject to Service law as provided by the Armed Forces Act 2006. However, in the UK, civilian authorities may exercise primacy. Soldiers are held legally accountable through the Service Justice System for offences covered by the Armed Forces Act 2006, irrespective of where the offence is committed.

³ See Joint Service Publication (JSP) 381, Aide-Memoire on the Law of Armed Conflict, JSP 383, *Joint Service Manual of the Law of Armed Conflict*, and JSP 398 *United Kingdom Manual of National Rules of Engagement*.

When deployed, various international laws may also apply, including host nation law and international human rights law. To these may be added rights and obligations placed on the UK under a United Nations Security Resolution or bilateral/multilateral agreements such as status of forces agreements, technical arrangements and memoranda of understanding. On multinational operations, other nations' forces may not all be subject to the same legal framework – their applicable domestic laws, for example, are likely to be different. The legal framework will vary between operations and at different times and places within a campaign as it progresses.

- c. Law governs the **use of force** in a number of ways. It regulates when states can resort to using force, for example by sending their troops onto the sovereign territory of another state. It also establishes how force can be lawfully used once those troops have been deployed, whether in an armed conflict, on a peacekeeping mission or other operation. It is important to distinguish between laws that regulate how a state may act, and those that govern the conduct of individuals and units. Commanders at all levels are responsible for ensuring that forces under their command operate within the law. At the same time, each individual remains ultimately responsible in law for their actions.⁴

Despite the codification of much customary law into treaty form during the last one hundred years, four fundamental principles still underlie the law of armed conflict. These are military necessity, humanity, distinction, and proportionality. The law of armed conflict is consistent with the economic and efficient use of force. It is intended to minimize the suffering caused by armed conflict rather than impede military efficiency.

JSP 383 The Joint Service Manual of the Law of Armed Conflict

- d. Military operations must comply with the underpinning **principles of the law of armed conflict** – military necessity, humanity, distinction and proportionality – so that they are consistent with the wider ethical considerations from which the law is derived. As well as governing the use of force, the law of armed conflict also, for example, provides protections and rights for captured persons and prohibits acts of deception that amount to perjury. The basic principles of the law of armed conflict are described in JSP 383 and summarised below:

- (1) **Military necessity** requires that only the necessary amount of armed force is applied. This force is controlled, lawful and directed towards achieving the complete or partial submission of an enemy at the earliest possible moment, and with the minimum expenditure of life and resources.
- (2) The principle of **humanity** forbids the infliction of suffering, injury, or destruction not actually necessary for the accomplishment of legitimate military purposes. Also prohibited is the use of weapons, means and methods of warfare of a nature that cause superfluous injury and unnecessary suffering.
- (3) The principle of **distinction** demands that land forces distinguish between enemy forces and non-combatants. Non-combatants include civilians and certain individuals within an enemy force, most notably, for example, medical and

religious personnel. Any intentional direct attack against the civilian population or civilian objects is prohibited and may amount to a war crime.

- (4) Armed forces only use force in **proportionality** to the military end sought. What is proportionate can only be judged in the particular prevailing circumstances at the time. This judgement requires careful deliberation and will be informed at all stages by considerations of the above three principles by individuals throughout the chain of command.
- e. **Rules of Engagement (ROE)** are commanders' directives – in other words policy and operational guidance – sitting within the legal framework rather than law themselves. They are expressed as permissions and prohibitions which govern where armed forces can go, what they can do and, to an extent, how and when certain actions can be carried out. They are designed to ensure that action taken by UK forces is lawful and consistent with government policy. They are also used to enhance operational security, avoid fratricide and to avoid counter-productive effects which could destabilise a campaign. ROE do not by themselves guarantee the lawfulness of action; it remains the individual's responsibility in law to ensure that any use of force is lawful. ROE do not restrict the inherent and inalienable right of an individual to act in self-defence.

Military frameworks of operations

- 2-09. Land forces, as a component of the military instrument of power, conduct operations within a framework that describe the levels and types of operations. This allows them to harmonise their contribution to alliance, coalition, national and defence objectives.
- 2-10. The framework of the strategic, operational and tactical **levels of warfare** are used to command, categorise and define military activity. The structure and discipline of these levels help to maintain a clear integrity of purpose between the state, its armed forces and their missions. The levels delineate delegated responsibilities for the use of armed force, but these distinctions are not required to control economic and diplomatic power. The levels of warfare are not tied to specific military levels of command. Depending on the situation, corps, division, brigade, battlegroup or unit commanders may all operate at either the operational or tactical level. It should be noted that the levels, if they are recognised at all, may be interpreted or applied differently, depending on the situation, by multinational partners and other government departments.

In highlighting the importance of the strategic level, David Fraser referred to Field Marshal Alanbrooke as regarding the art of strategy as "... (determining) the aim, which is, or should be, inherently political; to derive from that aim a series of military objectives to be achieved; to assess these objectives as to the military requirements they create, and the pre-conditions which the achievement of each is likely to necessitate; to measure available and potential resources against the requirements; and to chart from this process a coherent pattern of priorities and a rational course of action."

- 2-11.** The **strategic level** is the level at which a nation or group of nations determines national or multinational security objectives, and deploys national, including military, resources to achieve them. Land forces require an understanding, at all levels, of the evolving strategic context of their actions. In a globalised, networked battlespace, there are few situations where tactical activity cannot have strategic consequences. Encompassing all aspects of national, defence and military strategy, in the planning and execution of operations, three aspects of strategy are particularly relevant to military forces.
- a. A successful **national strategy** sets out a path, using the diplomatic, economic and military instruments of power, to achieve government policy goals. Strategy usually involves collaboration with other nations' governments and armed forces and other international organisations. In a multinational context, constituent states have their own national strategies, which should be coherent with the remainder of the alliance or coalition. National strategy consists of and should describe interdependent 'ends' (objectives of the strategy), 'ways' (methods) and 'means' (resources).
 - b. The **military contribution to strategy** is the application of military resources to achieve national strategic objectives. During planning for operations, military planners determine military objectives, identify freedoms and constraints, set out options for the desired end-state and describe the military approach and resources required. This enables coherent military advice to be given to UK Government decision-makers by the Chief of the Defence Staff and the Chiefs of Staff. A decision is then made and the campaign is conducted.
 - c. A successful campaign requires a **strategic narrative**, described in joint doctrine⁵ as communication that portrays a story designed to resonate in the mind of the audience that helps explain the campaign strategy and operational plan. This message must resonate to those deployed, and the domestic and broader international audience, including in the conflict region. It will be contested; adversaries will create their own narratives in support of their goals, or perhaps multiple narratives to confuse the audience so that our narrative fails to gain traction. A compelling strategic narrative, reinforced at operational and tactical levels and coherent with actions taken, has the potential to be decisive in developing favourable public consensus and maintaining campaign authority.
- 2-12.** The **operational level** is the level at which campaigns and major operations are planned, conducted and sustained to accomplish strategic objectives within theatres or areas of operations. The operational level provides the gearing between the strategic and tactical levels. Joint campaigns and operations are constructed and directed at the operational level to fulfil national, alliance or coalition strategy. An operational commander designs, plans, sequences and sustains a campaign according to the authorised campaign plan. Joint doctrine concentrates on the operational level, unifying tactical and environmental operations into a coherent campaign through joint action. Joint action is defined as the deliberate use and orchestration of military capabilities and activities to affect actors' will, understanding and capability, and the cohesion between them to achieve influence.⁶ It is implemented through the orchestration of information activities, fires, manoeuvre and outreach.

⁵ Joint Doctrine Publication (JDP) 3-00, *Campaign Execution*.

⁶ *Ibid.*

2-13. The **tactical level** is the level at which activities, battles and engagements are planned and executed to accomplish military objectives assigned to tactical formations and units. It is at the tactical level that troops are deployed directly in tactical activities, using the tactical functions. Couched in the context of the strategic and operational levels, the focus of this Army Doctrine Publication is on how tactical land operations are conducted.

Tactics form the steps from which operational leaps are assembled; strategy points out the path.

AA Svechin

2-14. British Army doctrine follows the NATO codification of operations themes, types of operation and tactical activities.⁷ This enhances interoperability with allies and aids understanding of the mosaic of conflict. Those relevant to land operations are shown in Figure 2-1.

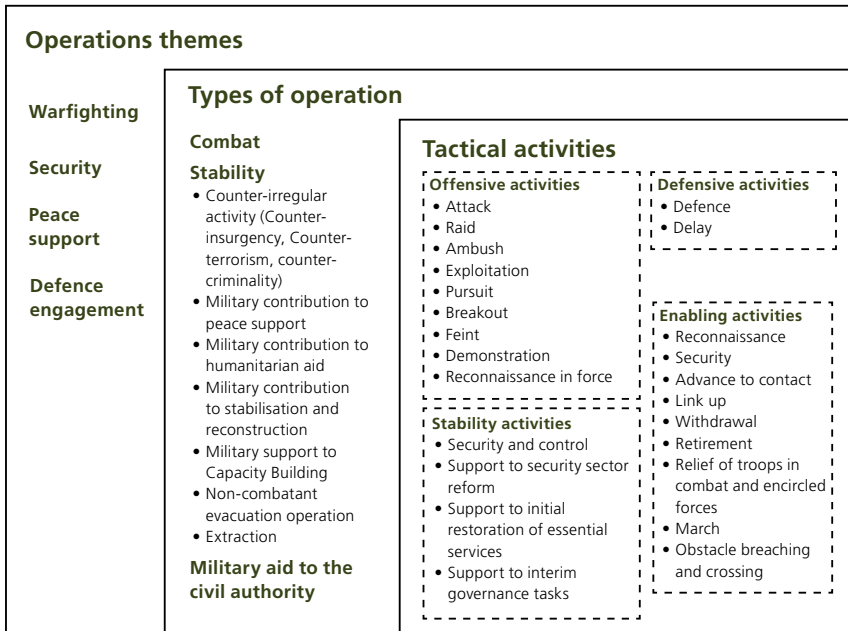


Figure 2-1. Operations themes, types of operation and tactical activities

7 AJP-01. This codification replaces the framework of military activities.

- 2-15. Operations may be assigned or described in terms of particular contextual themes. These **operations themes** allow the general conditions of the operating environment to be understood, informing the intellectual approach, resources available (including force levels, rules of engagement and force protection measures), likely activities required and levels of political appetite and risk. There are four themes, aligned to the functions of land power: **warfighting, security, peace support and defence engagement**.⁸ These themes provide a framework for understanding in general terms the context and dynamics of a conflict. A theme may be set at the strategic level and form part of the narrative for operations, but this will not necessarily happen. As a conflict evolves, the thematic designation may change. It is important for the operational and strategic levels of command, informed by tactical commanders, to anticipate the need for any change. Within a single operations theme more than one type of operation will often occur simultaneously.
- 2-16. Within the operations themes, certain **types of operation** exist. They are not mutually exclusive and are often concurrent with other types of operation within the mosaic of conflict. As doctrinal definitions, they are neither designed nor do they necessarily correspond to UK Defence planning tools or assumptions. Rather, they aid analysis and articulation of complex missions and provide the essential gearing required to sequence a series of tactical activities to achieve operational objectives. This doctrine groups types of operations into combat, stability and military aid to the civil authority (MACA) operations. Stability operations (which NATO describes as crisis response operations) and MACA are UK terms. This doctrine also includes an additional, discrete type of operation described as capacity building. Types of operation and operations themes are covered in more detail in Annex 8C.
- 2-17. Within all types of operation, land forces conduct all or some of a range of **tactical activities**, often concurrently. The balance between the different activities varies from one operation to another over time, as illustrated in Figure 2-2. Tactical activities are either offensive, defensive, stability or enabling. In the mosaic of conflict a force may be required to conduct all activities simultaneously. Also, these activities are not mutually exclusive. A single force element may link them by a simple transition from one activity to another without breaking contact with an enemy; for instance from a defensive activity to an offensive one. Enabling activities are never conducted for their own sake; their purpose is to enable or link other activities. Tactical activities are described in Chapter 8.

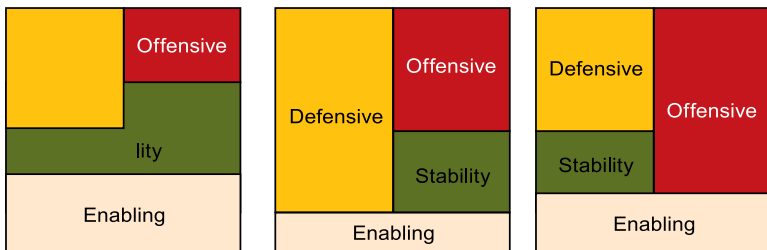


Figure 2-2. The balance of tactical activities, varying over time and between types of operation

8 AJP-01. Note that UK doctrine refers to defence engagement which is largely the same as NATO doctrine's description of peacetime military engagement, but is not constrained to peacetime situations.

Operational relationships

2-18. Operations and campaigns are unlikely to be conducted by a single Service or indeed by armed forces alone, and will most likely be multinational. Successful strategy requires more than military means; it depends on the cooperation of diplomatic, economic and military instruments of power, and the alignment of ends (objectives), ways (methods) and means (resources), underpinned by a compelling narrative. Land forces always seek to combine arms and will rarely work in isolation, more often supporting or being supported by air, maritime, special forces and logistic components as part of a joint force. Also, although the UK may choose to act alone, contemporary political and economic factors suggest that in most cases its forces are likely to operate as a contributing or lead nation, within an alliance or as part of an ad hoc coalition. They will often also work with regional or host nation partners. Most of the operations that land forces are likely to participate in, therefore, will require **joint, inter-agency and multinational** relationships.⁹ The joint force also consists of regular and reserve military personnel, civil servants and contractors, combined into a single team; this is described as the **whole force approach**. This section provides a summary of these four relationships.

Joint

2-19. The term joint describes an operation or organisation in which elements of at least two Services participate. More specifically, a joint operation is one where scalable maritime, land, air and special forces operate together within a single military force and/or command structure to achieve a specific mission or missions, in peace, war or crisis. A joint approach is one of the foundations of UK defence policy. Most campaigns in British military history have been joint; and contemporary national, NATO and coalition operations are all joint, structured according to the nature of the task. A joint approach combines capabilities to make each of them more effective. In operations this requires that maritime, land, air, special forces and logistic components are included in planning from the start.

Separate ground, sea and air warfare is gone forever. If ever again we should be involved in war, we will fight it in all elements, with all services, as one single, concentrated effort.

President Eisenhower

- 2-20.** In military terms, expeditionary campaigns are usually conducted by **joint task forces** (JTFs), created specifically for an operation. These may be national, coalition or NATO JTFs. JTFs are tailored to a mission, and furnished with the capabilities necessary to achieve specified objectives. They are usually multinational and their titles differ depending on the alliance or coalition involved.
- 2-21.** JTF headquarters plan and conduct the campaign at the operational level. Their subordinate force elements prosecute and coordinate battles and other tactical engagements to achieve operational level objectives. In larger scale operations, including major combat operations, a JTF will often exercise command through subordinate land, air, maritime, special forces and logistic **components**. This structure brings

⁹ Commonly referred to as the combined, joint, inter-agency, intra-governmental and multinational (CJIIIM) environment.

significant coherence to environmental activities, but land forces may not experience the same depth or proximity of joint cooperation as they might be accustomed to in a national or land-centric context. Indeed, in a land-centric campaign, command may be conducted by a JTF (Land), integrating the components within a single headquarters, alongside non-military actors and agencies. The JTF structure is designed to achieve the campaign objectives, rather than satisfy individual Service requirements. In both cases, the detail of the organisational structure is less important than the success of the campaign, which depends on a flexible approach to command and control.

- 2-22. Generally components work together through **'supported/supporting' relationships**, maximising the overall effect of the joint force. A supported commander has primary responsibility for all aspects of a task or line of operations assigned by higher authority. A supporting commander provides augmentation or other support to a supported commander, or develops a supporting plan. Land forces always require support from the air component and may receive support from, or give support to, any component for particular joint objectives in a campaign.

Inter-agency

- 2-23. Successful strategy requires an inter-agency approach to integrate the application of the military, economic and diplomatic instruments of power, at all levels of command and throughout the campaign. Ultimately states resort to the use of force when diplomatic and economic power cannot achieve the outcome required. When military power is used, it is in conjunction with the other two. It is, therefore, important to understand which agencies function at the operational level, how they will affect the tactical level, and the impact they will have on the conduct of operations. This inter-agency aspect of operations includes supranational organisations, for example the UN; UK government departments other than the Ministry of Defence, national intelligence agencies, host nation or other indigenous partners, non-governmental organisations, humanitarian groups, private security companies; and other contractors and commercial organisations.
- 2-24. To engender effective inter-agency relationships, the UK government seeks to engender effective inter-agency relationships across all departments. This approach requires a culture of collaboration and cooperation as well as structures developed to enable shared understanding. Where activity cannot be synchronised or integrated it must be deconflicted. This is described through the **Full Spectrum Approach**, which is also referred to in other government departments as the Integrated Approach.¹⁰ Similarly, NATO doctrine describes a **Comprehensive Approach** in which military and non-military actors contribute with a shared purpose, based on a common sense of responsibility, openness and determination. This is facilitated by **civil-military interaction** which applies at the strategic, operational and tactical levels.
- 2-25. By harnessing the three instruments of power, a full spectrum approach can increase tactical freedom. It applies expertise where and when it is needed to improve the prioritisation, synchronisation and coordination of activity. This approach can contribute to a sense of stability because when power is exercised in a civil context it creates perceptions of normality. There are also potential constraints

¹⁰ The Full Spectrum Approach will be described in the FSA Primer to be produced by DCDC. Although both terms are current in government, the Full Spectrum Approach will be used in this book."

that can be caused by an integrated or full spectrum approach. There might be different perceptions of risk, competing resource priorities, language difficulties, differences in operating procedures, clashes of organisational culture, or variations in empowerment and operational objectives. Even within a common strategy, all are potential sources of friction which could impact adversely on military activity and consequently broader operational outputs. Ultimately, the test of success lies not in the degree of cooperation, even though intrinsically valuable, but in the complete, integrated outcomes achieved through cooperation.

- 2-26. Human relationships are decisive in making the approach work or fail. Underlying the approach is the common desire to achieve unity of effort and an acceptance that all three instruments of power are required for success. Military headquarters and their command posts, because they are usually relatively well-resourced and secure, can provide the physical means to enable a full spectrum approach.

Multinational

- 2-27. Although the UK retains the capability to conduct certain types of overseas operations independently, Defence policy is described as ‘international by design’.¹¹ Multinational operations are the norm, whether in alliances, coalitions or partnerships with host nation forces.

There is only one thing worse than fighting with allies, and that is fighting without them.

Winston S Churchill

- 2-28. **Alliances** exist between states for mutual benefits, which may be economic, diplomatic or military. Military alliances can be between individual countries or based on an alliance organisation, of which NATO is pre-eminent from the UK’s perspective. They seek to develop shared strength during peacetime, working and training together to build interoperability. **Coalitions** are formed as temporary alliances for common action by two or more nations, or based around an alliance like NATO. They will usually have an agreed lead nation. National policy envisages that most major overseas military operations involving UK land forces will be as part of a coalition that will probably be led by the United States. Coalitions and alliances bring mass, legitimacy and diplomatic power but also friction. Land forces must be ready to adapt to the requirements of a particular coalition. Although the stated purpose of an alliance or the action required by a coalition may be clear, nations join them for a range of reasons, explicit and unstated. Cooperation always has challenges, which are exacerbated when alliance or coalition members do not have matched motives and capabilities. In every case, national considerations will play out at the tactical level, requiring commanders and staff to understand partners’ considerations and to exercise diplomacy. There are, therefore, benefits and costs in joining coalitions and alliances:

11 National Security Strategy and Strategic Defence and Security Review, 2015.

- a. Membership of a coalition or alliance provides many benefits, particularly diplomatic leverage to achieve international influence, not only to pursue a campaign but also to shape that campaign in the national interest. This benefit is broadly in proportion to the level of equity that a nation invests in the operation, with lead nations reaping the greatest potential reward. Membership also confers: representation in the coalition chain of command; unity and economy of effort, and a common purpose which adds to legitimacy and provides access to capability and mass; a sharing of risks; and a share of the benefits of a successful outcome from the campaign. Alliances and coalitions concentrate resources and provide a range of options which most nations could not generate independently.
- b. Membership of a coalition or alliance means bearing a share of additional risks. It demands interoperability, the pursuit of which can be expensive and time-consuming. Membership can dilute national and military priorities. Coalitions may also include new allies with which the land force has not developed interoperability, requiring the force to adapt accordingly. Other costs include the need for consensus and a consequent reduction in freedoms. If a campaign goes badly, it is difficult to disengage from collective responsibility. The committal of resources to a coalition or alliance reduces the freedom to conduct other tasks. Burden sharing can also undermine the requirement for national military capabilities and versatile forces.

Where responsibility is to be shared, it is essential to have written agreement in advance on how decision making and governance will operate within an alliance or coalition. The UK normally acts with allies, as it did in Iraq. Within the NATO Alliance, the rules and mechanisms for decision taking and the sharing of responsibility have been developed over time and are well understood. The Coalition in Iraq, by contrast, was an ad hoc alliance. The UK tried to establish some governance principles in the Memorandum of Understanding proposed to the US, but did not press the point. This led the UK into the uncomfortable and unsatisfactory situation of accepting shared responsibility without the ability to make a formal input to the process of decision making.

Sir John Chilcot, The Iraq Inquiry (2016)

- 2-29. The extent of a force's multinationality depends on a number of factors. The degree of interoperability is the foundation that governs what is achievable. However, the nature of the task is the deciding factor. Certain tasks are not achievable at certain levels unless interoperability is very high. Also, the more deeply a force is integrated, the more likely it is that a nation's forces will come under the command of allied officers. Consequently, the higher the risks involved in tactical activity, the more likely it is that national chains will compete with, even supersede, multinational chains of command. This is also the case when the deployment is close to a nation's strategic interests. This is why unit level multinationality is more common on peace support than it is on warfighting operations. The design of a force will depend on judgement, balancing the strategic benefits of the multinational arrangement with the tactical feasibility, limited by interoperability.
- 2-30. It is essential that joint, allied and coalition forces establish effective **host nation partnerships**. The degree of support offered to and by host nation governments and security forces is linked to its own political and social context as well as to the campaign itself. A host nation may provide access, overflight or staging facilities

for joint forces to and from the area of operations. Alternatively it may be within its territory that operations are conducted and it may provide military capability directly, including its own land forces. We may work with a host nation partner to help improve their external and internal security capability through direct or indirect capacity building. In all cases, the nature of the relationship with host nations is likely to be dynamic. They may exert their sovereignty in different ways during the campaign. Their motivations and political interests may evolve and will affect how joint forces conduct operations. Politics, culture, extant relationships, legitimacy and capabilities all affect the character of host nation partnerships. Early engagement with and understanding of organisations with which land forces may operate is fundamental in forming effective partnerships. Defence Engagement provides one aspect of this. Within a wider integrated or full spectrum approach, it sees land forces developing relationships with host nation security forces in peacetime, and during and after conflict.

Whole force approach

- 2-31.** The whole force approach¹² concerns the appropriate mix of individual people within each group of Defence actors that contribute to operations. People are the defining attribute of land forces, whether organised as part of or alongside combined arms, joint or multinational formations. The operational challenges require people who are agile, adaptable and together have the full range of knowledge, skills and experience.
- 2-32.** The whole force approach places human capability at the heart of decision making, ensuring that outputs are delivered by the right mix of capable and motivated people. This mix might include regular and reserve service personnel, civil servants, other civilians (including local nationals) and contractors. This approach enables and requires land forces to draw on specialist expertise not normally held within regular military establishments. In addition to seeing civil servants embedded within land force structures, this may also include, for example, logisticians, cyber experts, or medics from either the reserve forces or as contractors. **Contractor support to operations** describes specific groups of **contractors on deployed operations** (referred to as CONDO), private security companies and sponsored reserves.
- 2-33.** The mix of individuals varies from operation to operation. Forces at very high readiness usually comprise mostly regular personnel, while forces engaged on more enduring stabilisation operations contain a broader mix. At the same time, the blurring of previous distinctions between domestic and overseas operations and threats means that a whole force approach is as relevant and necessary in the UK as in the deployed force.

Contractors need to be in our force design and generation from the outset. This will ensure integration at the earliest opportunity and allow better planning to make certain that the contractor produces the desired military effect.

Operation HERRICK Campaign Study (2015)

12 Previously described as "Total Support Force or the Whole Force Concept"

- 2-34.** In the same way that relationships with multinational and joint partners are improved through mutual understanding, working and training together, the whole force approach will also benefit. Civilians and contractors work under different terms and conditions to regular and reserve personnel. Their flexibility and security requirements will vary, as will the assurance of their input.

UK land forces contribution to strategy and joint operations

- 2-35.** The context of operations informs the enduring contributions that land forces make to strategy and joint operations. UK land forces can:
- a.** integrate the effects of national instruments of power in the land environment;
 - b.** defeat enemy land forces;
 - c.** secure and hold terrain objectives, including access to areas of operations;
 - d.** directly influence the behaviours of conflict actors, in conjunction with other instruments of power;
 - e.** enable other Services, instruments of power, partners and agencies to operate, including through providing security, tactical understanding and interpersonal relationships;
 - f.** represent strong political commitment in support of national, alliance, coalition or bilateral objectives, complementary to other instruments of power;
 - g.** deter hostile and potentially hostile actors from aggression, as part of a credible and capable joint force;
 - h.** support the civil authorities in providing of homeland resilience and security; and
 - i.** support conflict prevention and security improvement through persistent engagement and capacity building.

ADP Land Ops **Chapter 3**



Fighting Power





CHAPTER 3

Fighting Power

Introduction

3-01. Fighting Power is a concept that describes the operational effectiveness of armed forces, or any element of them. Common across Defence and NATO,¹³ the concept guides force development and preparation. This chapter explains the contextual characteristics of Fighting Power, and then describes its three components: conceptual, moral and physical. See Figure 3-1.

Fighting Power

- Introduction
- Conceptual component
- Moral component
- Physical component
- Readiness, deployability and recovery

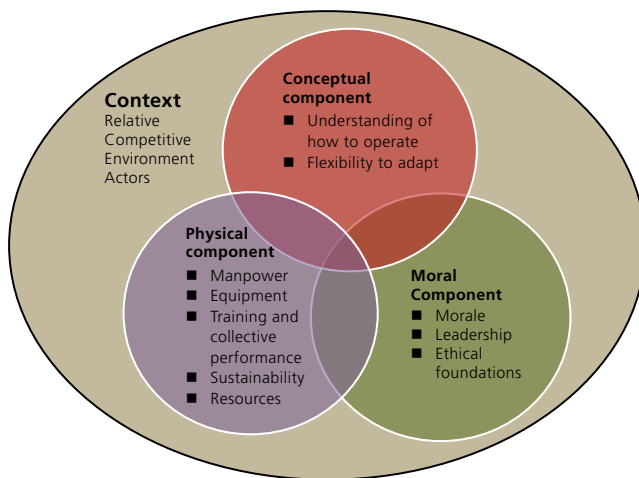


Figure 3-1. Model of Fighting Power

3-02. The conceptual component is the force's knowledge, understanding and application of doctrine – the ideas behind how to operate and fight – kept relevant by its ability to learn and adapt. The moral component is the force's morale, leadership and ethical conduct: the ability to get people to operate and fight and to do so appropriately. The physical component consists of manpower, equipment, sustainability and

¹³ See AJP-01, AJP-3.2, *Allied Joint Doctrine for Land Operations* and JDP 0-01, *UK Defence Doctrine*. Note that United States Army doctrine does not use this model.

resources: the means to operate and fight. Training is considered as part of the physical component, although it develops and integrates all three components. The three components are interdependent. In some circumstances, one component can be more important than the others. The level of Fighting Power is closely connected to readiness: the more complete all the elements are, the higher the level of readiness. The Fighting Power of a force element relies on the overall Fighting Power of its Service, and on its ability to provide the necessary institutional support.

- 3-03.** The Fighting Power of a Service or force must be adaptable if it is to be effective on operations. A force must be balanced, able to start the operation at the appropriate time and place, able to continue for as long as is necessary, and be large enough for the task. These requirements point to readiness, deployability, and the capacity, if necessary, for endurance. The nature of the task or campaign will indicate the scale of force required, but it may be necessary to generate mass: to expand armed forces for unforeseen circumstances, as the UK did in the world wars and for the Korean War. Beyond the requirements of readiness, deployability, duration and mass, the force must be adapted to the context of each unique operation.
- 3-04.** Fighting Power is in some respects a relative as well as an absolute concept. For example, certain forces may be assessed as having high and balanced Fighting Power, but be fundamentally unsuited for the task. So Fighting Power is inherently contextual, determined by how well a force (our own, allied or enemy) is adapted to the character of the operation in which it is engaged. Certain **contextual characteristics** inform assessment of Fighting Power:
- a. Assessment of Fighting Power is both **quantitative and qualitative**. Much of the physical component can be quantitatively measured. This constitutes the visible combat power of a force and informs force ratio assessments, and so contributes to understanding relative capabilities. On the other hand, the moral and conceptual components tend more to subjective, qualitative assessment. The three components are interdependent, although which, if any, is pre-eminent depends on the situation.
 - b. Military effectiveness is measured not against an absolute standard; rather it is **relative and competitive** in nature. Comparison to and understanding of the Fighting Power of other relevant actors provides the essential reference points by which land forces' Fighting Power can be assessed and adapted in a given situation.
 - c. The **environment** in which land forces are used and for which they are prepared also has a significant bearing on their actual Fighting Power. Given the uncertainty of where, against whom and with whom operations might be conducted, land forces require mental and physical preparation to operate in a range of environments. A force optimised to fight and operate in a single environment may not have the appropriate balance of Fighting Power to operate elsewhere. When Fighting Power is developed to deal with the complexities of the most demanding operational environments, a force increases its potential to adapt rapidly to new situations.
 - d. In contemporary operations, the Fighting Power of UK land forces is dependent on effective **interoperability** with other Services, allies, partners and agencies. The moral component is strengthened through human interoperability, the physical through technical interoperability, and the conceptual through procedural interoperability.

The conceptual component

- 3-05.** The conceptual component of Fighting Power rests on the development and application of doctrine. As the intellectual basis of Fighting Power, it guides the physical and moral components. Deficits in the conceptual component, for example through misunderstanding, or insufficient flexibility, severely damage a force's overall Fighting Power, even if the will and means to fight are well developed.

Theory exists so that one does not have to start afresh every time sorting out the raw material and ploughing through it, but will find it ready to hand and in good order. It is meant to educate the future commander or, more accurately, to guide him in this self-education; not accompany him to the battlefield.

Carl von Clausewitz

- 3-06.** The conceptual component is as important to routine military activity as it is to operations, providing the corporate mental agility, intellectual rigour and creativity required to adapt quickly. This section describes two elements of the conceptual component particularly relevant in an operational context: understanding how to operate, and the flexibility by which a land force can adapt.
- 3-07. Understanding how to operate,** the basis of the conceptual component, requires understanding of a given situation and knowledge of the relevant doctrine. **Understanding** is the perception and interpretation of a particular situation to provide the context, insight and foresight required for effective decision making.¹⁴ To operate effectively in complex situations, land forces must develop understanding of the nature and character of conflict and its context. This understanding, constantly refined through education and experience, not only ensures that the doctrine used is relevant and useable, but also that it can be applied pragmatically, rather than by prescription. See Annex 8A for further detail on understanding.
- 3-08. Doctrine** is defined as a set of fundamental principles by which military forces guide their actions in support of objectives. It is authoritative but requires judgement in application. Doctrine is a formal expression of military knowledge and thought that the British Army accepts as being relevant at a given time. Agile, not dogmatic, it takes past experience and extracts guidance for dealing with future challenges, providing a foundation from which initiative can be applied with confidence.
- 3-09.** As doctrine underpins all military activity, it is the basis for education and training. UK land forces doctrine is founded on joint and NATO doctrine.¹⁵ Where there are deviations from this, they must be clearly communicated to all involved. The language and terminology used in doctrine must be precise, clear, and formally agreed.

Military Doctrine

is defined as a set of fundamental principles by which military forces guide their actions in support of objectives

¹⁴ JDP 04, Understanding.

¹⁵ It is Defence policy that except where there is a specific need for national doctrine, the UK will adopt NATO doctrine, with caveats or amplification where necessary. Army Doctrine Publication (ADP) Land Operations is an example of national doctrine, albeit coherent with that of NATO.

The central idea of an army is known as its doctrine, which to be sound must be based on the Principles of War, and which to be effective must be elastic enough to admit of mutation in accordance with change in circumstance. In its ultimate relationship to the human understanding, this central idea or doctrine is nothing else than common sense – that is, action adapted to circumstance.

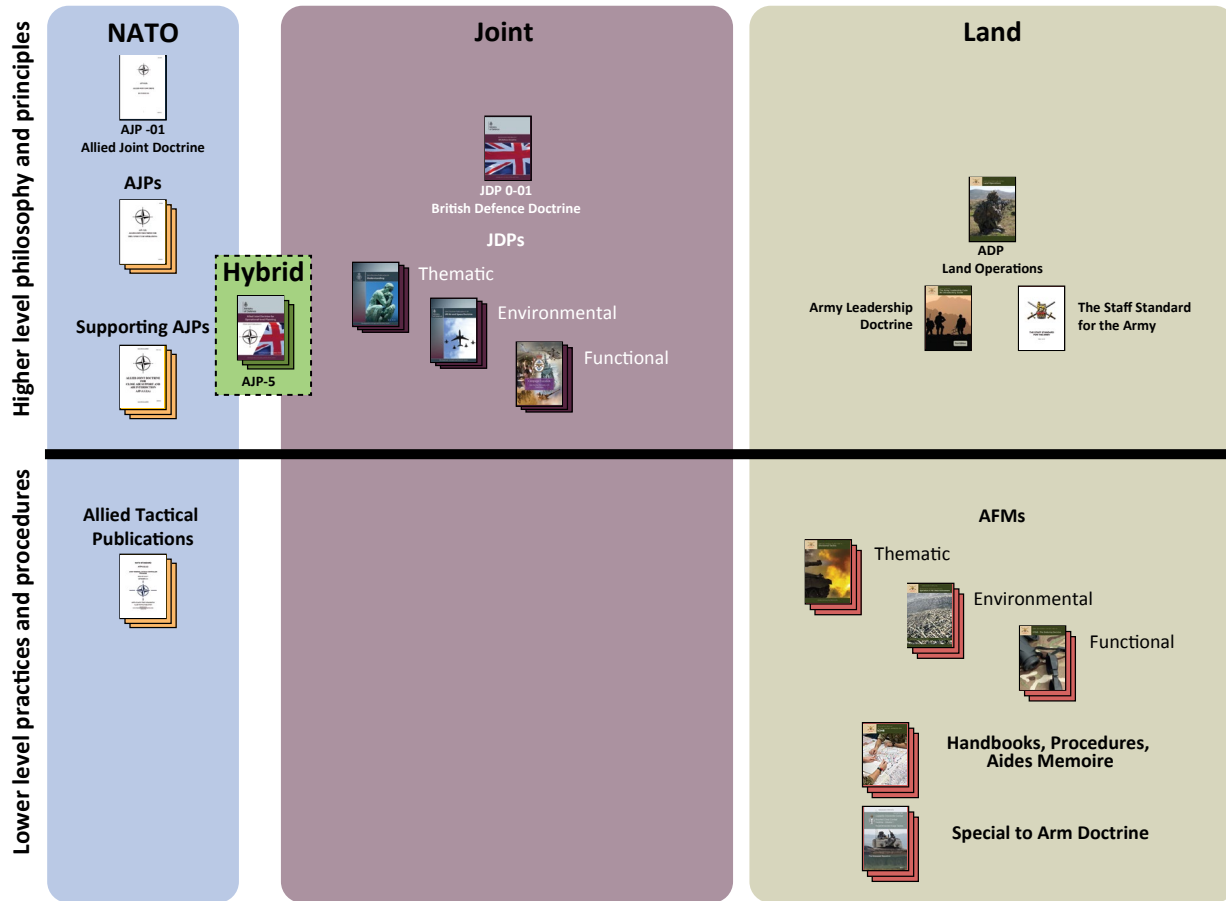
Major General JFC Fuller

- 3-10.** Doctrine is broadly categorised as either higher or lower level, as illustrated in Figure 3-2:
- a. Higher-level doctrine establishes the philosophy and principles that underpin the approach to military activity. It provides a framework for the employment of the military instrument and a foundation for its practical application. While it is in part prescriptive, it is mostly descriptive. Higher level NATO and joint doctrine is contained in the Allied Joint Publication and Joint Doctrine Publication series respectively. If NATO doctrine differs significantly from UK joint doctrine, UK either retains a national JDP or adds national 'green pages' to the AJP, referred to as a 'hybrid' publication. Army Doctrine Publication Land Operations is the British Army's higher level doctrine, also referred to as capstone doctrine for land forces.
 - b. Lower-level doctrine focuses on the practices and procedures required for the effective employment of military forces. It is more prescriptive than higher-level doctrine and at its lowest levels includes instructions for specific drills. NATO lower-level doctrine for land forces is found in the Allied Tactical Publication series. For UK land forces, the equivalents are the Army Field Manual series (of thematic, environmental and functional doctrine), tactical aides-memoire, handbooks, and standard operating procedures and instructions.
- 3-11.** Effective doctrine is accessible, credible and relevant. This requires engaging with three groups in its development: writers, teachers and practitioners. It is the responsibility of commanders not only to understand and apply doctrine, but to impart understanding to their subordinates, as well as to recommend improvements to those who write it. Doctrine is reviewed and refreshed as required to account for evolving strategic direction, emerging doctrine (from both higher and lower levels), the changing character of conflict and relevant lessons from experimentation, training and operations.
- 3-12.** The second essential element of the conceptual component is the **flexibility to adapt** to deal with complex, dynamic challenges. Flexibility spans all components of Fighting Power, but is guided by the conceptual component. A dogmatic and rigid conceptual component stifles the opportunities presented by organisational versatility. A flexible conceptual component can enable the whole force to adapt with confidence in the face of uncertainty and in competition with adversaries, when whoever adapts most effectively is more likely to prevail.

Flexibility is the ability to change rapidly, appropriately and effectively to new circumstances.

Principle of War – Flexibility

Figure: 3-2. Doctrine organisation



- 3-13.** History is full of examples of military forces that have either successfully adapted or failed to do so. Land forces that are successful in adaptation require, though not exclusively: the right command and cognitive skills across the force; a broad, flexible doctrine; the ability to identify and learn lessons; organisational and technical flexibility; and broad-based preparation.¹⁶
- 3-14.** Firstly, land forces require the **command and cognitive skills** to be flexible and adaptable. Essential to all aspects of flexibility is a military culture that supports and nurtures mental agility and initiative. The British Army's command philosophy, Mission Command, promotes decentralised command, freedom and speed of action, and initiative. Mission Command not only encourages but also demands that subordinates use their initiative. It is through initiative and a culture of mutual trust providing a safe environment for open analysis of shortfalls that a land force learns lessons, and adopts innovative approaches to complex challenges. Initiative draws strength from experience and realistic training. It also draws strength through understanding of doctrine, military education and a questioning mindset across the whole force.
- 3-15.** Secondly, a **broad doctrine** provides a common foundation on which land forces can build when faced with potentially new situations. Although the principles of doctrine endure, tactics, techniques and procedures need to evolve rapidly, adapting to the specific situation. A land force can only gain meaningful understanding when it has actually engaged on an operation. It can then generate lessons from the operational theatre, enabling its own rapid adaptation, that of follow on forces, and longer term institutional level force development.
- a. Lessons** are experiences, examples, or developed observations that impart beneficial new knowledge or wisdom for the future. Lessons can be identified through historical study, training, operations and the experiences of other forces. An effective lessons capability depends on a military culture that strives for continuous improvement, encouraging enquiry into and examination of what has gone well and what has not. Fundamental to this culture are leaders who engage directly and openly in the process, with humility, trust and a willingness to learn.
 - b.** The supporting lessons process requires a staff structure and information management and exploitation tools. The process initially comprises lessons capture and analysis of observations and insights, resulting in lessons identification. The lessons identified are assigned to those responsible for remedial action. There are two ways by which a lesson is described as being learned. The first is when validated implementation of the remedial action results in improved operational performance and capability. The second is when identification of best practice is widely communicated and exploited.

It is this flexibility both in the minds of the Armed Forces and in their organisation, that needs above all to be developed in peacetime... This is the aspect of military science which needs to be studied above all others in the Armed Forces: the capacity to adapt oneself to the utterly unpredictable, the entirely unknown.

Professor Sir Michael Howard

16 This framework is from Meir Finkel's *On Flexibility: Recovery from Technological and Doctrinal Surprise on the Battlefield*, (2011).

- 3-16.** Thirdly, the land force requires **organisational and technological flexibility**. A balance of capabilities across the land force, plans for regeneration and constant innovation together aid flexibility. A balanced force includes the appropriate mix of force elements (combat, combat support, and combat service support), force types,¹⁷ specialist capabilities, and individuals (the whole force approach). If the force is not ideally balanced, the risk can be partially mitigated by exploiting synergies with allies and other Services. Robust and realistic plans for the regeneration of capabilities also contribute to the potential adaptability of the force. Flexibility can also be enabled by the innovative use of current and emerging capabilities and technologies. While innovation can require specialist expertise, it can also come from, for example, wargaming and scenario based planning. The success of the German Army's innovation in the 1920s demonstrates the potential of such an approach (see below).
- 3-17.** Finally, adaptable land forces conduct **realistic broad-based preparation** through military education and training. Although we cannot predict the future, rigorous analysis, lessons from our own and others' experiences, education and concept development can indicate many characteristics of the conflicts likely to be faced. Realistic and demanding training to develop core skills, based on doctrine and supported by effective lessons processes, underpins the successful adaptation of land forces.

Learning From history – German Army 1920-30s

Under the 1919 Treaty of Versailles, the German army (Reichsheer) had to be reorganised. It was limited to 100,000 men, of whom only 4000 could be officers, and it was not allowed to have heavy or modern equipment. As its chief from 1919, General Hans Von Seeckt implemented the changes and instituted a major programme to examine the lessons of the First World War.

The first experiments on mechanization and mobility were carried out in 1921 and the lessons from these were widely distributed throughout the army. Foreign writings on military theory (such as by Fuller, Liddell-Hart and Martel) were translated into German and studied and debated. The review of lessons, the experimentation and study led to the promulgation in 1933 of a coherent and realistic doctrine (Truppenführung) – that emphasised combined arms manoeuvre; close air support; decentralized command and control; and rapid exploitation. The 100,000 were trained as the leadership cadre of a much larger army.

In the 1930s Germany used dummy tanks (plywood hulls mounted on a truck chassis) and other ways of experimenting, training and refining their tactics. This allowed them to continue the process of force development without causing the major powers to intervene. Rapid expansion followed soon after Hitler came to power in 1933, but the foundation for the early, shattering successes of the Wehrmacht in the Second World War was laid by the conceptual preparation of Seeckt's Reichsheer.

¹⁷ The NATO force types are heavy, medium and light. This is explained further in Chapter 7

The moral component

- 3-18.** The moral component concerns the human aspect of Fighting Power. It consists of three mutually dependent elements, described in turn in this section: **morale** is the will of the force and its soldiers to fight; **leadership** is the essential element of morale, inculcates the ethical foundation, and directs the force across all three components of Fighting Power; and the **ethical, moral and legal foundation** underpins the way in which land forces conduct operations.
- 3-19.** The moral component is easily corrupted. To be sound, its three elements must be strong and balanced. A force can have high morale, be willing and able to fight very effectively, but if its actions are not legitimate, it risks becoming like the Waffen SS in the Second World War. Such forces can never be the instrument of a democracy. Likewise, when a force's ethical, moral and legal foundations are sound, but its leadership or morale is weak and it will not fight, it is at best useless, at worst a danger to the wider force.
- 3-20.** **Morale**, the first element, resides at the heart of Fighting Power. Maintenance of Morale is a Principle of War because high morale enables the land force to fight and overcome the privations of conflict. High morale is possible without an ethical foundation, but this would be ultimately self-defeating for the land forces of a democratic country. Indeed, the morale of the land force is strengthened by its moral integrity and legitimacy. Morale is not a discrete entity, but is the product of the synergy of all three components of Fighting Power. Of the many contributory factors to morale, which include the Army's Values and Standards, seven stand out and are described below. These are mutually supporting and developed most effectively through leadership and challenging, realistic training.

Morale is a state of mind. It is steadfastness and courage and hope. It is confidence and zeal and loyalty. It is élan, esprit de corps and determination. It is staying power; the spirit which endures to the end – the will to win. With it all things are possible, without it everything else, planning, preparation, production, count for naught.

General George C Marshall

- a. **Fighting spirit** unifies all who serve in our armed forces. Comprising initiative, courage, resilience, determination and toughness, fighting spirit drives soldiers forward in the most arduous and adverse of conditions. Through fighting spirit, soldiers accept both the legal right and duty to apply lethal force, and also the potentially unlimited liability to lay down their lives in the service of the nation. Fighting spirit requires moral and physical fortitude. By testing fighting spirit in demanding training, it is hardened and made more resilient to the realities of potentially brutal land conflict.
- b. **Moral cohesion** is the sense of shared identity and a determined purpose that gives a force the will to fight and succeed. Cohesion binds individuals into teams, and teams into effective fighting forces. Strong moral cohesion makes forces emotionally resilient in adversity. It also helps to make individuals more likely to use their initiative and exploit opportunities, because they will be confident of the support of their comrades and unit or formation. The nature of conflict puts significant pressure on moral cohesion, but without it, the force is susceptible to shock and collapse. Leadership enhances moral cohesion by building shared identity and values. Individual friendships

and collective bonding grow when teams are kept together over time, developing a sense of belonging. Common experiences and histories strengthen comradeship and pride. Together, these build identity, ethos and cause, which individuals can value even above their own lives.

- c. **Discipline** underpins fighting spirit and moral cohesion. It is the glue that holds soldiers together when threatened; it is the primary antidote to fear. When discipline is sound, commanders can be confident that their orders will be carried out, and soldiers know that their commanders and comrades will not let them down. Commanders at all levels are responsible for maintaining discipline in terms of obedience to the law, regulations, orders, instructions, procedures and standards. The best discipline, however, is self-discipline. Commanders must be confident that their subordinates will strive to do their duty under the worst conditions of war, and do so with initiative and intelligence.
 - d. **Comradeship** is the basis of moral cohesion and the wider morale of the land force. Land conflict is ultimately a human activity conducted by groups of people, whose comradeship gives them the friendship and mutual trust necessary to endure and overcome danger, fear and privation. Honed on operations, comradeship is forged in the common bonds developed between individuals and teams working, training, living and socialising together. Comradeship embraces former comrades-in-arms and the families of soldiers, often making units families themselves.
 - e. **Pride** in oneself, one's unit, Service, country and cause can be a potent moral force. As a sense of worthy achievement, pride inspires individuals and teams to the greatest heights of sacrifice and valour. It also generates a common goal of avoiding shame by doing the right thing, upholding the ethical foundation and abiding by the Values and Standards. Pride without arrogance brings people from the widest variety of backgrounds together, strengthening the ties of moral cohesion.
 - f. Confidence and trust placed in the **equipment and sustainment** of the physical component are also instrumental to morale. Living conditions, rations, ammunition, vehicles, weapons, communications, and medical support, for example, all underpin morale. The nature of land conflict means that a disconnect between expectations and reality is inevitable, but a force with high morale and strong leadership can usually overcome this. However, when failures in equipment or sustainment become or are perceived to be systemic, unnecessary or irreversible, morale suffers.
 - g. Field Marshal Slim concluded that "only spiritual foundations can withstand real strain". The **spiritual foundation** relates to belief in a cause, which may be religious, cultural or political. In the same way as the ethical and legal foundations of the moral component require nurturing and protection, so will the spiritual foundations. Spiritual support comes in many forms. It is provided by chaplains and lay persons in units, by families and wider social networks, and by strong leadership, developing shared belief in the cause to be fought for.
- 3-21. **Leadership** is the central element of the moral component; it is so important to morale and the whole conduct of operations that it is treated as a separate subject. Land forces rely completely on the strength of their leadership at all levels, from the force commander to the most junior non-commissioned officers. Leadership is not, however, constrained solely to the chain of command or to those of rank; anyone, including private

soldiers, can motivate those around them through initiative, example and courage. In battle, it is leaders who break the paralysis of shock amid fear, uncertainty, death and destruction. Their vision, intellect, communication and unceasing motivation paves the path through chaos and confusion. They inspire the force through boldness, courage, personal example, compassion and resolute determination to win. Then, and at all other times, it is leaders who shape and control the conduct of the force, for good or ill.

- 3-22. Leadership, therefore, is the critical element of the moral component, vital to the success of operations, particularly in their darkest moments. It is also the cornerstone of command, as the trust and mutual understanding engendered by good leadership are central to Mission Command. It is instrumental in inculcating the ethical, moral and legal foundation of the force. Leadership provides the inspiration, purpose and direction to the development and protection of all components of Fighting Power. Bad leadership, often masked in the hierarchy of land forces, has far reaching and damaging effects. It rapidly demoralises and destabilises a land force and its combat effectiveness.

Definition of Army Leadership: A combination of character, knowledge and action that inspires others to succeed.

Army Leadership Doctrine

- 3-23. **Army Leadership Doctrine** exists because land operations and the nature of land forces require a distinctive approach to leadership. **Leadership on operations** is conducted in a challenging context, which, because of the nature of conflict, is sometimes at the extremes of human experience. It is constrained by doctrine and policy (for example levels of authority), orders, and the ethical, moral and legal foundation of the force. It is important to understand three particular elements of operational leadership.
- a. Land forces have to be deeply hierarchical, with leaders (commanders) appointed to the lowest levels. The adversarial and human characteristics of **operations** place particular demands on leadership in the land force, requiring it to be developed in and exercised by all ranks. Fostering junior leadership and initiative at all levels enables Mission Command.
 - b. Leaders at all levels establish the command **culture and climate** of the force and any element of it. If either culture or climate is inappropriate, it damages morale, and therefore operational effectiveness. Culture is relatively stable and enduring, and is established by senior leaders whose attitudes and behaviours shape that of the wider force. Climate is more specific, susceptible to change and heavily influenced by lower level leadership. It is most relevant in smaller groups, such as at unit level and below. Leaders of all ranks must establish an appropriate climate and culture that promotes and is consistent with the Army's Values and Standards.
 - c. UK land forces' **reputation** for and practice of good leadership is vital to operational success. We remain a reference point, domestically and internationally, for leadership throughout the force. Because campaign authority includes how the members of the force conduct themselves, collectively and individually, it is essential to maintain the reality that underpins this reputation. The reputation, built over a long time, is therefore a key factor of our operational effectiveness, but it is easily damaged by bad leadership and misconduct.

- 3-24.** Army Leadership Doctrine explains what is expected of leaders on operations and in all other activity. It explains the Army Leadership Framework (what leaders are/know/do), the Army Leadership Model (the three roles and six functions) and the Army Leadership Code. The key operational requirement is for good practice of British Army leadership to be translated into good practice by those in command, and for it to be adopted by all ranks.
- a. The Army Leadership Framework** explains the characteristics of leaders. **‘What leaders are’** is about integrity, example and personal impact. Leaders set the example as role models, accept responsibility and are able to influence people and events. They routinely apply and promote the British Army’s Values and Standards and in all situations. Leaders care about the people they lead, the example they set, their own leadership and the Army’s Values and Standards. **‘What leaders know’** is about professional competence. It is grounded in the fact that leaders are soldiers first and foremost, and should be experts in their technical field. In the operational context it requires, for example, thorough understanding of doctrine, the context of operations, and higher commanders intent. **‘What leaders do’** is about translating values and competence into action. Leaders develop the individuals under their command, and build effective teams. But above all, they lead their people to achieve their tasks.
- The Army Leadership Code**

 - Lead by example
 - Encourage thinking
 - Apply reward and discipline
 - Demand high performance
 - Encourage confidence in the team
 - Recognise individual strengths and weaknesses
 - Strive for team goals
- b. The Army Leadership Model**¹⁸ describes the generic role of a leader performing three interdependent roles: achieving the task, building teams and developing individuals. Obviously highly relevant to operations, the leader requires contextual understanding and has six further leadership functions: defining the task, planning, communicating, executing, supporting and evaluating.
- c. The Army Leadership Code** consists of seven behaviours that define how Army leaders should lead. It assists them in translating Values and Standards into action and reminds them of the desired leadership behaviours.

I contend that fortitude in war has its roots in morality; that selection is a search for character and that war itself is but one more test - the supreme and final test if you will - of character. Courage can be judged apart from danger only if the social significance and meaning of courage is known to us; namely that a man of character in peace becomes a man of courage in war. He cannot be selfish in peace and yet be unselfish in war. Character, as Aristotle taught, is a habit, the daily choice of right and wrong; it is a moral quality which grows to maturity in peace and is not suddenly developed on the outbreak of war. For war, in spite of what we have heard to the contrary, has no power to transform, it merely exaggerates the good and evil that are in us, till it is plain for all to read; it cannot change; it exposes

Lord Moran

- 3-25.** The third element of the moral component is the **ethical, moral and legal foundation**. To be effective, a force's actions must reflect a sound and appropriate ethical, moral and legal foundation, and be perceived as such by the audience. If they are not, campaign authority will be undermined, reducing, if not removing, the opportunity to translate tactical military success into desired political outcomes.
- 3-26.** The actions of land forces are guided by their obligations as soldiers and an ethical foundation shared with that of UK society. These ideas inform two of the Army's values – selfless commitment and respect for others. This ethical foundation is based on the concept of inalienable natural rights, granted not by a particular government or culture, but universal and non-negotiable. Modern Western liberal democracy emerged from the belief that every individual has the natural right to life and liberty. From these natural rights stem three moral principles. First, everyone in the world is morally equal, including before the law. The second principle is that of intrinsic, individual moral dignity: a person's status is defined not by what they do, but by the fact that they are human beings. Third, everyone has moral worth, residing in their potential. While always acting lawfully, land forces apply these principles in their engagement with other people, in conflict and non-conflict situations.
- 3-27.** However, UK soldiers have responsibilities to the country and their comrades not expected of other parts of society, and voluntarily place their inalienable right to life and liberty behind that of service to the nation. They must be prepared to accept risk to their own lives, and they are required when necessary to use lethal force. To ensure they conduct themselves appropriately, they must comply with the Army's Values and Standards and fulfil their commitment as part of the mutual obligation of the military covenant.
- 3-28.** The practical expression of the Army's ethical foundation are the **Army's Values and Standards** that guide the conduct of every soldier. They are a fundamental part of morale. Operational effectiveness and the reputation of land forces depend on the ability of every individual to demonstrate absolute professionalism in the most intense of circumstances. Adversaries and enemies will seek to manipulate situations and our understanding to not only test our resolve, but also our ethical foundation. Our Values and Standards are the practical code that fulfils this foundation. The Values of courage, discipline, respect for others, integrity, loyalty and selfless commitment together guide our actions. They define who we are as individual servicemen and women and collectively as a land force. The Standards define the manner in which serving personnel are required to behave in every aspect and dimension of their life, professional and private. They demand that our actions are lawful, appropriate and totally professional. The Army's Values and Standards publication provides a detailed and authoritative explanation.
- 3-29.** Service personnel are bound by service to the country in what is effectively a mutual **military covenant**. This arrangement is inherently unequal in that they may have to contribute more than they receive: their liability is total. In putting the needs of the country, society and their comrades before their own, they forgo some of the rights and freedoms enjoyed by their fellow citizens. In return, UK service personnel

Values

- Courage
- Discipline
- Respect for others
- Integrity
- Loyalty
- Selfless commitment

Standards

- Lawful
- Appropriate
- Total professionalism

should be able to expect the country, and their commanders, to provide them with the necessary resources and leadership to: achieve the objectives required of them; treat them fairly; value and respect them as individuals; support their families; and provide long term support, should they need it, during and after their service. As a covenant, it imposes moral rather than contractual obligations.¹⁹

The physical component

- 3-30.** The physical component of Fighting Power provides the means to fight. Comprising principally manpower, equipment, training, sustainability and resources (METS-R), it is also referred to as the combat power of a force. Manpower and equipment are converted into ready, deployable forces by training. Training, although described within the physical component, has an essential part in the development of Fighting Power as a whole, building the moral and conceptual components as much as the physical.
- 3-31.** The Fighting Power of a land force is founded on its people – **manpower**. The Army's ability to attract, recruit and retain the right people, with the right skills, in the right quantity and at the right time is critical to its Fighting Power. Land forces require soldiers who are ready and prepared, individually and collectively. UK land forces also demand that soldiers place the needs of the Service above their own. Manpower is, therefore, absolutely dependent on the moral component if it is to be effective and sustainable. It also relies on the conceptual component to ensure required knowledge and skills. This pool of manpower does not consist solely of soldiers, regular or reserve, but also of civil servants, other civilians and contractors. Each will come with differing terms of service, experiences, requirements and expectations that must be accounted for in forming a cohesive and effective land force.
- 3-32.** Land forces require sufficient and effective **equipment**, designed, manufactured and scaled according to the likely or directed operational requirement. Equipment can be operational or non-operational, deployable or non-deployable. Equipment care is the responsibility of all soldiers to ensure that equipment is serviceable for use on operations and training and money is not wasted.
- 3-33.** Equipment programmes follow a cycle of concept, assessment, demonstration, manufacture, in-service use and disposal. This process can be time and resource intensive and may not be sufficiently responsive to the needs of an adaptable land force. Alternative procurement methods exist through the urgent capability requirement process, but these can be expensive. The Army, therefore, seeks to reduce the difference between programmed and urgent procurement. This requires first an understanding of the nature and character of conflict and of doctrine. It also depends on a coherent research and development programme between the UK Government and industry, experimentation, and operational analysis. Additionally, harnessing initiative, creativity and innovation through lessons processes improves the equipment availability of the force and identifies novel ways of adapting its use.
- 3-34.** **Training** is the essential vehicle by which all three components of Fighting Power are developed. Force preparation relies on a structured training progression, tailored to the operating context, tempo and the resources available. The overall progression begins with

¹⁹ This is not quite the same as the Armed Forces Covenant, a policy codification of the military covenant, in which the UK Government encourages community support to service personnel, veterans and families.

turning recruits into soldiers. They are then trained in a specific role, individually and as part of a team. The team is trained to be a coherent part of a sub-unit. The sub-unit is then trained to operate within a combined arms grouping; the combined arms grouping is then trained within a formation context. Once in units, through the progression soldiers develop interoperability not only with other arms and Services but also allied nations. This continuous flow can be divided into individual and collective training. These two elements are best delivered separately to avoid training a force of individuals, at a time when that force needs to be training as a whole. Training continues during operational deployments, not only to maintain core skills, but as part of adaptation, so the force can employ new tactics, techniques and procedures, and use new equipment.

It cannot be too often repeated that in modern war...the chief factor in achieving triumph is what has been done in the way of preparation and training before the beginning of the war.

Theodore Roosevelt

- 3-35.** AFM Training provides guidance on how to plan and conduct training in accordance with prioritised direction given by higher headquarters. The principles of training reflect the cumulative experience of many military generations and form the bedrock of the Army's approach to training.
- 3-36.** As people are the foundation of a land force's Fighting Power, training is designed around individuals first. Intimately related to education, individual training provides the essential skills needed to conduct operational tasks as a soldier, apply trade skills in the field and operate as part of a team. Physical fitness, shooting and fieldcraft are the essential foundation of military skills for all soldiers, but are insufficient for contemporary operations. Other skills are required, such as the ability to access and use information, and to communicate and cooperate with allies, partners and other actors in the area of operations. Individual training is delivered after recruitment, and continues throughout careers, building upon special-to-arm expertise. This is essential for the maintenance and development of military skills, as they quickly fade if they are not practised. Individual training is one of the first responsibilities of commanders; they should ensure that standards are maintained by, among other things, a cycle of annual skills testing. Strong collective performances are based on strong individual capabilities, and weaknesses in collective performance can often be traced to gaps or weaknesses in individual training.

The principles of training:

- Is a function of command
- Is a continuous and progressive process
- Must be challenging and interesting
- Must be realistic
- Must have an aim and objectives
- Training methods must be continuously reviewed for effectiveness
- Must reflect operational doctrine
- Must be permissive of error
- Must be appropriately safe
- Must be exploited

- 3-37.** Collective training is the iterative process by which competent individuals are gradually forged into teams of increasing size, complexity and capability. A force is not ready for operations until it has undergone robust and realistic collective training, to training objectives and conditions consistent with the operational requirement. Collective training seeks to replicate, through simulation and field training, the challenges of complex operations. The primary purposes of forms of collective training vary, but each complements the others. Collective training builds competence over time, beginning with low level team skills, through special-to-arm and combined arms to joint training. Commanders and staff at all levels participate in command training.

In no other profession are the penalties for employing untrained personnel so appalling or so irrevocable as in the military.

General MacArthur

- 3-38.** Collective training is described as either foundation or mission specific training. The collective skills developed are not bound to a single category; rather this description informs the purpose and resourcing of the training conducted. Foundation training develops the flexible core competences of the land force, providing it with a firm foundation from which to adapt to specific operational situations. It takes account of how the operating environment might change or broaden as well the unchanging aspects of the nature of conflict. Foundation training seeks to replicate high-intensity, complex warfighting. It reflects the nature and character of conflict, the austerity of expeditionary campaigns, and the requirement to fight in both the physical and virtual domains, with, against and among multiple actors and in view of the rest of the audience. Mission specific training then addresses inevitable shortfalls in foundation training, and enables a unit's adaptation to meet its specific, intended mission. Mission specific training continues both on arrival in a theatre of operations and during deployment, ensuring that the force trains in the most current and relevant tactics, techniques and procedures.
- 3-39. Education** contributes, in parallel with training, to the development of Fighting Power as a whole. Training without education will not be sufficiently sophisticated to deal with the complexity of conflict and operations. Education without training does not prepare people to apply the theory. Military education equips individuals with the breadth and depth of knowledge and skills to assume greater responsibility and increase their employability. Courses, academic placements and private study are examples. The adaptability of land forces depends on continuous investment in, encouragement of and reward for appropriate education. Most importantly, education gives people the intellectual edge and confidence to improvise, innovate and find solutions to problems which do not fit the contingency expected.
- 3-40. Sustainability** is essential: even if the force is fully manned and has all the necessary equipment, if it cannot be sustained, it cannot be employed as intended. Sustainment also underpins the path from force preparation to deployment. This encompasses the sustainability of individuals and teams, of training, and of infrastructure and training space so that soldiers can live and train together in suitable conditions.

The more I see of war, the more I realize how it all depends on administration and transportation . . . It takes little skill or imagination to see where you would like your army to be and when; it takes much more knowledge and hard work to know where you can place your forces and whether you can maintain them there.

Field Marshal Wavell

- 3-41. The physical component is also reliant on wider **resources**. Manning, equipping, training and sustaining armed forces costs money. Ultimately, if there are insufficient resources available on and between operations to recruit, train, equip, deploy and sustain the force, Fighting Power is severely undermined.

Readiness, deployability and recovery

- 3-42. Fighting Power can only be applied if the force is held at the appropriate readiness, can be deployed in time, and then recovered for the next operation. Forces are generally held at **readiness**, or notice to move, from their home base or a mounting centre in the UK. A force at 6 months notice to move, for example, needs that time to train and gather the necessary resources to complete its Fighting Power. Notice to effect is largely dependent on the resources, including time, required to deploy and be ready for employment. Readiness applies to all components of Fighting Power: conceptual readiness reflects the required understanding and intellectual readiness to adapt to expected and unexpected contingencies; moral readiness is represented by the leadership and morale of the force; and physical readiness by the physical state of the force.
- 3-43. The **deployability and recovery** of the force requires internal and usually external, including joint, enablers. For example, the joint force may enable the deployment of a land force to a point of disembarkation from which it may need to project itself overland for hundreds of kilometres. These factors must be accounted for when considering the readiness and overall military effectiveness of a land force. Enabling actions include: pre-deployment leave; reception, staging, onward movement and integration (RSOI); the relief in place of the in-place force; extraction and recovery; decompression; and post-operational tour leave.

3rd Division - France 1940

The distinction that can be made between pure numbers of troops and their actual Fighting Power is well illustrated by the contrasting experiences of the British 3rd and 12th Divisions in the British Expeditionary Force (BEF) in May 1940. Soon after the German invasion of France on 10 May 1940, the Allied forces were split by a bold and massive armoured thrust that forced the BEF to fall back towards the port of Dunkirk.

Though having similar numbers of infantry battalions to the 3rd Division, 12th Division's actual Fighting Power was compromised by a range of powerful disadvantages. The 3rd Division, as one of the pre-war regular divisions, was a long-standing force, one of the best equipped in the Army, and had been in France since late 1939. Its GOC, Montgomery, had trained them hard for 6 months before the German invasion. But 12th Division was only recently created. The troops had not trained together; they lacked cohesion, being a collection of disparate battalions; the senior officers did not know their men; and the division had virtually no anti-tank weapons, combat support or combat service support.

12th Division's Fighting Power was further compromised by the circumstances in which it found itself. Deployed to defend lines of communication and so spread over a wide area, a German breakthrough led the division to be tasked suddenly on 20 May with the defence of the towns of Albert, Amiens, Abbeville and Arras against Guderian's advancing XIX Panzerkorps. Though 3rd Division's circumstances were also difficult, the force having to conduct a fighting withdrawal, they were able to do so closed up with other divisions to either flank.

Under these circumstances, the contrasting experiences of the two divisions become easier to understand. In fighting lasting no more than seven hours, 12th Division was effectively annihilated and was utterly defeated and dispersed. Eight days later, during the final stages of the withdrawal to Dunkirk, the left flank of the BEF was suddenly exposed due to Belgium's surrender. The 3rd Division (at this stage reduced to almost 50% combat effectiveness after 18 days of continuous combat and withdrawal) was ordered to disengage from one flank and move to the other. This involved a 50 mile move across the rear of the BEF and occupation of a position on the Yser Canal. Though exhausted and in a nearly defeated army, 3rd Division remained a cohesive fighting force and completed the move in a single night.

Thus, though comparable in numbers, the Fighting Power of the ill-fated 12th Division was not equal to that of 3rd Division because the 12th laboured under significant physical, moral and conceptual difficulties brought about by deficiencies in equipment, training and the circumstances in which the unit had to fight.

PART 2

Fundamentals

Part 1 described the nature and character of conflict, and the implications for land forces. These indicate a need for doctrine that addresses the increasing global flow and availability of information as well as the enduring human, adversarial and political nature of conflict. This doctrine is **Integrated Action** – the application of the full range of lethal and non-lethal capabilities to change and maintain the understanding and behaviour of audiences to achieve a successful outcome. It is a unifying doctrine which guides the orchestration and execution of operations whether the task is any combination of fighting, engagement, security or support. In particular it provides the conceptual framework for land forces to succeed in an interconnected world where information is pervasive. While only formations at the higher tactical level and above are routinely resourced and structured to orchestrate Integrated Action, it governs the way of thinking about all operations, and informs how they are executed. Integrated Action is explained in Chapter 4.

Integrated Action is supported by the tenets of the **Manoeuvrist Approach** and **Mission Command**. The application or threat of lethal force in accordance with the Manoeuvrist Approach, explained in Chapter 5, is central to combat operations. The Manoeuvrist Approach is an attitude of mind that seeks indirect approaches in applying strength against the vulnerabilities of the enemy. It is the British Army's fighting doctrine for the tactical level, specifically focused on the enemy. It is a particularly important aspect of Integrated Action as combat operations can have far reaching effects at the operational and strategic levels. Mission Command, the subject of Chapter 6, is our command philosophy. It emphasises decentralised command, empowers leaders down to the lowest level, and makes them responsible for acting to achieve their commander's intent within designated constraints. Integrated Action guides the land contribution to joint and multinational operations. It is consistent with the UK doctrine of Joint Action²⁰. Integrated Action and Joint Action are also consistent with NATO operational and tactical doctrines. These emphasise the military contribution to an inter-agency full spectrum approach through the orchestration of the NATO joint functions.

Together, Integrated Action, the Manoeuvrist Approach and Mission Command form the fundamental ideas of UK land forces' doctrine. The Chapters that follow in Part 2 provide the intellectual foundation for Part 3, which introduces how operations are conducted and provides the capstone for the AFM series.

Part 1 – Context

Nature and character of conflict
National and operational context
Fighting Power

Part 2 – Fundamentals

- ▶ Integrated Action
- ▶ Manoeuvrist Approach
- ▶ Mission Command

Part 3 – Conduct of operations

Organising for operations
Orchestrating and executing operations
Commanding operations
Sustaining operations

²⁰ Joint Action is defined as the deliberate use and orchestration of military capabilities and activities to affect actors' will, understanding and capability, and the cohesion between them to achieve influence. (JDP 3-00)

ADP Land Ops **Chapter 4**



Integrated Action



CHAPTER 4

Integrated Action

Integrated Action is the application of the full range of lethal and non-lethal capabilities to change and maintain the understanding and behaviour of audiences to achieve a successful outcome.

Introduction

- 4-01.** Integrated Action describes how land forces orchestrate and execute operations in an interconnected world, where the consequences of military action are judged by an audience that extends from immediate participants to distant observers. Integrated Action requires commanders and staff to be clear about the outcome that they are seeking and analyse the audience relevant to the attainment of their objectives. They then identify the effects that they wish to impart on that audience to achieve the outcome, and what capabilities and actions are available. These lethal and non-lethal capabilities may belong to the land force itself, or to joint, inter-governmental, inter-agency, non-governmental, private sector and multinational actors involved in the operation. What is important is for commanders and staff to work out how to synchronise and orchestrate all the relevant levers to impart effects onto the audience to achieve the outcome.
- 4-02.** Integrated Action, with the **audience** as its major consideration, requires sophisticated **understanding, integration** of all capabilities available, and is **outcome-focused**. These are the four fundamentals of the doctrine. Within land forces, the **tactical functions** are the primary levers of influence.
- People are at the heart of conflict; it is their decisions and behaviours that determine how conflict is conducted and resolved. Integrated Action requires consideration of the diverse **audience** that is relevant to the attainment of our objectives, globally, nationally and within theatres of operations.
 - Integrated Action is founded on the land force's **understanding** of its task and environment. A dynamic approach to understanding, built on a learning culture, allows the force to adapt and innovate in response to evolving situations.
 - Land forces create desired effects by the **integration** of lethal and non-lethal capabilities. Effective integration relies on the cooperation and interoperability of the

Integrated Action

- Introduction
 - Fundamentals
 - Orchestration and execution
- Understanding and the audience
- Integration of actions to achieve desired outcomes
- Examples of Integrated Action

land force, multinational, host nation, inter-governmental, non-governmental and inter-agency partners, as well as of tactical combined arms formations and units.

- d. Integrated Action needs commanders to think about how their actions contribute to the desired **outcomes**, in a broad and evolving context. This approach encourages a wider and longer-term view of a situation, relative to the task and role of the land force.

4-03. This chapter explains how these fundamentals of Integrated Action are put into practice. The first section describes what land forces need to understand, with the priority being the human aspect of the land environment – the audience. The second section introduces how the land force integrates lethal and non-lethal capabilities to achieve desired outcomes. The chapter concludes with three examples.

4-04. The doctrine of Integrated Action applies at all levels to land forces, from the land component of the joint operation, to tactical formations, units and sub-units. There is, however, an important delineation between responsibilities for its orchestration and execution.

- a. It is only at the higher tactical or operational level (usually the division or corps) that Integrated Action can be orchestrated and fully aligned with joint, inter-agency and multinational operations. In certain circumstances, brigades or units may be the highest level of UK land command in a particular theatre and so may be required to operate at the operational level. Examples include conducting capacity building or non-combatant evacuation operations. In such cases, they must be resourced appropriately.
- b. Brigades and units at the tactical level plan and execute their contributions to Integrated Action. They routinely integrate their capabilities and activities to deliver single tactical actions, as part of a longer term higher tactical or operational level plan.

Understanding and the audience

4-05. Central to Integrated Action is analysis and understanding of the audience relevant to the attainment of our objectives. We must also develop understanding of the information and physical aspects of the operating environment, and of the context and consequences of our actions. However, no amount of analysis can achieve complete understanding in advance of an operation; and predictable relationships between cause and effect are rare in adversarial human conflict. Therefore, it is essential to set the force to learn throughout an operation, generating dynamic and continuous understanding. This will require specific planned effort, to collect and analyse information to test deductions, and to refine decisions as to future action.

- a. The **audience** is made up of all the groups and individual people whose perception and interpretation of events and subsequent behaviour contribute to the success or otherwise of military action. These groups range from the global audience right down to immediate participants, as illustrated in Figure 4-1.
- b. Within the wider audience are **actors** – those individuals or groups who take action or directly exert influence. They include our own forces and allies, as well as others who are friendly, neutral or hostile to us. Although the audience and actors are not constrained geographically, tactical level land forces are primarily concerned with changing or maintaining the behaviour of actors within an area of operations, while

promoting the consent of the wider audience. These local actors, ranging from armed groups to non-governmental and private sector organisations, may be, or have the potential to be supportive, neutral or hostile.

- c. **Adversaries** are a sub-set of actors; they seek to prevent us from achieving our objectives. They may have many different motivations and may be subject to a broad range of influences. Adversaries will often present hybrid threats, combining the threat or application of armed force with deniable or ambiguous actions that may not cross the threshold of armed conflict.
- d. An **enemy** is a particular kind of adversary, who seeks to oppose us through armed, lethal means.

The boundaries between these groups are not fixed. For example, adversaries may be persuaded or elect to become neutral or even friendly actors. Conversely, the unintended consequences of our actions may see previously neutral actors become our enemies. It is important to identify how groups and individuals relate to each other, what motivates and influences them, how they can influence us and how land forces might seek to achieve advantageous behavioural outcomes while preventing those that are undesirable.

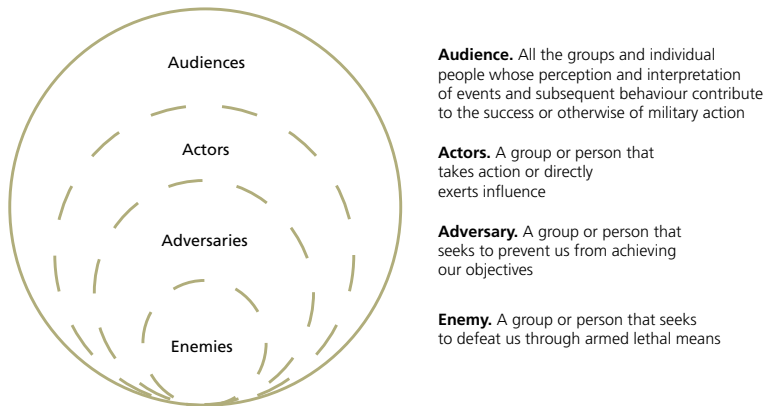


Figure 4-1. Audiences, actors, adversaries and enemies

- 4-06. Commanders must also understand the **information** aspects of the land environment: how it can influence the audience, and how, as a resource of the land force, it supports the integration of actions. As a means of influence, we must understand what information is relevant and, to whom, how it is received, and how it might influence people's decision-making and behaviours. We must also understand how we and other actors compete for influence by using information, in both the physical and virtual domains. Information is also a fundamental resource of land forces, our partners and adversaries. It is generated, maintained and transferred primarily in the virtual domain, which will be contested and potentially denied by adversaries.

- 4-07. Understanding how we and others operate in the virtual domain informs how we protect our own information, and how we might challenge our adversaries. We seek information superiority, but must be able to operate without it. Understanding the **physical** geography of the land environment underpins the effective integration of physical actions, such as manoeuvre and fires, with other levers of influence, for example, information activities or those delivered by other instruments of power. First, we must understand the military relevance of the terrain, both as an objective of land operations and as the medium through which operations are conducted. Factors include the ground, weather, climate and infrastructure. Secondly, we need to understand the relevance of the physical geography to the audience. Different people perceive and use the physical environment in significantly different ways. For example, a particular building may hold cultural significance to a key audience, and so should not be considered solely for its physical utility.
- 4-08. The **context** comprises the historical, political, economic, cultural and social background to the situation or conflict. It shapes what resources and missions are allocated to land forces, their freedoms, constraints and relationships with other actors. It also shapes, but cannot predict, the likely consequences of our actions, which in turn contribute to the evolving context. Actions will have both intended and unintended effects. These can be positive or negative, immediate, short or long term, and will be perceived and interpreted differently by different parts of the audience. Commanders, therefore, need to constantly assess and re-assess the consequences of their actions, as perceived by the audience, and adjust accordingly.

Integration of actions to achieve desired outcomes

- 4-09. Understanding is a means to an end; nothing happens until action is taken. What is important is to draw from the available relevant information what effects and combinations of actions are required, and then to act appropriately and quickly, relative to other actors. Furthermore, it is through action that understanding is often best developed. Only so much can be learned through observation and study; early actions should usually be seen as a bridge from preliminary understanding to Integrated Action.
- 4-10. Integrated Action blends lethal and non-lethal **actions** to have **effects** on the understanding, physical capability, will and cohesion of the audience. Organised into attainable **objectives**, these effects are ultimately realised in people's minds, influencing their decision making, to achieve the desired **outcomes**. Although not all tactical activities are directed against people, the ultimate targets of land power are the audience and actors (including enemies, adversaries, allies and civilians). Integrated Action is planned from desired outcome back to actions, through objectives and effects, and adjusted in execution in response to what has been learned and the changing situation.
- 4-11. Informed by continuous analysis of the audience, the commander describes the desired outcomes, an **outcome** being a favourable and enduring situation. Where appropriate to the tasks assigned and the resources available, outcomes are described in terms of changed or maintained understanding and behaviour. In all cases, however, land forces operate in a context where the success of military actions is judged by a wide audience.
- 4-12. Because military operations are unpredictable, they must be designed to allow those executing the plan to focus on clearly defined and attainable tactical **objectives**, in the context of desired and potential outcomes.

- 4-13.** Objectives are achieved by **effects** that bring about changes (or not) in a particular object, for example maintaining the support of particular actors or denying an enemy access to a piece of terrain. Integrated Action, seeks effects on the understanding, physical capability, and will and cohesion of actors, consistent with the desired outcome.
- a. The decision-making of actors is, like ours, grounded on their **understanding**, how they perceive and interpret particular situations. Actions can affect their understanding directly or indirectly. Often, how key individuals understand a situation can affect the decisions and behaviour of larger groups. For example, enemy commanders who have been deceived, or denied the ability to make accurate assessments, will give less effective direction to their subordinates; a force might show additional resolve as a result of the actions of just one individual; or a community might leave a town or stay in it, support an enemy or not, depending on how a few influential people interpret the situation.
 - b. Our actions can damage, build or maintain **physical capability** in the form of people, equipment and infrastructure and the means to sustain or direct them. For example, an enemy's physical capability can be destroyed or denied; partner forces can be equipped and trained; and communities can be provided with or given improved access to resources and infrastructure.
 - c. Our actions can seek to affect actors' **will and cohesion** positively or negatively, depending on the desired outcome. Land forces can use Integrated Action to bolster or maintain partner and community will and cohesion, for example, by using capacity building or fire support to improve partner forces' morale.
- 4-14.** Having identified the effects required, a commander integrates the **actions** and capabilities available to achieve them. Those actions taken by the land force are normally worded as tasks, which, together with their purpose, constitute subordinates' missions. At the tactical level, such missions are typically fixed: they require specific activity, such as attacking, seizing terrain, building a bridge or providing logistic support. A capacity to think laterally beyond these missions is, however, required; commanders must always consider the wider impact of their actions and how they might contribute to first and second order effects and outcomes.

The Tactical Functions

- 4-15.** The **tactical functions** are the primary levers of influence, representing the full breadth of the force's activities that are integrated when orchestrating and executing operations. These are, however, rarely sufficient. Commanders and staff must also seek to integrate a range of different levers not under their direct control; they must, therefore, cooperate with joint, inter-governmental, inter-agency, non-governmental, private sector and multinational actors involved in the operation.
- 4-16.** Those tactical functions mainly directed towards actors are: manoeuvre, fires, information activities and capacity building.²¹ Their successful application depends on command and intelligence which set the operation's direction, and protection and sustainment which enable the mission. These tactical functions can also have direct and indirect effects on the audience as well as on the mission itself. For example, how a force collects intelligence, protects or sustains itself may directly affect the audience's perceptions of the force.

²¹ Capacity building is the land force contribution to outreach in Joint Action.

- 4-17. The nature of the task determines how the tactical functions are applied. When fighting, for example, the main effects sought are on the will of the enemy and so this aspect of Integrated Action is guided at the tactical level by the Manoeuvrist Approach. As each operation is unique, however, there is no single way by which actions are integrated. Rather, there are doctrinal frameworks, common to varying degrees in joint and NATO doctrine, which aid the organisation and visualisation of Integrated Action. These are the **operational** and **tactical frameworks**, which link groups of actions by their purpose, and the **geographic framework** which does so by their location in relation to the force. The tactical functions and doctrinal frameworks are explained in Chapter 8.

Gulf War - 1990/1991

In August 1990, Iraq invaded and occupied Kuwait. Soon after, the United Nations Security Council authorised a coalition of 34 nations to eject Iraqi forces. The campaign lasted from 2 August 1990 to 28 February 1991. The fighting in 1991 is remembered by many as being largely about fires and manoeuvre. But from national capitals to the battlegroup level, there were important political and information activities aspects to the operation, integrated with fires and manoeuvre, which included many of the elements of Integrated Action in a warfighting operation.

At the strategic level, the first challenge was to assemble the Coalition in Saudi Arabia. This was hugely sensitive because the arrival of thousands of Western soldiers and airmen in the cradle of Islam was unprecedented and in many quarters unwelcome. Part of the solution was to place Coalition forces under overall Saudi command, with the components commanded by US generals. The Coalition was eventually 700,000 strong with the major contributions from the United States, UK, Saudi Arabia, France, Egypt and Syria. Subsequently, the major issues were building and maintaining consent for the operation, keeping the Coalition together, and retaining campaign authority. In the time before the internet, print and broadcast media played a key role in informing opinions at home. Live TV, used by both sides to inform audiences, was particularly prominent. The cohesion of the Coalition was critical, and also a potential vulnerability. Retaining campaign authority was essential.

At the operational and tactical level, psychological operations played an important role in demoralising Iraqi forces. Initially Iraqi troops occupying Kuwait were reached by using smugglers to get small radios and cassette tapes into Kuwait. The 50,000 tapes that were smuggled in had popular Arabic music on them and also messages from the Coalition, crafted by the Saudis to appeal to their intended audience. When the six week air campaign began in January 1991, coalition air raids deliberately destroyed the Iraqi TV system, and filled the void with their own broadcasts, again designed and presented with Saudi assistance. Indeed, the air campaign itself was intended to be a powerful political and psychological instrument. Whilst preparatory air attacks failed to coerce Saddam to withdraw from Kuwait, the impunity with which Coalition air attacks were conducted provided compelling evidence of the Coalition's military superiority. These air attacks also imposed significant physical and psychological attrition on defending Iraqi forces. Iraqi defences were bombed and leafleted to encourage desertion and later, honourable surrender. Some battlegroup objectives were also attacked with lethal force while surrender was encouraged and enabled by loudspeaker.

The manoeuvre of the land component of the campaign delivered the decisive coup de grâce. Controversially, the ground operation was brought to a close after only 100 hours, largely because of the threat of the loss of campaign authority. The reaction of the audiences at home to what seemed excessive destruction of defeated Iraqi forces on the Basra Road; the threat of the disintegration of the Coalition if the Western members were to go on to Baghdad; and the willingness of the Iraqis to negotiate a surrender were all considerations that brought military operations to an end.

Thus, Coalition success required the careful integration of political, psychological, and military activity in order to achieve the campaign's limited declaratory goals.

Operation HAMKARI - Afghanistan 2010

In 2010 the surge of United States forces into Afghanistan allowed the International Security and Assistance Force (ISAF) to attempt to regain the initiative in Kandahar province. In Regional Command (South), Kandahar City was the key, because it was the heart of the Pashtun south, the birthplace of the Taliban movement, the former de facto capital of the Taliban government, and the home of President Karzai. For the Taliban, if they could not seize and hold Kandahar, then contesting it was important for their attempts to appear a viable rival to the Afghan government.

The commanding general realised that efforts in Kandahar province could not simply comprise a physical effort to drive out the Taliban; there would also have to be a political effort to re-connect the people to the Afghan government. The preliminary requirement was to understand the physical, human and information aspects of the environment. A particular focus was to establish which actors could enable or undermine the operation, and to determine who it was that could provide the conduits within the Government, and also from within the population at large, to effect the necessary change. It was also essential to understand what tools or levers could be applied to achieve the desired behaviour from these actors. Certain actors might be supportive if their agricultural and economic problems were addressed; others might have to be removed and replaced; others empowered by another authority; some might join the Afghan security forces; many would need to be defeated by military action.

Operation HAMKARI (from the word 'cooperation' in Dari and Pashto) was launched in July 2010 as a combined civil-military operation to deny the Taliban control of key terrain around the city and to improve governance and development. Taliban access into Kandahar City was dependent on their control of the surrounding districts, where they had a relatively secure refuge from which they controlled or influenced the population.

Phase One involved extensive shaping operations. These operations included efforts by the Afghan Government to place the right personnel in key appointments in order to improve the capability and legitimacy of local government. They also included targeted raids to capture or kill Taliban leaders. Afghan government forces established physical control of Kandahar city enabling them to control the flow of population in and out, and therefore also cutting off the insurgent supply and infiltration routes.

Subsequently, the division's brigades executed overlapping decisive phases. Each brigade was assigned one of the surrounding districts which they cleared sequentially. Arghandab district was first. It was historically and physically important terrain for the Taliban and a major centre of improvised explosive device (IED) production and arms caches. Afghan and ISAF forces began the clearing operation in late July, targeting the strongholds in west-central Arghandab, and by the beginning of October they had cleared the enemy positions and IED belts. These activities were accompanied by parallel efforts to improve the effectiveness of civil government. The other districts, and more fighting, followed, but the Taliban in the region were defeated. The remaining Taliban fighters either fled or laid down their arms; some joined ISAF cash-for-work programmes.

Operation HAMKARI consciously blended all non-lethal and lethal means available to the commander to change the physical capability, will and cohesion, understanding and behaviour of key targeted actors. It was, effectively, an exercise in Integrated Action.

Operation GRITROCK - Sierra Leone 2014

A task force under command of a brigade headquarters deployed to Sierra Leone in September 2014 to assist the UK Department for International Development (DFID) to support the Government of Sierra Leone in countering the outbreak of the ebola virus. Although there was a security risk, the main threat was not an armed enemy, but a lethal virus. Since the security threat was not primarily military in character, Defence was in a supporting role at the strategic level. Nevertheless, on the ground the military were required to provide a framework of command and control, coordination and action which proved critical to the success of the operation.

The tri-service force was initially commanded by a logistic brigade headquarters. It included combat and combat support force elements (infantry, combat engineer, communications, intelligence, and information activities forces) and combat service support to enable the mission. Critical force elements were joint or drawn from other components, including: a tri-service medical group, RAF strategic lift and RFA ARGUS. Although it was clear that the British military was not in the lead, the force was a key resource, and the command and control and medical capabilities provided by the military were particularly valuable to the UK-led international effort.

At the initiation of Operation GRITROCK, the threat was extreme and the situation was deteriorating. There was an infection rate of 600 people per week (and climbing), many hospitals and medical centres had closed, there were dead bodies in the streets and health care workers were contracting the disease at an unsustainable rate.

The brigade commander's first task was to begin to understand the problem and to build relationships with key individuals and organisations. The commander had had some first-hand experience of the country, and the Army had been engaged in Sierra Leone for over 14 years. There was considerable local knowledge, some key personal relationships already existed and the Republic of Sierra Leone Armed Forces and Ministry of Defence were well-disposed to the British and competent. By developing an understanding of the nature and outlook of all the key actors in Sierra Leone and in London, the brigade commander was able to begin to work out how best to assist DFID's team on the ground, and their 2* overall lead.

The efforts of the Sierra Leone Government, DFID, NGOs and the supporting military task force turned the situation around over a period of months. Many more people died, but the virus outbreak was stabilised, contained and eliminated. The military contribution, although a supporting effort, was vital to the success of the operation. It had a very significant influence on planning, strategy, conduct of the operation, the maintenance of morale of NGOs and Sierra Leonean health services, and the continuance of effective governance in the country. For example, the military were able to deploy trained and equipped medical staff immediately into theatre; they built and then operated ebola treatment centres; they provided a framework for the training of local medical, police and government personnel; they provided critical logistic capabilities for the ebola treatment programme.

The doctrine of Integrated Action did not exist during Operation GRITROCK, but the brigade commander consciously used the tools of operational art and counter-insurgency doctrine to guide his actions. His approach focused on identifying the desired outcomes and objectives, and the human audience and actors whose behaviour would be essential for success. Some of those actors were his superiors in London and partners in Sierra Leone. Some of them he could influence personally or by the words or deeds of his task force; others had to be reached vicariously through the Sierra Leonean authorities and media, DFID, and relevant NGOs. Operation GRITROCK is a good example of the ideas of Integrated Action being applied in a non-conflict situation.

ADP Land Ops **Chapter 5**



Manoeuvrist Approach



CHAPTER 5

Manoeuvrist Approach

Introduction

- 5-01.** The Manoeuvrist Approach is the Army's fighting doctrine for the tactical level. It determines the way we fight enemies across the different types of operation, and because fighting can have extremely significant consequences, it is set in the broader context of the audience and Integrated Action. It is an indirect approach which emphasises effects on the will of the enemy. It blends lethal and non-lethal actions to achieve objectives which shape the enemy's understanding, undermine their will and break their cohesion. It aims to apply strength against vulnerabilities. Significant features are momentum, tempo and agility, which in combination lead to shock and surprise. It entails doing the unexpected, using initiative and seeking originality, combined with a relentless determination to succeed.
- 5-02.** This section describes the requirements of the Manoeuvrist Approach; ways of seizing and holding the initiative; and how to shape the understanding of enemies, undermine their will and break their cohesion. Although explained separately below, gaining the initiative and attacking vulnerabilities must be seamlessly connected. Each reinforces and enables the other.

Manoeuvrist Approach

- Introduction
- Requirements:
 - Understanding
 - Attitude of mind
- Psychological impact
- Seizing the initiative
- Shaping understanding
- Attacking will and cohesion

Requirements

- 5-03.** The Manoeuvrist Approach, enabled by Mission Command, has two specific requirements: an attitude of mind and understanding of the enemy's vulnerabilities.
- 5-04.** First, the Manoeuvrist Approach requires an **attitude of mind** that seeks indirect solutions to reduce the enemy's will to fight, by pitching our strength against enemy vulnerability, rather than strength. This indirect approach emphasises the use of initiative to act in original ways unexpected by the enemy and a relentless determination to retain the initiative and exploit success. It does not preclude destruction of the enemy so long as the results sought are disproportionately greater than the resources applied and the enemy's will to fight is undermined and their cohesion shattered. It depends on practical knowledge, agility, Mission Command and the willingness to accept risks.
- 5-05.** The second requirement is an **understanding** of the enemy's vulnerabilities, both before contact and as they appear and evolve during battle. Centre of gravity analysis can be a useful tool for this. The Manoeuvrist Approach guides us to find, attack, and exploit these vulnerabilities in an enemy's strength. Additionally, commanders must consider carefully how the enemy themselves might apply the Manoeuvrist Approach. They must understand their

own centre of gravity and critical vulnerabilities, and protect their forces accordingly. Contextual understanding is also necessary. The Manoeuvrist Approach is not executed in isolation from wider contextual and operational factors, for example, domestic appetite for risk and casualties (of friendly and enemy forces), or second and third order effects of actions taken.

Psychological impact of the Manoeuvrist Approach

5-06. The tools of seizing the initiative, shaping understanding and attacking will and cohesion are means to an end. By holding the initiative and operating at higher tempo than the enemy, we aim to impose multiple, simultaneous dilemmas, forcing the enemy to make decisions favourable to us or, when necessary, to induce shock and so render the enemy incapable of rational decision making. The classic physiological and psychological symptoms of shock are numbness and irrational behaviour, preventing the enemy from responding effectively to a developing situation. It is most debilitating when the full range of the force's capabilities, lethal and non-lethal, is applied against enemy vulnerabilities. As an effect, shock is both unpredictable and temporary, so its effects must be rapidly exploited before the enemy can respond effectively.

Seizing and holding the initiative

- 5-07.** The initiative is the ability to dictate the course of events, to decide and act before our opponents do and so gain advantage. In contact with an enemy, gaining, regaining and retaining the initiative requires: tempo, surprise, pre-emption, momentum, simultaneity, exploitation and avoiding culmination. They cannot be applied in isolation, but are mutually reinforcing.
- 5-08. Tempo** is the rate of activity of operations relative to an enemy's. It is about acting more quickly than the enemy. The side which consistently decides and acts fastest should gain and hold an advantage. Speed and quality of decision-making, while necessary to gain and hold the initiative, is not sufficient. Action must follow swiftly, enabled by Mission Command and good battle procedure. Often a perfect plan made and executed too late will fail, whereas an imperfect one made before an enemy can act will succeed.
- 5-09. Surprise** is an important way of seizing and retaining the initiative. It must be central to the design of all combat operations and be sought by commanders at all levels.
- a.** Surprise is a potent psychological weapon, causing shock through unexpected action in time, space and method. For example, surprise can be achieved by: attacking an enemy earlier or more rapidly than anticipated, including through cyber electromagnetic activities (time); attacking the enemy's rear, or preparing well concealed depth defences (space); unforeseen employment of air manoeuvre or indigenous forces, the concealment and employment of reserves or sudden withdrawal to defensive positions (method).
 - b.** The increasing visibility of a land force's actions places increased importance on the use of **deception** to achieve surprise and to protect the force's own vulnerabilities. Deception is defined as those measures designed to mislead the enemy by manipulation, distortion, or falsification of evidence to induce them to react in a manner prejudicial to their interests. There are two methods of deception: simulation, which deliberately allows an enemy to see false activity (for example through a demonstration); and dissimulation, which is hiding the reality by concealing it or

making it appear to be something else. Deception plans must have a clearly defined aim, be convincing by playing to enemy's perceptions, prejudices and likely reactions, and be flexible, without consuming disproportionate resources or time. Enemies will also employ deception, requiring commanders and staff to have a sceptical mind-set.

- c. The acme of surprise is when it combines high tempo physical manoeuvre, superiority in the virtual domain, and concentrated application of violence – sometimes termed 'shock action'. Enabled by security, surprise involves using combinations of secrecy, concealment, deception, originality, audacity and tempo to confuse, paralyse or disrupt effective decision-making, and undermine an adversary's morale. Thus it is instrumental not only to gaining the initiative, but also subsequently to attacking and defeating the enemy. It need not be total, but merely sufficient to instil doubt, delaying a decision or an action until it is too late. The effects of surprise are transitory, as shock and confusion recede over time, so its effects should be exploited rapidly and aggressively.
- 5-10. Pre-emption** is to seize an opportunity, which may itself be fleeting, to deny the enemy an advantage before they act. It denies them the initiative and frustrates their plan. Its success lies in the speed with which the situation can be subsequently exploited.
- 5-11. Momentum** is the driving force of a moving object. Maintaining momentum keeps an enemy off-balance and enables a commander to retain the initiative. As a product of velocity and mass, it is liable to be reduced through either a loss of speed or of combat power, stalling the operation and so allowing the enemy to regain the initiative. Exploitation of momentum creates the bridge from seizing the initiative to achieving success.
- 5-12. Simultaneity** seeks to disrupt the decision-making process of opponents by confronting them with a number of concurrent problems. By attacking or threatening enemies in many ways and from many directions at once, in the physical and virtual domains, they cannot concentrate on any one attack, nor establish priorities between them. They cannot choose how and where to react; they are torn between multiple threats and find it hard to respond coherently. Enemy cohesion is particularly susceptible when several layers of their command system are acted against simultaneously.
- 5-13. Exploitation** is defined as taking full advantage of success in battle and following up initial gains. If not exploited, the effects of surprise and shock, pre-emption, tempo, momentum and simultaneity are likely to be local and temporary. A capable enemy will try to recover and seek ways of regaining the initiative. Therefore success should be exploited to maintain the initiative, extend and expand its effects and encourage collapse. Exploitation can be planned or opportunistic. Planned exploitation is designed in advance to follow anticipated success and may require fresh, echeloned forces. Opportunistic exploitation is a way of building on local success. It should be carried out with the resources at hand and should be initiated as soon as an opportunity is recognised, particularly at lower tactical levels. The most effective exploitation integrates the full range of lethal and non-lethal capabilities available to the force, appropriate according to the task and environment. For example, a combat action may be exploited by manoeuvre and information activities or, in a counter-insurgency context, by a combination of information activities and capacity building. Exploitation is enabled by Mission Command, effective understanding and balanced, mobile and flexible reserve or echeloned forces, which can be deployed rapidly to take advantage of the opportunities presented.

- 5-14. Avoiding culmination** is also key and must be constantly balanced with the advantages presented by exploitation. The culminating point is defined as the point in time and the location at which a force no longer has the capability to continue an operation under current conditions and so loses the initiative. An operational pause may be required: a temporary and deliberate cessation of certain activities during the course of an operation to avoid reaching the culminating point and to be able to regenerate the combat power required to proceed with the next stage of the operation. Anticipation of when or where a force might reach a culminating point requires detailed understanding of the environment as well as of friendly and enemy forces. Implementation of an operational pause at a place and time to the advantage of friendly forces allows the initiative to be maintained.

Shaping understanding

- 5-15.** The Manoeuvrist Approach seeks to manipulate an enemy's understanding to produce behavioural outcomes favourable to the friendly force. The perception of failure is the best mechanism by which to promote actual failure, convincing the enemy of the futility of their actions. The shock induced by surprise and an enemy's loss of initiative all contribute to this perception of failure. Security, deception and information activities amplify their effects and are therefore central to the Manoeuvrist Approach. They are not, however, sufficient. Shaping the enemy's understanding conclusively is rarely achievable without the application or threat of force, attacking will and cohesion.

Attacking will and cohesion

- 5-16.** The will and cohesion of a force are indivisible. **Will** is the determination to persist in the face of adversity. It has two aspects: intent and resolve. Both can be influenced, attacked and undermined. The enemy's intent is thwarted when they believe that their aim is no longer achievable, and so desist from their course of action. The enemy's resolve is their strength of will. It is overcome when they are demoralised and no longer have the desire to continue. It is intimately linked to the **cohesion** of the force. The same principle applies to our own force; we must protect our own will and cohesion from the actions of enemies and adversaries.
- 5-17.** Troops who have moral cohesion stick together: they continue to fight despite adversity and local reverses. It relies on leadership, perception of success, confidence and trust that forces will be supported and sustained. It cannot, therefore, be separated from the physical cohesion that gives a force its potential to mass forces and effects at the time and place of its choosing. Physical cohesion relies on sustainment, freedom of movement, and effective command systems of leaders, command posts and communications.
- 5-18.** Physical capability is also a feature of cohesion. If key combat forces, combat service support or command nodes are lost or threatened, then both moral and physical cohesion of the enemy are reduced, while the freedom of action and initiative of friendly forces are enhanced. Attacking and often destroying physical capabilities is therefore required by the Manoeuvrist Approach as a means to an end of defeating the enemy's will to fight.
- 5-19.** Ultimately, without moral and physical cohesion, a force becomes less than the sum of its parts and readily susceptible to shock. As well as using surprise and pre-emption, cohesion and will can be attacked through dislocation, disruption and destruction.

- a. **Dislocation** denies the enemy the ability to bring their strengths to bear, or to persuade them that their strength is irrelevant. Its purpose is wider than the frustration of the enemy's plan; it is about ensuring that their strengths are in the wrong place. It may be deliberate or a fortunate consequence of other actions. Deep penetration, envelopment and deception are three methods of dislocation. Another method is distraction, encouraging the enemy to cover more options than they can afford.
- b. **Disruption** can be used to break apart and confuse assets that are critical to the employment and coherence of the enemy's fighting power. It aims to rupture the integrity of a force, to render it incapable of deciding and acting purposefully. Military targets might include communication networks, command centres, transport nodes, or logistic facilities. Against irregular forces, disruption can be achieved by attacking vulnerabilities in the enemy's networks.
- c. **Destruction**, when unsupported or unfocused, is not normally a major contributor to shock, other than when used on a massive scale. Otherwise, the careful selection and destruction of discrete capabilities or force elements amplifies the effects of surprise, dislocation and disruption, and can be decisive in undermining an enemy's will to fight. Such targeted destruction may well be the focus of all of the forces of a particular formation or battlegroup within a wider concept of operations. The effects of destruction also extend beyond the elimination of a particular capability and demoralisation of the wider force. Second order consequences may include adverse or positive reactions from across the audience, or a later requirement to reinstate the same capability for use by friendly forces or the local population.

Attacking will and cohesion - Falkland Islands 1982

42 Commando assaulted Mount Harriet in the Falklands on the night of 11 June 1982 in a surprise attack from the enemy's rear. The 4th Argentine Infantry Regiment, defending Harriet, expected an attack from Mount Wall to the west; a diversionary attack by 12 Troop of 42 Commando reinforced that perception. The main body attacked from the south-east and approached to within about a hundred metres of the Argentine positions before it was detected. The assault was very rapid: leading elements reached the crest of Mount Harriet within 40 minutes; the crest line was cleared within about two hours; and the fighting was largely complete within 5 hours.

The Argentine regimental command post and mortar platoon were overrun early in the assault. This was a lucky consequence of the chosen axis of attack but the effects of this selective destruction were significant. The Argentines lost much of their primary indirect fire support and command and control of their forces; both affected their cohesion. An Argentine company commander attempted to organise a counter-attack force on the north side of the ridgeline; however a sudden, concentrated artillery fire mission broke up the attack. The survivors were seen fleeing east towards Stanley through the smoke and darkness. The surprise attack, shock action and some aspects of the destruction achieved had overcome the 4th Infantry Regiment's cohesion; it collapsed and was effectively destroyed as a fighting force.

Abridged from Nicholas van der Bijl, *Nine Battles to Stanley* (1999)

Colonel John Boyd and the OODA loop

Boyd was the USAF officer who developed the 'OODA loop': a decision-action cycle of observe, orient, decide and act. It came from his experience of air combat between USAF F86 Sabres and Chinese MiG 15s in the Korean War. In many ways the MiG 15 was a better aircraft than the Sabre, but the Sabre was far superior in combat. Boyd wanted to understand why.

Boyd concluded that the Sabre's bubble canopy gave US pilots better visibility and situational awareness than their opponents. Also, Sabres had early hydraulic flight controls, unlike the MiGs, so pilots could more rapidly manoeuvre the aircraft. The psychological stress of being in combat with a Sabre increased USAF superiority as it caused many MiG 15 pilots to panic and underperform.

He posited that pilots operated a decision making process in a continuous cycle of: observe, orient, decide and act (OODA). Later this idea was expanded to describe the cycle that any dynamic organisation goes through. Boyd saw that the goal was to go more rapidly through the cycle than the opponent, and try to slow the opponent's cycle. The critical proviso was that the orientation phase was most important: if the wrong judgements were made this would lead to incorrect and possibly fatal decisions irrespective of the speed of the cycle.

We see it now as a helpful way to understand the concept of tempo. A force and its adversaries observe the unfolding situation. They orient themselves to the situation, decide what to do, and act. The decision and action stages give continuous feedback to observation and so the process goes on.



ADP Land Ops **Chapter 6**



Mission Command



CHAPTER 6

Mission Command

Introduction

6-01. Command is the authority vested in an individual of the armed forces for the direction, coordination, and control of military forces. The manner in which command is exercised by armed forces is described as their command philosophy. The British Army's command philosophy is Mission Command. This philosophy is founded on the clear expression of intent by commanders, and the freedom of subordinates to act to achieve that intent. Mission Command is common across Defence and is the allied concept for command and control of NATO land forces.²² As a command philosophy, it comprises commonly understood principles and guidelines for application; its expression will, however, vary in relation to cultural, task and operational factors. This chapter places Mission Command in context, explaining the nature of command. It then describes Mission Command, its principles and how it is applied in practice.

- Introduction
- Context
- Nature of command
- Mission Command
- Principles
- Application

Context

- 6-02.** Historically, land forces have employed different command philosophies, ranging from Mission Command to more centralised control. Centralised control seeks to impose order and certainty on the battlefield. It does not, however, account for the adversarial and dynamic nature of conflict, where success comes from the speed of appropriate reaction to a changing situation, and from the initiative and will to fight of every soldier and unit. Higher commanders responsible for planning and executing operations cannot feasibly make timely and appropriate lower level tactical decisions; these are best made quickly by subordinate commanders on the spot.
- 6-03.** In conflict, even the most robust communication systems are not completely reliable. This failure occurs through either the friction inherent in conflict or an adversary's cyber or electromagnetic attack. In such circumstances, subordinates require freedom of action, within the constraints of their commanders' intent, to prevail over friction and chaos. Success demands a command philosophy which draws strength from but is not reliant on improving communications, enables the rapid identification and exploitation of opportunity to match strength against vulnerability, and harnesses the disciplined initiative of all forces.

²² There is no formally agreed NATO definition of Mission Command. This chapter is consistent with NATO and joint descriptions.

Nature of command

- 6-04.** For UK Armed Forces, **command authority** has a legal and constitutional status, codified for the British Army in Queen's Regulations, and is vested in commanders by a higher authority that gives direction and assigns forces for them to accomplish missions. The exercise of command is the process by which commanders make decisions, impress their will on and transmit their intentions to subordinates. With authority comes responsibility and accountability – all three of which must be correctly aligned for command to be effective. This is particularly important when responsibility is delegated, as it usually is. **Authority** is the power and right to give orders and enforce obedience. **Responsibility** is the ability and obligation to act independently and make decisions. **Accountability** is the requirement and expectation to justify actions and decisions.
- a. **Authority** may come with a specific appointment, by virtue of rank, or be delegated by an appropriately authorised superior. When a commander delegates authority, the scope of that authority is stated in orders, including the command relationships of subordinate force elements. When a commander delegates responsibility, it must be matched with the required delegated authority. Too little authority and the subordinate will not be able to assume full responsibility. Too much and a subordinate may misjudge and over-reach. It is essential that subordinate commanders and staff officers do not exceed their authority.
 - b. With the authority granted to commanders comes a wide range of standing **responsibilities**, dependent on their position, rank or delegations. In addition to these, military operations in general and Mission Command in particular rely on subordinates receiving additional responsibility for missions and tasks so that they can achieve their commander's intent. It is essential that the responsibility assigned over the forces and resources matches the mission or task, and that the requisite authority accompanies it. Otherwise, the subordinate will not have the required materials and power to succeed. Responsibility also involves an obligation to complete the task to the best of a commander's ability.
 - c. **Accountability** ensures that authority is exercised appropriately and that responsibilities are fulfilled. Whoever has authority and responsibility for anything will, if necessary, be required to justify their actions, and will be responsible in law for their decisions and actions.



Figure 6-1. Functions of command

- 6-05.** By **delegation**, commanders use their authority to ensure that along with resources, subordinates receive the appropriate authority and responsibility for their missions and tasks. Whoever has authority delegated to them becomes accountable for the mission and the conduct of the forces under their command. Delegation does not detract from the authority of superior commanders (delegation can be rescinded), and since they are responsible for the decision to delegate and for the actions of subordinates, the superior commanders retain overall accountability. So, commanders and subordinates to whom they delegate share authority, responsibility and accountability for delegated missions and for the forces under their command.
- 6-06.** Military command at all levels is the art of decision making, motivating and directing forces into action to accomplish missions. It is founded on understanding and constant assessment of the operating environment and its various actors and audiences, people, resources, risk and desired outcomes. A commander determines courses of action to be taken, leads the force and controls the execution of the mission. The three **functions of command**, which are inter-dependent, are decision-making, leadership and control (see Figure 6-1). A command system comprises not only the commander, but also the staff who, depending on the level of command, contribute to the effect of all three functions, with particular emphasis on control. Deficiencies in any of the constituents of command have a detrimental effect on a force's fighting power as a whole.
- a. Timely, accurate and effective **decision-making** (including assessing risk) increases tempo relative to opponents, thereby increasing the probability of success on operations. Decision-making stems from a blend of structured military processes and intuition, developed through experience, education and training. Intuition and judgement are key when making difficult decisions, evaluating risk and exploiting fleeting opportunities on the basis of incomplete information. Knowing when to be resolute and when to consider a change in direction are fundamental skills of a commander and are features of strong leadership. Making major decisions is a commander's responsibility, including judgements relating to the whole force, especially those relating to less quantifiable aspects of the art of war, for example when to decide and when to act. The staff also make certain decisions on behalf of the commander, appropriate to their delegated authority, as well as assist the commander's decision-making.
 - b. The way in which commanders exercise **leadership** of their staff and subordinates necessarily impacts on the conduct of the force. Commanders must be strong leaders, capable of adapting their leadership style to the requirements of the operation and force. Different circumstances demand varying degrees of regulation, delegation, inspiration and coercion. Army Leadership Doctrine explores in detail this critical constituent of command.
 - c. As a function of command, **control** is the oversight, direction, and coordination of assigned forces in accordance with the commander's plan and intent. Control is achieved through employing common command doctrine, including standardised procedures for the control of operations and forces. Above sub-unit level, it may be delegated to staff, but at all levels commanders may need to control activity personally to ensure that their intent is achieved.

Mission Command

- 6-07.** Mission Command is the British Army's command philosophy. This is an approach which empowers subordinate commanders and promotes initiative as well as freedom and speed of action. Critically, it focuses on achievement of higher intent through mission type orders. It empowers leaders at every level and is intended to generate agility and tempo. This enables us to overcome an enemy in the most chaotic and demanding circumstances and unlocks everyone's potential to seize winning opportunities, however fleeting. Supporting Integrated Action, Mission Command focuses on outcomes, objectives and effects, rather than specifying the detailed ways in which these are to be achieved. Mission Command depends on: the duty of commanders to express their intent clearly and to ensure that it is understood; the duty of subordinates to act to achieve that intent; and the presumption by subordinates of delegated freedom of action to achieve the intent, within specified and implied constraints.
- 6-08.** For Mission Command to work, the three functions of command must be in harmony. Commanders must ensure that subordinates understand the context and their commander's intent. Commanders at all levels must use good judgement and initiative to achieve intent and develop a mind-set focused on identifying indirect solutions to problems. Mission Command requires commanders who will make sound decisions without recourse to their higher headquarters and who are comfortable with freedom of action rather than tight control. It also depends on effective leadership at all levels of the force, with the most junior commanders and private soldiers confident and willing to use their initiative and tactical understanding to exploit opportunities. It also requires control: actions must be deconflicted, and resources shared, and some subordinates will need more control than others. If Mission Command is to be instinctive, it must be well understood and practised, not only on all operations and during field training, but every day. Commanders must empower their subordinates routinely because this gives them the confidence to act boldly and independently on the battlefield.
- 6-09.** In practice, there are circumstances when commanders must apply greater control of their subordinates. Factors to be considered include: the nature of the task, including how complex or time critical it is; and the aptitude and capability of subordinates and staff to apply Mission Command in a given context. In these circumstances it is a superior commander's duty to ensure that their intent and detailed guidance is understood and followed.
- 6-10.** In a **multinational and inter-agency environment**, even when Mission Command is formally advocated, it may be subject to differing national, organisational and individual interpretations and applications. This can be extremely challenging. Improved interoperability may assist to some degree. Commanders and staff must be prepared to adapt, recognising also the requirements of potential partner nations and agencies that will not recognise or be able to practise Mission Command.

Principles of Mission Command

- 6-11.** Mission Command comprises one guiding principle and five further principles.²³ The fundamental guiding principle of Mission Command is **the absolute responsibility to act to achieve the superior commander's intent**.
- 6-12.** Mission Command requires **unity of effort**. This stems from the commanders ability to formulate a clear intent and mission statements; the use of common doctrine and tactics; a common language of command; a high standard of collective training; and the designation of priorities and a main effort. Taken together, these provide a framework of common understanding throughout a force. They also assist the coordination of actions in time and space and the ability to anticipate and respond swiftly to changes in the situation.
- a. Unity of effort is further enhanced by: commanders' nesting their plans in the context and intent of superiors, at least two levels up; and ensuring that their own direction is resourced two levels down. This is described as vertical integration. The concept of horizontal integration, which helps subordinates understand how their missions interact with others at their own level, is equally important. Horizontal and vertical integration are essential to delivering cooperation between units and formations within the framework of the commander's intent.
 - b. In support of unity of effort, commanders should state a main effort – the activity which the commander considers critical to the success of the mission. However, in the orchestration of complex operations stating a single priority may not always be possible. A main effort is given substance in three ways. Firstly, it attracts resources and sufficient fighting power. Secondly, it has relevance for all subordinates, even those who are not part of it; they may lose resources to it, and are expected to support it without further direction should circumstances require it. Thirdly, these main and supporting efforts are integrated into a concept of operations. This might require narrowing boundaries to concentrate force, requiring economy of effort elsewhere.
 - c. Although there may be a sequence of main efforts, there cannot be more than one at any one time. The main effort should be expressed as a single action together with the principal force undertaking it. Commanders may choose to shift the main effort in response to changing situations.
- 6-13.** In Mission Command, subordinates must exercise **freedom of action**, within specified and implied constraints, to act as they see fit to ensure the achievement of the higher commander's intent.
- a. To do so through the inherent friction and chaos of conflict requires subordinates to have the determination, drive, vigour and disciplined initiative to take the plan through to a successful conclusion. Subordinates have the most up-to-date information about the situation in front of them and must make decisions and act quickly without waiting for further orders. When the situation changes, subordinates must rapidly adapt their plans or what they are doing to achieve the intent, using their best judgement and without asking for permission. To nurture boldness and promote a will to win across the force, superior commanders should always support the subordinate's decision, only overruling it if it is unsuitable. This enables the force to sense opportunities, tackle threats quickly, and generate and maintain tempo.

²³ Allied Tactical Publication (ATP) 3.2.2, *Command and Control of Allied Land Forces* describes 'decentralised execution' rather than 'freedom of action'. Note that UK joint doctrine does not explicitly refer to principles of Mission Command.

b. Decentralisation of execution is the means by which freedom of action is achieved. For it to work, commanders provide guidance and constraints that allow subordinates to use their initiative. Commanders must also allocate sufficient resources, including time, information and intelligence, manpower, equipment, materiel, rules of engagement, and space. Critically, decentralisation requires delegation of authority for decision-making within particular constraints. These freedoms and constraints may be clearly stated or implied in orders. The extent of delegation will depend on the superior commander's judgement of their subordinates. A commander must understand which subordinates will thrive and excel with fewer constraints, and which will require more direction and control. This is likely to inform the kind of tasks different subordinates receive.

6-14. Trust is a pre-requisite of command at all levels. Trust improves speed of decision making, and, therefore, tempo. While trust must be earned and not demanded, the default should be for commanders to trust their superiors and subordinates. In particular, they must trust that their subordinates will sensibly interpret their intent and persevere to achieve it. Personal trust can only be built up over time with experience, rather than by reputation. The spirit of Mission Command requires a bond of trust between superiors, subordinates and peers that will develop through shared experience. These bonds are strengthened when commanders tolerate mistakes and foster a climate where failure is an opportunity to learn. This is not about encouraging recklessness or gambling, but about accepting errors in the pursuit of calculated risk-taking, boldness and initiative. If a subordinate cannot trust their superior to support them in such circumstances, the bond of trust will be eroded; the subordinate will not act on their own initiative; and the moral fabric of Mission Command will be lost. Trust is based on a number of qualities, including personal example, integrity, professional competence and attention to detail. The basis of trust is respect and mutual understanding.

6-15. Like trust, **mutual understanding** is established over time and through the application of common doctrine and concepts. With experience, commanders gain understanding of the issues and concerns facing their subordinates, partners and peers. Professional knowledge and study, and the cultivation of personal relationships give subordinates, in turn, an insight into command at higher levels, enabling them to anticipate and apply their initiative to good effect. Mutual understanding is also based on common doctrine and command philosophy and so cannot be assumed when operating in a multinational and inter-agency context. Where shared experience and common doctrine do not exist, commanders should pay particular attention to developing and sustaining mutual understanding as a central pillar of effective interoperability.

6-16. Successful command requires **timely and effective decision-making** at all levels. Timely decisions allow our forces to act more quickly than adversaries and enemies can cope with. Despite the increasing availability and speed of information, it remains essential for commanders to make decisions on the basis of incomplete and imperfect understanding. This can seem risky, and good judgement is required to decide when is the right time to act or not act. In general, however, it is often less risky to act quickly than it is to wait for more information and give adversaries more time. Developing an intuitive understanding of **when** to decide is as integral a component of the art of command as knowing from **where** to command.

Application of Mission Command

- 6-17.** Founded on the principles above and the absolute responsibility to act to achieve the superior commander's intent, there are practical, sequential actions that guide the effective application of Mission Command.
- a.** Commanders ensure that their subordinates understand the intent, their own contributions and the context within which they are to act.
 - b.** Commanders exercise minimum control over their subordinates, consistent with the context and nature of mission, and the subordinates' experience and ability, while retaining responsibility for their actions.
 - c.** Subordinates are told what outcome they are contributing to, the effect they are to realise and why.
 - d.** Subordinates are allocated sufficient resources to carry out their missions.
 - e.** Subordinates decide for themselves how best to achieve their superior's intent.

Modern... warfare demands quick movement, quick thinking and quick decisions... There simply is not the time to put a decision into writing or the opportunity for putting it into effect may be lost: and it is the effect of the decision that matters, not the writing of it out... Recent operations have shown that... situations develop and change so rapidly that more and more it is becoming necessary for subordinate commanders to be 'in the mind' of their superior so that they will instinctively take the right course of action in accordance with his general intention, acting upon the briefest of instructions and often upon none at all.

War Office report on operations in the Western Desert, 1940

PART 3

Conduct of operations

Part 3 describes how land forces conduct operations, adhering to the fundamentals of land doctrine and in the context of contemporary conflict. Before land operations begin, land forces must organise appropriately and develop sufficient interoperability with other participating actors. This is the subject of Chapter 7. Chapter 8 then introduces how land forces orchestrate and execute Integrated Action. Chapters 9 and 10 focus on two specific areas critical to all operations – command and sustainment. The AFM series expands on the concepts and themes introduced in Part 3.

Part 1 – Context

Nature and character of conflict
National and operational context
Fighting Power

Part 2 – Fundamentals

Integrated Action
Manoeuvrist Approach
Mission Command

Part 3 – Conduct of operations

- ▶ Organising for operations
- ▶ Orchestrating and executing operations
- ▶ Commanding operations
- ▶ Sustaining operations

ADP Land Ops **Chapter 7**



Organising for operations



CHAPTER 7

Organising for operations

Introduction

7-01. This chapter explains interoperability, how land forces organise for operations, and how they support and are supported by other components. The aim is to provide the baseline knowledge necessary for interoperability within a land force, and between it and other components within a joint force.

Interoperability

7-02. Integrated Action requires significant cooperation between all elements of the combined arms, joint, inter-agency and multinational force. The key enabler for military cooperation is interoperability – the ability to act together coherently, effectively and efficiently to achieve tactical, operational and strategic objectives. The purpose of professional study and working and training together with other forces and nations is to build interoperability. Interoperability strengthens and amplifies the unique contributions of all forces and agencies, at every level. Multinational and inter-component interoperability is usually more challenging and needs more effort and resources than interoperability within UK land forces, but even this requires conscious effort. The exact requirement for interoperability is determined according to operational need.

Organising for operations

- Interoperability
- Organisation of land forces
 - Structures
 - Force elements
 - Force types
 - Specialist capabilities
 - Combined arms forces
- Relationships
 - Air
 - Maritime
 - Special forces
 - Logistic
 - Cyber

Military operations are joint enterprises between formations, arms, services, government departments, agencies, allies and host nation partners, so depend on cooperation for success. Cooperation is best engendered through shared training, developing interoperability, team spirit and cohesion.

Principle of War – Cooperation

7-03. Land operations are conducted by combined arms forces because no single arm of the land force can operate entirely independently of other arms. So even within land forces, a high degree of interoperability is required: each arm must be interoperable with every other arm. The start point for interoperability for force elements at all levels, therefore, is competence and the ability to advise with authority on their particular capabilities and limitations. So, when establishing interoperability with other components and contributing to joint campaigns, land forces, by virtue of their professional credibility,

knowledge, skills and expertise, are the authority for the planning and execution of land operations. A force element, formation or component seeking to be interoperable with other arms, components or agencies from any nation, must also seek to understand its partners and establish strong working relationships with them. Above this, individuals in the land force must understand the theory and process of interoperability. The requirement for interoperability is defined by the answers to three questions: with whom, to what level and in what functions will force elements organise for operations?

A good inter-Service staff officer must first be a good officer of his own Service.

Marshal of the Royal Air Force Slessor

- 7-04.** The level of interoperability required for each relationship varies. In some cases an awareness of a particular activity and suitable de-confliction may suffice. Defence policy defines three levels of interoperability. **Integrated** means that forces are able to merge seamlessly and are interchangeable. **Compatible** means that forces can interact with each other in the same geographical battlespace in pursuit of a common goal. **De-conflicted** means that forces can co-exist but not interact with each other. Additionally, in certain cases, the actions or capabilities of a force or agency may even have a damaging impact on those of others, making even co-existence challenging. The level of interoperability within a multinational force is seldom uniform. For example, a multinational corps or division might consist of compatible force elements from contributing nations with some multinational integrated elements (such as the headquarters, some combat support and combat service support force elements). In other circumstances, such as a combined arms battlegroup, full integration lies at the heart of mission success.
- 7-05.** High levels of interoperability take time and resources to develop and maintain, and must be honed through training and by learning lessons during operations. Challenges to achieving interoperability arise from differing cultures, structures, equipment, laws and languages, and critical variations in doctrine, tactics, techniques, procedures and sustainment. These are commonly categorised into three dimensions of interoperability, as illustrated in Figure 7-1. **Technical** interoperability concerns systems and equipment. This involves issues such as communication and information systems, connectivity, standardisation of ammunition and other combat supplies. NATO standards are often used to enable technical interoperability. Where possible, **procedural** interoperability is based on NATO doctrine, procedures and terminology. **Human** interoperability, which includes language, creates trust and mutual understanding by strengthening relationships on operations and in training. It can mitigate shortfalls in the other dimensions of interoperability and so is the responsibility of all members of land forces to nurture and promote. A human interoperability approach is particularly important for defence engagement and capacity building tasks. It has five aspects.

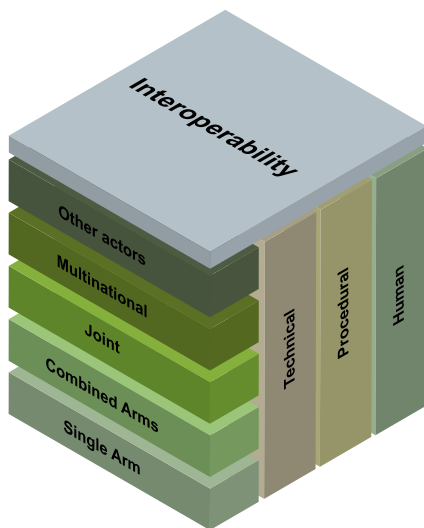


Figure 7-1. Interoperability model

- a. **Language** proficiency is central to multinational interoperability, assisting comprehension and relationship building. Even when working in English, it is essential that native speakers communicate clearly, avoiding slang, idioms and 'quasi-doctrinal' terms; even formally agreed doctrinal terms may be interpreted differently across a multinational force.
- b. Effective personal **rapport** between commanders influences cooperation at all levels. Commanders must strive to develop genuine and robust relationships with each other.
- c. Mutual **respect** for the professional ability, culture, history, religion, customs and values of participants strengthens relationships. Cultural understanding is particularly important to maintaining and promoting the cohesion of a multinational force, and when working with a host nation partner, particularly during capacity building tasks.
- d. Time taken to improve **knowledge** of the doctrine, capabilities and aspirations of partners will pay dividends. It is important that forces and agencies assume a role commensurate with their aspirations, tempered by their capabilities.
- e. **Patience** is essential as differences of opinion, perspective and understanding, whilst natural, may generate friction. A patient approach built on mutual trust and respect, and combined with effective cooperation takes time, but will ultimately bear fruit.

Organisation of land forces

- 7-06.** Land forces are generally structured hierarchically into formations, units and sub-units and categorised by function, type and specialist capabilities. They are organised operationally by combining arms to form a cohesive and versatile whole. The principle of combining arms demands high levels of technical, procedural and human interoperability between all arms. This overview explains how land forces organise within combined arms formations – the basis for land environment interoperability.
- 7-07.** A typical **hierarchy** flows down from army group to army, corps, division, brigade, unit and sub-unit. Formations and units are designed to be modular and scalable, so that elements can be easily added or taken away, and they can be expanded or contracted. The greatest capacity for this lies in corps and divisions.
- a. A **corps** commands a number of divisions, functional brigades and task forces, comprising all types of force element. It is the link between the operational and tactical levels of conflict. It can command at the operational level (as a JTF (Land), or land component headquarters, for example), but in major coalition or alliance operations, it may be a subordinate tactical formation in the land component, operating at the higher tactical level. In the British Army, the corps is the highest level of deployable headquarters and is assigned to NATO as the Allied Rapid Reaction Corps. A corps is fully resourced and structured to orchestrate Integrated Action in a joint, inter-agency and multinational context and can plan and execute large-scale complex operations simultaneously.
 - b. The **division** is a tactical formation that commands brigades within a corps, JTF (Land) or theatre framework. A divisional headquarters may form a land component headquarters for specific operations. It is the lowest level formation that routinely commands all types of force element. A division has integral intelligence, surveillance and reconnaissance (ISR), combat support and combat service support force elements, enabling it to conduct continuous operations. It usually also has at least one manoeuvre brigade. A divisional headquarters, capable of planning and executing simultaneously, can also command at the operational level as a land component headquarters. For example, a combat operation of just one brigade or a capacity building operation made up of several smaller groupings is likely to require command by a divisional headquarters. The division is the lowest level capable of orchestrating Integrated Action and routinely interacting with joint, inter-agency and multinational actors.

A division... is the smallest formation that is a complete orchestra of war.

Field Marshal Slim

- c. The **brigade** is a tactical formation with combat, combat support and combat service support force elements. Its primary focus is on achieving tactical effects. It is at the brigade level that task organisation between combat units takes place to create combined arms battlegroups. A brigade's capacity to plan and execute operations simultaneously is contingent on the intensity and type of operation.

- d. A **unit** is the smallest grouping capable of independent operations with organic capability over long periods. It contains integral combat service support and limited combat support elements, and is normally commanded by a lieutenant colonel. Units typically have between 400 and 1000 people, the majority of which are of one arm or Service. Units of the British Army are called regiments or battalions. A Royal Marine unit is called a commando. In more demanding types of operation including combat, a unit battlegroup does not normally have the capacity to plan and execute battlegroup level operations simultaneously; it generally does one or the other.
- e. A unit contains a number of **sub-units**, usually three to five. Sub-units are normally commanded by majors, and typically have between 60 and 150 personnel. British sub-units are called squadrons, companies or batteries. Sub-units are usually grouped into battlegroups or task forces but are, for limited periods, capable of independent operations, if they have been provided with suitable combat support and combat service support elements.

7-08. Land forces are categorised functionally as either **combat, combat support** or **combat service support** force elements.²⁴

- a. **Combat** force elements are those that engage the enemy directly. They manoeuvre and fight, typically employing direct fire weapons, to gain ground, find and defeat the enemy, or acquire information. They include armoured, reconnaissance, infantry, and attack and reconnaissance aviation units.
- b. **Combat support** force elements provide operational assistance, including fire and manoeuvre support to Combat force elements. They include support helicopters, artillery, combat engineers, intelligence, communications, command support and information activity specialists.
- c. **Combat service support** is the organisational support provided to the whole force, primarily in the fields of administration and logistics. It includes logistic, health service and equipment support, personnel, welfare and administration force elements. Certain combat service support functions are also provided by combat engineers, such as providing water and electrical power supply, infrastructure and supply routes.

7-09. Complementary to functional categorisation, land forces are also distinguished by their **force type**, commonly described in NATO as heavy, medium or light. Combined arms groupings generally comprise more than one force type, but with one being predominant. These force types are brought together (task organised) for specific roles or tasks. For example, in the British Army, armoured infantry brigades are built around heavy force types of tanks, armoured infantry, self-propelled artillery and armoured engineers. In creating a force of a particular type, force design has to make trade-offs between protection, firepower, operational and tactical mobility, and logistic demand. All forces are strategically mobile. They can go by sea or in the case of light forces, by air, to anywhere in the world.

- a. The forces with the most firepower and protection tend to be equipped with heavy armoured vehicles. To maximise firepower and protection, a compromise is made with operational and tactical mobility. Their operational mobility is limited by high logistic

²⁴ Traditionally the major combat and combat support functional branches of the British Army were known as arms (leading to the expression "combined arms") and the combat service support branches were known as services.

demand. But their tactical mobility is excellent, except in the most densely complex terrain, particularly when enabled by armoured combat engineers. On the other hand, dismounted light forces have limited firepower and intrinsic protection. Yet they can theoretically go anywhere that human beings can go – into mountains, forests, marshes, buildings, caves or subterranean structures. But their operational mobility, without assistance, is limited to how far and fast a soldier can march. Of course, when light forces are supported, by aircraft or vehicles, they can go anywhere within a theatre very quickly.

- b. The operational mobility of a force can be enhanced by trading off firepower and protection. The force can be equipped with armoured vehicles that are optimised for long range manoeuvre, but still have some valuable protection and firepower. This reduces the range of threats that they can deal with, but can give advantages, particularly if access to the theatre by sea or air is challenged or denied. Also, this level of mobility can enable rapid concentration and dispersion of a force, enhancing the scope for security and surprise.

7-10. A further categorisation is of particular **specialist capabilities**, which include: ISR, air manoeuvre, amphibious and capacity building forces²⁵
Several NATO countries also have specialist mountain forces.

- a. The primary purpose of **ISR forces** is to collect, process and disseminate the information and intelligence required to enable understanding of the human, information and physical aspects of the land environment. They can be close, medium or long range and can support all force types. Task organised into combined arms groupings, their composition depends on the level at which they operate and their task; they also often include forces from outside the land component (for example special forces or human intelligence specialists). At the higher tactical level, ISR tasks may be allocated to a combined arms battlegroup or formation. Although reconnaissance and surveillance²⁶ tasks differ in scope and duration, when resourced and prepared appropriately, ISR forces are generally capable of conducting both tasks. These forces include, but are not limited to: manned and unmanned air systems including aviation reconnaissance; certain combat, combat support (including intelligence specialists) and combat service support force elements; and technical ISR assets exploiting cyber electromagnetic activities of all actors in the area of operations. Although ISR forces generally avoid armed contact, reconnaissance forces, when supported by fires, can provide guards and screens, or be used to degrade enemy ISR capabilities.
- b. **Air manoeuvre forces** are a specialist type of light force. They exploit the mobility of aircraft to provide reach and speed. Air manoeuvre forces include attack, support and reconnaissance helicopters, air assault and airborne infantry with organic combat support and combat service support. Their actions are closely integrated with all forms of air power and the actions of ground manoeuvre forces if also deployed. Air manoeuvre forces are also intrinsic to amphibious manoeuvre, used to project force onto objectives beyond a specific beach or landing site. Once on the ground, air manoeuvre forces have the strengths and weaknesses of light forces.

²⁵ Capacity building forces are not a separate category in current NATO doctrine.

²⁶ For definitions of reconnaissance and surveillance, see Allied Administrative Publication (AAP) 06, *NATO Glossary of Terms and Definitions*.

- c. An **amphibious force** consists of a naval force and a landing force, together with supporting forces that are trained, organised and equipped for amphibious operations. Amphibious forces undertake littoral or riverine operations, deployed and supported (at least initially) from ships. Amphibious forces conduct landing force operations in the littoral environment, which are land areas predominantly susceptible to engagement and influence from the sea. Landing force operations, conducted in accordance with Joint Action, require close integration of joint forces, routinely comprising: an amphibious task group; landing force; battlefield helicopters and air group; and joint enablers.
 - d. Capacity building tasks can (and often must) be conducted by any appropriately skilled and prepared force element. UK land forces, however, include specially trained, structured and equipped **capacity building forces**. These include those designed to develop the capacity of host nation security forces as well as those able to assist with physical and organisational infrastructure development.
- 7-11.** The combination of capabilities provided by different force elements and types, when they have sufficiently high levels of interoperability, produces extremely powerful **combined arms forces**, where the sum of the parts is greater than the whole. This combination of forces is the norm for all formations and units on operations. As a guide, during warfighting operations a combined arms force is designed to be capable of the four complementary and concurrent functions of the tactical framework: find, fix, strike and exploit. It should also always have a reserve. These functions do not require equally sized forces for each; rather they are resourced according to the tactical requirements.
- 7-12. Task organisation** is the process by which combined arms forces are formed. Task organisation during operations increases flexibility. It depends, however, on appropriate interoperability, enabled by common doctrine and common or compatible procedures, and developed during training. Commanders must balance the flexibility of frequent task organisation with a potential reduction in tempo.
- 7-13.** In the British Army, the term **battlegroup** has a particular meaning. A battlegroup is a combined arms force commanded by a combat unit headquarters. It comprises sub-units drawn from armoured, reconnaissance, infantry or aviation units. A **task force** refers to a combined arms force created for a specific purpose. It is based on the headquarters of any type of force, at unit and formation level, and is not limited to a combat arm.²⁷

Relationships of land forces to other components and capabilities

- 7-14.** Interoperability is also required between land forces and other components and capabilities. The basis of this form of interoperability is an understanding of their characteristics, and of the relationships, dependencies and mutual support between them and land forces. This is just the start. Interoperability, at whatever level required, can be improved through deeper study and training together.

²⁷ An example would be an engineer unit allocated an infantry sub-unit for local protection. Note that in the United States Army, task force usually refers to a unit-level combined arms grouping, and combat team to a brigade level grouping.

The air component

The development of air power in its broadest sense, and including the development of all means of combating missiles that travel through the air, whether fired or dropped, is the first essential to our survival in war.

Marshal of the Royal Air Force Trenchard

- 7-15.** Air is the most important physical environmental interface for land forces, which also have their own integral air assets (primarily unmanned aircraft and helicopters). Gaining, maintaining and exploiting control of the air is critical to success in most operations in the land environment. Air power is also an accelerant to actions in the land environment: generating intelligence, delivering fires, and significantly enhancing options for manoeuvre at far greater speed and reach than can be achieved on the ground alone. Seizing the potential of the air environment is not discretionary for land forces. They must understand the attributes of airpower, the fundamentals of air-land integration, and how the separate air and land components can complement their strengths and mitigate their weaknesses. Land operations are conceived, planned and executed as air-land operations.
- 7-16.** The core **attributes** of air power, whether drawn from air, maritime or land components, are the exploitation of height, speed and reach. Height allows manoeuvre in three dimensions; speed projects power rapidly and responsively; and reach opens up adversaries' vulnerabilities otherwise protected.
- a.** These core attributes enable and enhance additional characteristics. Air power's reach combined with increasing persistence gives it ubiquity; it can pose or counter threats simultaneously across a wide area. Its speed gives it tactical agility and operational flexibility, able to achieve multiple effects over distance and in a short period. For example, aviation can rapidly switch from intelligence gathering to fires in different parts of the battlespace. Speed and reach also mean that effects can be quickly concentrated in time and space, amplified by precision technology.
 - b.** Air power also has inherent constraints. The most significant are its relative impermanence, limited payload and vulnerability. The latter includes the fragility of aircraft, the effects of weather and the requirement for well-found and secure basing, logistic and equipment support.
- 7-17.** Air power has four fundamental **roles**; control of the air; intelligence and situational awareness; attack; and air mobility. These roles provide the basis for understanding air power and also frame how air power, including from the land component, can support land forces.
- a. Control of the air** is crucial. It enables freedom of manoeuvre in all of the physical environments. Control of the air helps commanders to seize and hold the initiative. Rather than talking of air 'superiority', it is more accurate to define control of the air as the freedom, bound by time, to use a volume of airspace, while, if necessary, denying its use to an opponent. Adversaries who possess advanced air forces and some non-state adversaries are able to challenge control. This is particularly the case at lower altitudes which are likely to be contested with portable air defence systems, rockets, rocket-propelled grenades and small arms. Rotary and slow fixed-

wing aircraft (including unmanned aircraft), cooperating closely with or as part of the land component, necessarily operate within the envelope of these weapons, so are vulnerable, particularly during take-off and landing.

If we lose the war in the air, we lose the war and lose it quickly.

Field Marshal Montgomery

- b. The high vantage point afforded by air and space allows a view of the land battlespace across the entire electromagnetic spectrum, enhancing **intelligence and situational awareness**. Aircraft and space platforms, including unmanned air systems, provide layers of sensing in depth that, integrated with other sources, allow commanders to search out information on the human and physical aspects of the land environment. Unmanned aircraft, because of their flexibility, endurance and the risks that can be taken, are changing the way the air environment is exploited to find information.
- c. Land forces can also be supported by air targeting the enemy and their infrastructure, or by using the psychological effects of air power to attack will, for example by making shows of force. **Air attack** can be executed to shape the strategic context or to support operations or tactical engagements. Air interdiction seeks to destroy, disrupt, divert or delay enemies' surface potential before it can be used effectively. Close air support provides land forces with firepower to destroy, suppress, neutralise, disrupt, fix or delay an enemy, often in close proximity to friendly forces. Close air support requires detailed integration with the fire and manoeuvre of land forces for targeting guidance and to avoid fratricide. It can be delivered by a combination of fixed-wing aircraft and helicopters. Helicopters can be task organised to a land formation, included within its scheme of manoeuvre or given their own mission and area of operations.
- d. **Air mobility** supports deployment, sustainment and manoeuvre. It includes air drop, air manoeuvre missions, personnel recovery and aeromedical evacuation. Air mobility enables the global, regional and local deployment of personnel and materiel, both military and civilian. It is the fastest way to move supplies and mass forces. Intra- and inter-theatre air mobility is often the only way to get wounded personnel to medical facilities quickly enough to save lives and to conduct an efficient relief of troops.

The understanding of air power has been hard won, but to maintain 'air mindedness' into contingency, training in air power and specific air and aviation capabilities needs to continue to be part of the land training syllabus at all levels.

Operation HERRICK Campaign Study (2015)

- 7-18. **Air-land integration (ALI)** is a particular form of interoperability between the air and land components. It describes the creation and execution of simple operational and tactical plans by land and air forces, synergistically blending land and air power across all activities, from ISR to fires, manoeuvre and sustainment. ALI is a concept that requires strong relationships built over time, effective training and resourcing, an awareness of joint doctrine and capabilities, and detailed co-ordination and

liaison between air and land components. To achieve ALI, air staff are fully integrated within core planning teams from the outset; and land formations maintain sufficient numbers of air-minded personnel at tactical and operational levels. Common and assured procedures between air and ground forces are essential, particularly because in multinational operations, the air component is also most likely to be multinational.

- 7-19.** Effective interoperability between air and land components is particularly important for the planning and execution of **air manoeuvre operations**. These provide commanders with an ability to deploy light land forces rapidly, and to support all force types across the battlespace, either as part of land manoeuvre or as a means of projecting land power in its own right. They are initiated and controlled by land forces (with the exception of certain amphibious operations). The air component plays a key role in air manoeuvre. The cooperation between components has an air to air element, as battlefield helicopters are usually part of the land component or amphibious task group. Air manoeuvre takes different forms.
- a. Airborne operations involve the movement of combat forces and their logistic support into an objective area by air. Forces reach their objective by parachute (referred to as air drop by NATO) or air-land delivery.
 - b. Air assault operations deliver combat forces by helicopter within direct fire of their objective.²⁸ In amphibious operations, this is part of 'ship to objective manoeuvre'.
 - c. Airmobile operations are those in which combat forces and equipment manoeuvre by aircraft to engage in ground combat. Unlike air assault, airmobile operations do not deliver forces directly onto an objective and so require less specialist training.
 - d. Independent helicopter tasks are also carried out within a force's scheme of manoeuvre.
- 7-20.** The relationship between land and air components is synergistic, with the land component providing critical support to, and enhancing the effectiveness of, air operations. First, land forces share airspace with air forces, including for the use of their own aircraft and weapon trajectories. Through understanding of ALI and associated control measures, land forces coordinate and arrange ground troops and their activities with regard to the air environment. Second, land forces mitigate the vulnerabilities of air power by defending airfields, supporting essential logistics requirements and suppressing or destroying enemy air defences. Third, land forces can seize and hold terrain from which enemy air assets can be engaged or which might be used as forward operating bases or airfields. Finally, land forces can operate to make the enemy more vulnerable to air power.

The maritime component

- 7-21.** As an island nation with global interests and responsibilities, UK land forces rely on the maritime component for sustainment, projection and support of land operations. Furthermore, as urban-littoral populations grow, land forces will necessarily conduct operations at this interface of land and maritime components' battlespace, where each component supports the other. For land forces, this requires an understanding of: the attributes of maritime power projection, the littoral environment, and where mutual support can be offered.

²⁸ Air assault is not a NATO concept.

- 7-22.** The principal **attributes** of maritime power are: access, mobility, sustained reach, posture, versatility, resilience, leverage and lift capacity. Maritime forces also have the ability to remain poised at sea for extended periods as an act of coercion, with limited political liability, and then take direct action against targets ashore. These attributes can be exploited through the three **roles** of maritime power: warfighting, maritime security, and international engagement.
- 7-23.** Maritime capabilities can create a broad range of effects and influence from the sea into the land environment in support of land forces. These include demonstration of political intent, early theatre entry, enduring littoral operations, long-term sustainment and support to operations, and the application, or the threat of maritime strike. Maritime close air support, other joint fires and air mobility are significant enablers to inland activity, especially in the early stages of an operation, before a land foothold has been established. Maritime platforms contribute intelligence, area surveillance and communications capabilities to land forces. They can provide: air defence over littoral areas; logistic support; clean facilities for deep maintenance and casualty treatment; and locations from which to exercise command. Maritime forces can also protect land forces by providing a sea-based defensive barrier, or by preventing enemy manoeuvre from the sea.
- 7-24.** Over two thirds of the world's population live within 200 kilometres of the sea and most states have a coastline. Operational theatres with coastlines present both opportunities and challenges for land forces. Complex coastlines with navigable inlets, estuaries and offshore islands may see land and maritime forces operating in very close proximity, thus presenting battlespace management challenges. It is in this littoral environment that amphibious operations are conducted.

Lying offshore, ready to act, the presence of ships and Marines sometimes means much more than just having air power or ship's fire, when it comes to deterring a crisis. The ships and Marines may not have to do anything but lie offshore. It's hard to lie offshore with a C-141 or C-130 full of airborne troops.

General Colin Powell

- 7-25. Amphibious operations** are maritime activities, launched from the sea by a naval and landing force embarked in ships or other craft, with the principal purpose of projecting the landing force ashore tactically into an environment ranging from permissive to hostile. Primarily conducted to create effects in the land environment, there are four types of amphibious operation.
- a. Amphibious raids involve swift incursion into or temporary occupation of an objective followed by a planned withdrawal. Concentrated in time, space and resources, they seek to destroy or disrupt adversary infrastructure, gain information, create a diversion, capture or evacuate individuals and/or equipment.
 - b. Amphibious assault is the principal type of amphibious operation, establishing, with some permanence, a force on a hostile or potentially hostile shore. Amphibious assaults exploit the full effect of maritime power for the rapid build-up of landing forces ashore.

- c. Amphibious withdrawal concerns the extraction of forces by sea from a hostile or potentially hostile shore in preparation for re-deployment.
- d. An amphibious demonstration seeks to deceive an enemy by a show of force with the expectation of deluding the enemy into an unfavourable course of action. An amphibious demonstration must pose a credible threat to the enemy, requiring them to allocate sufficient forces to counter the apparent threat.

The integral aviation and surface manoeuvre craft, stores capacity and diverse skill sets make amphibious forces well suited to a range of other operations, including non-combatant evacuation operations, humanitarian assistance and disaster relief.

- 7-26. Land and maritime forces operate together not only in the littoral, but also in the riverine operating environment. This is an inland, coastal or river delta area comprising both land and water, characterised by limited land lines of communication. Waterways are extensions of the littoral, and so provide an important conduit for the conduct of amphibious actions, offering natural penetration points as well as obstacles. Riverine actions can provide freedom of movement for land operations or deny it to an adversary. Although amphibious forces can be structured and trained for riverine operations, they can also be conducted by other maritime or land component forces. These must be able to exercise command of the riverine operation and also control the riverine environment, including the sub-surface element.

Since men live upon the land and not upon the sea, great issues between nations at war have always been decided – except in the rarest of cases – either by what your army can do against your enemy's national life, or else by fear of what the fleet makes it possible for your army to do.

Sir Julian Corbett

- 7-27. There is potential for tactical synergy between land and maritime components beyond amphibious operations. Land forces can neutralise threats to naval forces from the shore, undermining adversary anti-access and area denial efforts. They can seize and guard onshore infrastructure required by naval forces and also provide landing forces and fires for amphibious operations. For instance, land forces might secure naval infrastructure or suppress coastal defences while maritime forces conduct shaping operations in depth. Having mutually enhanced the joint commander's freedom of action, land forces might then exploit along a coastline, supporting and supported by maritime forces.

The special forces component

- 7-28. Special forces provide strategic insight and precision effects in all operating environments. Designed, trained and equipped to operate at the strategic and operational levels, they create effects beyond the reach, capability or expertise of conventional forces.
- 7-29. The degree of cooperation between land forces and special forces depends on the nature of the operation. Routinely, special forces operate at the **strategic level**, which may, or may not, require detailed planning and cooperation with the land force and other components.

- 7-30.** At the **operational level**, they usually form a component alongside those of maritime, land, air and logistic forces, either within an integrated JTF headquarters or in supporting/supported relationships with other components. From a UK perspective, command and control of UK Special Forces (UKSF) operations is directed on a case by case basis by the Chief of the Defence Staff. On joint operations, special forces operations will typically be deconflicted in time and space from land forces. Even then, there are likely to be interests common with land forces. These include how the audience and key actors respond to military activity, target deconfliction, access to intelligence and communications systems, management of the electromagnetic spectrum, fire support coordination, sustainment and personnel recovery.
- 7-31.** Even though special forces will rarely be deployed for tactical effect, there will be occasions demanding closer cooperation between them and land forces at the **tactical level**. These include circumstances when land forces' tactical actions have operational or strategic level consequences, resulting in closer proximity of force elements or the sharing of particular capabilities. For example, on a capacity building mission, land forces may operate alongside special forces. Or, specific counter-terrorism or hostage rescue skills, only held by special forces, may be required within the battlespace of a land force.
- 7-32.** Effective cooperation with special forces requires an understanding of their characteristics,²⁹ principles of employment, roles, planning considerations, limitations and dependencies. Each nation's Special Forces vary according to national requirements. The term special operations forces (SOF), common in NATO, encompasses a breadth of units with unique capabilities; they are not necessarily equivalent in terms of capability or role to UKSF. Commanders and staff must understand where NATO SOF and UKSF differ and plan accordingly. The description here is focused on that of UKSF,³⁰ with key differences to NATO doctrine highlighted.
- 7-33.** Special forces operations are underpinned by a number of **characteristics**.³¹ **Precision** allows them to provide military options in situations that require a tailored and focused effect. Operations are conducted with **tempo** to gain and retain the initiative. Maintained at very high readiness, special forces have the **agility** to enable responsive strategic and operational deployment. They also have the ability to operate at **reach**, globally, in the most hostile and politically complex environments beyond the capabilities of many conventional force elements. Special forces levels of **endurance** allow operations to be conducted in hostile environments for extended periods, isolated from main combat forces and surviving on relatively limited resources. Operators accept a commensurately high level of individual and collective physical **risk**. Special forces maintain high levels of **secrecy** in respect of their operations, capabilities, information and personnel.
- 7-34.** Special forces are a scarce and valuable resource. UKSF and NATO SOF are employed according to similar enduring **principles**. Used for strategic effect, they are commanded at the highest appropriate level and involved in the earliest stages of planning to enable timely decision-making. They are provided with access to the best intelligence available and have their security protected.

29 For example, some NATO SOF include civil-military cooperation and psychological operations teams, language and environmental specialists, as well as other capabilities not generally held by UK. See AJP-3.5 *Allied Joint Doctrine for Special Operations*.

30 See JDP 0-40 *UK Special Forces Doctrine* for further detail on UKSF.

31 AJP-3.5 refers to five attributes of SOF: high tempo; pre-emption; disruption; deception; and initiative.

- 7-35. Special forces have three broadly defined **roles**, each of which has a number of associated tasks or activities.³² **Surveillance and reconnaissance** delivers strategic insight, support to planning, target development, assessment and liaison. **Support and influence** is achieved through capacity building of security forces, military assistance to irregular forces, civil-military cooperation and information activities. **Offensive action** seeks to seize, destroy, capture or inflict damage to an opponent's offensive capability or infrastructure to create specific and often time-sensitive effects. It includes sabotage, raids, strikes and ambushes, counter-terrorism, and bespoke operations.
- 7-36. UKSF, while maintaining specific protocols for their own operations, in a joint context apply operational level **planning** processes. The Special Forces Component Commander and Special Forces Task Group Commander, represented by a Special Operations Planning and Liaison Element or Special Forces Cell, should be involved in the planning process from the outset so that advice on capability and the best use of scarce resource can be included within the evolving campaign design. They can then support and shape the operation, within the freedoms and constraints laid down in the operational directive. In an operational environment, liaison officers are also likely to be deployed to land (and other) component headquarters to advise on the coordination, integration and de-confliction of special forces' activities as required.
- 7-37. While a significant force multiplier, special forces have **limitations**. Special forces are small in number and must be employed appropriately, focusing effect at critical times and places. They are not a substitute for land forces, which have greater mass and firepower, and can potentially be reconstituted more quickly. They should not be employed for tasks which may appear attractive, but against which conventional forces are more appropriate. As a finite resource with a relatively high cost to train and equip, UKSF will routinely be assigned to the strategic main effort. Although UKSF can operate for extended periods in hostile territory, they do not generally hold ground. However, through integrated planning and execution of operations special forces may magnify the effectiveness of land operations in a joint context.
- 7-38. Access to intelligence, sustainment and means of force projection are all key **dependencies** for special forces. They are normally deployed against high value targets, often at short notice, and require intelligence of the highest fidelity. The nature of special forces operations also requires bespoke and flexible sustainment. This tends to be small-scale but more complex compared to that of conventional forces. Finally air support is a critical enabler for special forces operations.

32 AJP-3.5 describes: special reconnaissance, military assistance and direct action.

The logistic component

It is no great matter to change tactical plans in a hurry and to send troops off in new directions. But adjusting supply plans to the altered tactical scheme is far more difficult.

General Walter Beddell Smith

- 7-39.** The logistic component is an essential element of all operations. Unlike the environmental components, it is not tied to a specific Service but is inherently joint. It also differs in that it exists only at the operational level; it is an integral part of an end-to-end system, from industry to deployed tactical force elements. At the tactical level, land forces are, therefore, unlikely to interact with the logistic component in the same manner as with, for example, maritime, air or special forces components. Land forces must, however, understand the construct of the logistic component and its relationship with land component's logistic force elements, which together inform the land approach to sustainment. The planning and execution of sustainment in the land environment is the subject of Chapter 10.
- 7-40.** The logistic component is responsible for all logistic activity at the operational level. It supports the activities of the combat components, which are usually responsible for tactical level sustainment specific to their operating environment.
- 7-41.** In a multinational context, logistic arrangements are complex and need to be agreed and established in advance of operations. By default the sustainment of national forces in a multinational operation is a national responsibility. However, nations should explore opportunities for cooperation to reduce duplication of effort. Such arrangements may include appointing a lead logistic or framework nation, or appointing particular roles to contributing nations. In multinational operations, each nation establishes a national support element in support of their national contingent. The activities of the various national support elements are de-conflicted and coordinated at the operational level by a multinational logistic headquarters, on NATO operations called the joint logistic support group. On UK-led operations requiring more than specialist augmentation of a JTF headquarters, a logistic component is formed. This component, or a national support element in a multinational operations, may be founded on the UK Joint Force Logistic Component (JFLogC), an existing logistic formation or a bespoke headquarters.
- 7-42.** Sustainment in the land environment can be very complex and resource-intensive, depending on the type of operation, the scale and types of forces involved, the distances to be covered and the threats posed by both the physical environment and enemy action. These factors inform the relationship of the logistic component with land component logistic force elements. At the very least, a close and formalised cooperative arrangement with the deployed logistic brigade or lead logistic unit is required.
- 7-43.** The logistic component has several **generic functions**. These include theatre activation, movement control, certain in-theatre movement and life support tasks (for example, reception, staging and onward integration), force supply and distribution, the reverse supply chain, contractor support and personnel policy. Tactical level logistic, equipment, health services, infrastructure and administrative support are normally conducted by the individual components, but require coordination across the wider joint operations area. They also are often optimised by drawing on skills available across the joint force and through the whole force approach.

- 7-44. The factors above and the character of contemporary conflict shape the **approach** to sustainment in the land environment, which has five elements.
- a. Sustainment is focused on support to expeditionary operations. Although there may be requirements to sustain military activity within the UK, the focus of sustainment doctrine, training and preparation is on expeditionary operations.
 - b. Sustainment is a fundamentally joint activity. In order to deploy forces and sustain them in an expeditionary environment, the end-to-end support chain is predominantly joint. It is only forward of the deployed joint supply area that sustainment activity becomes the responsibility of the land component commander.
 - c. Sustainment is delivered through a range of military, civilian and allied capabilities (the whole force approach). Sustaining UK land forces requires capabilities that frequently are only available from reserve, contract, host nation and allied resources.
 - d. The UK has adopted the NATO principles of logistics to enhance interoperability and reflect the NATO underpinning of UK defence. These are described in Chapter 10.
 - e. Sustainment activities must be designed and executed in the context of Integrated Action. The actions of the logistic component and of land logistic force elements have intended and unintended **consequences** beyond those directly contributing to the sustainment of the land force. For example, the delivery of humanitarian aid, a convoy of logistics vehicles or the disembarkation of main battle tanks in a foreign port, can all be observed by the audience. Alternatively, the establishment of sustainment nodes and capabilities, along with use of locally sourced contractors, can reassure the local audience of our commitment to security, stabilisation and the local economy. Conversely, sustainment activities can inadvertently lead to corruption, in particular contracting and employment of local civilians, and potentially undermine longer-term political success.

Cyberspace

- 7-45. Land forces operate in an increasingly complex environment, where information technologies continue to transform how land forces operate with, among and against other actors. Cyberspace in particular presents significant opportunities and threats. Integrated Action is enhanced by cyberspace's ubiquitous, interconnected and dynamic nature. These same factors, however, also enable threats such as espionage, sabotage and subversion. There is no cyber component matched to this environment (as there is for the physical environments of maritime, land and air). Rather, cyberspace pervades all operations and so responsibility for exploiting its potential and protecting from its threats is common to all components.
- 7-46. Joint doctrine defines **cyberspace** as: an operating environment consisting of the interdependent network of digital technology infrastructures (including platforms, the Internet, telecommunication networks, computer systems, as well as embedded processors and controllers), and the data therein spanning the physical, virtual and cognitive domains.³³

- 7-47. The **cyber operating environment** of platforms, networks and systems is critical to operations, and can be explained by reference to near, mid and far operating spaces. The near space is controlled and assured by a particular commander. The mid and far spaces are not; the mid includes systems operated by other government departments, or commercial companies; the far lies predominantly outside the control or assurance of friendly actors and is likely to be owned by third party or hostile actors.
- 7-48. There are four roles identified with cyber operations: defensive cyber operations (DCO), comprising active and passive measures; cyber intelligence, surveillance and reconnaissance (cyber ISR); offensive cyber operations (OCO); and cyber operational preparation of the environment (cyber OPE).
- 7-49. Cyberspace and the electromagnetic environment (EME) must be considered together. Electromagnetic activity can be used to affect the ability of other actors to operate in cyberspace, and *vice versa*. The EME, however, is focused on activity in the virtual domain, while cyberspace also spans the physical, including, for example, the computer cables that carry data traffic. The term **cyber electromagnetic activities** (CEMA) refers to the integration of activities in cyberspace and the EME, as illustrated in Figure 7-2. The full range of activities is usually only conducted and orchestrated at the divisional level and above. At lower levels, land forces will either execute specific CEMA or integrate their own actions with CEMA executed by other organisations. In all cases, land forces must consider the effects of cyberspace and the EME on their particular operating environment and the actors within it.

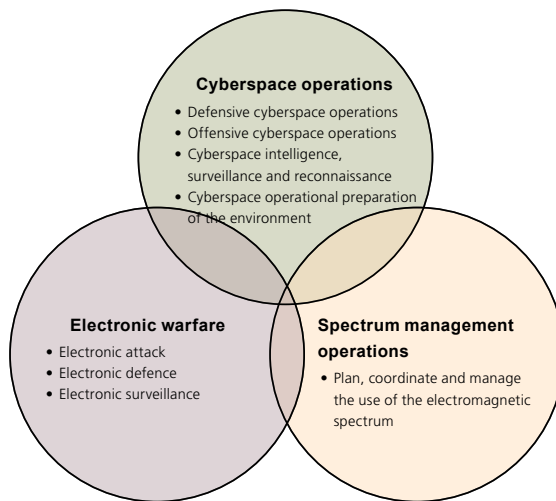


Figure 7-2. Cyber electromagnetic activities conducted by land forces

- 7-50.** Cyberspace and the EME provide the medium through which operations are planned and also, increasingly, executed. They affect land forces of all types and at all levels, from the lowest tactical grouping using networked, digital communication systems and global positioning systems (GPS) to higher tactical formations resourced to orchestrate cyber activities within Integrated Action. Protection and exploitation of cyberspace and EME are, therefore, fundamental to all operations. Considerations for land forces include the following.
- a.** Whether near, mid or far, cyberspace is contested. Hostile actors constantly probe our systems to seek vulnerabilities, intelligence and advantage. Land forces must protect against cyber attack, while remaining capable of planning and executing operations with reduced or denied access to cyberspace and the EME. This could include operating for periods of time without GPS navigation, tactical data or secure voice networks, or the ability to communicate with the home base.
 - b.** The increasing global accessibility of cyberspace, low relative cost (when compared with more traditional capabilities) and difficulty in attributing attacks means that its exploitation is not limited to peer competitors, but to almost all potential adversaries. Also, land forces and those we wish to protect are increasingly and routinely dependent on cyberspace as a matter of daily life. Cyber factors must be considered in land forces' planning.
 - c.** Most electronic control systems have cyber vulnerabilities, even if not all are readily exploitable. Cyber attacks can cause damage not only in the virtual domain, manipulating information, but also in the physical domain. They can be used to affect directly electronically-controlled systems, from equipment to infrastructure.
 - d.** Actions in cyberspace and the EME can have a broad range of effects in time and space, as part of all tactical functions. Unconstrained by physical environments, their range can be almost without limit and they can take effect either instantaneously, over a longer period or be programmed for subsequent activation. These factors provide significant opportunities through Integrated Action.
 - e.** UK offensive cyber electromagnetic activities are conducted within the same legal framework as operations in the physical domain. Actions taken in cyberspace can, however, be ambiguous and publicly deniable, allowing hostile actors to remain below thresholds traditionally associated with entering armed conflict.
- 7-51.** In a cyber context, multinational and inter-agency interoperability is particularly challenging. However, since the effects of actions taken in cyberspace and the EME are not necessarily geographically bounded, de-confliction and mutual understanding are imperative. National and commercial sensitivities surround specific electronic counter measures, cyber and electronic warfare capabilities; and, with the exception of spectrum management, there is currently no common, NATO approach to cyber electromagnetic activities.

ADP Land Ops **Chapter 8**



Orchestrating and executing operations



CHAPTER 8

Orchestrating and executing operations

Introduction

- 8-01.** At the operational or higher tactical level, corps and divisions orchestrate Integrated Action and align their activity with joint, inter-agency and multinational operations.³⁴ The orchestration of operations concerns the direction and arrangement of actions, sequentially and simultaneously, to create desired effects. Brigades, units and other force elements, operating at the tactical level, plan and execute their contributions to the divisional operation.
- 8-02.** This Chapter builds on Chapter 4, describing in general how operations are planned and conducted to achieve Integrated Action; Volumes 1 and 3 of the AFM series provide greater detail. It begins by describing the overall process of operational design and tactical planning at different levels. It then describes the fundamental building blocks of a land force's capabilities, the **tactical functions**. It introduces how **operational art** connects **objectives**, over time, to achieve desired **outcomes**. The next section explains the **doctrinal frameworks**, which aid the integration of **actions** and **effects** to achieve objectives. It concludes with a summary of the **tactical activities** that contribute to Integrated Action.

Orchestrating and executing operations

- Introduction
- Operational overview
- Tactical functions
- Operational art
- Doctrinal frameworks
- Tactical activities
- Annexes:
 - Understanding
 - Centre of gravity analysis
 - Operations themes and types of operation

Operational overview

- 8-03.** In **Integrated Action** the land force draws together all the levers of power and influence available to it. These include those levers exercised by friendly actors and those integral to the land force, which are described by the tactical functions. It applies them (through doctrinal frameworks and tactical activities) to have the effects required to achieve assigned objectives and outcomes. These objectives and outcomes, however, are rarely, if ever, achieved by a single cycle of actions and effects. At the higher tactical level and above, military operations invariably require multiple lines of activity and sequences of objectives and actions – each one dependent on prior activity. Operational art, described later in this chapter, guides the planning and management of operations at this level. The emphasis in this publication is to describe how tactical activities should be conducted so that they contribute to wider operational and therefore strategic outcomes.

34 Some brigade or unit-sized task forces can be an exception to this rule.

- 8-04.** Effective operations rely on appropriate and constantly updated **understanding** of the context of the situation, the audience, and the information and physical environment. Understanding is specific to role. For example the land component commander, a staff officer in a logistics unit, a battlegroup operations officer and an engineer reconnaissance sergeant all need to know different things. It is very important, but relatively straightforward, to develop understanding of the physical environment and many aspects of the information environment. Critical to the design of effective operations, and to eventual success, is understanding the audience (the human aspect of the environment), which is far more challenging. Further detail on the theory and process of understanding is at Annex 8A.
- 8-05.** Figure 4-1 illustrates how **the audience** consists of all those relevant to the attainment of objectives: the wider audience, actors, adversaries and enemies. The first stage in operations design and tactical planning is to understand not only the problem and task, but to understand enough of the relevant audience to judge what actions within the force's power will stimulate behaviour in a way that leads to achieving the desired outcomes. It is also vital to try and anticipate what actors might do, including to us, recognising that there will always be uncertainty. Action is often the best way of developing understanding, and is certainly the way to begin to take the initiative. In an area of operations, the audience could consist of enemies, adversaries, actors, and other groups or individuals that are not active in the situation, or about to be, but are still members of the audience. There are many tools used to assist with understanding the human aspect of the environment. Centre of gravity analysis can be a useful tool particularly for understanding what an actor's capabilities, requirements and vulnerabilities are. The concept is described at Annex 8B. Outside the area of operations is a wider audience that must be considered; depending on the situation, this wider audience could be important to the course and outcome of the whole operation.
- 8-06.** A key responsibility for commanders at all levels is **shaping the context** for their part of the operation. Through responsible and constructive dialogue with their 'one-up' commanders and the staff, and when possible by engagement in the 'one-up' planning process, subordinates can make success more likely. They are able to influence the enabling actions of their superiors, adjust the resources available to them, shape expectations about the likely achievements of their force, and gain the support and confidence of their commanders. Those with operational-level responsibilities must go further, complementing the actions of government, senior military officers, and diplomatic and civilian officials. By direct communication, and information activities (including through the media) they can shape the context of the entire venture by influencing relevant actors to assist the force, directly or indirectly.
- 8-07.** One of the challenges of designing operations is the **integration of lethal and non-lethal effects**. The means at the disposal of the land force (the tactical functions) do not all have matched or easily assessed effects. Integrated Action aims to create effects on actors' understanding, physical capability, and will and cohesion. These effects range from those that are intended to be wholly constructive and positive such as through training the forces of a partner (capacity building and information activities), to those intended to be destructively negative such as defeating an enemy force (fires

and manoeuvre, accelerated by information activities). Some effects can be more or less immediate (such as from the use of fires); others can be very long term (again, capacity building is a good example). In both these examples, we can be confident that our actions have led to the changed state of the actors concerned. In other cases the connection is less clear; this is a particular issue for some forms of information activity.

We conduct all operations in order to influence people and events, to bring about change, whether by 155mm artillery shells or hosting visits: these are all influence operations. We sought to make use of every lever we had to influence events.

Major General Graham Binns

- 8-08. Tactical planning for combined arms tactical activities is more straightforward. Formations, units and other force elements are given missions and tasks that contribute to the higher commander's plan and fulfil its intent. These are designed as discrete actions to achieve specified conditions, or subordinate objectives and outcomes, as part of the overall plan. For this lower-level activity to contribute fully and appropriately to the overall plan, it is essential that commanders and staff at unit and sub-unit level understand the context of their actions, their division and brigade commanders' intent and plans, their own contributions, and the likely wider consequences of their actions.
- 8-09. Operations design and tactical planning lead to the scheme of manoeuvre and provide the basis for control of the operation (Annex 8C describes different operations themes and types of operation). Plans are continuously reviewed and refined; the situation will change, in response to actions, reactions and the unavoidable consequences of chance and friction. Commanders insure against uncertainty, the unpredictable opportunities and risks that will arise, by preparing contingency plans and assigning reserves.

The tactical functions

- 8-10. The **tactical functions**³⁵ represent the full breadth of a land force's activities when conducting operations.³⁶ They are: **command, intelligence, manoeuvre, fires, information activities, capacity building, protection and sustainment**. The tactical functions are a device that helps to organise activities into intelligible groups; they have no effects, whereas the activities do. Few, if any stand alone. All activity needs to be commanded and sustained for example. However, the bigger and more combined arms the force is, the more likely it is to have the ability for significant activity under every heading. As a rule of thumb, corps and divisions are designed to conduct all the tactical functions simultaneously. Subordinate force elements may be able to apply all the functions to lesser degrees or specific ones to great effect. For example, an engineer unit has less access to fires than a combined arms battlegroup, which in turn may have fewer opportunities for capacity building than one scaled for security force assistance tasks. The tactical functions also provide a useful checklist for commanders when assessing a plan, and a common vocabulary for describing a force's overall capabilities.

³⁵ They deviate slightly from NATO's combat functions, which do not include capacity building. AJP-3.2.

³⁶ The defence capability framework of **command, inform, prepare, project, operate, protect**, and **sustain** encompasses the broader range of military actions prior to, during and after operations.

- 8-11. Each of the descriptions that follow describes the functions generically; they are intended to apply from division to sub-unit level. Each describes the activities grouped under the function, and the sort of effects the activities might have. Figure 8-1 illustrates how the functions fall into three groups organised by purpose. **Command** and **Intelligence** activities are largely internally focused, setting and maintaining the direction of the operation or action; **manoeuvre, fires, information activities** and **capacity building** are mainly directed at those relevant to the outcome of the operation; and **protection** and **sustainment** are the activities that enable the operation.



Figure 8-1. The tactical functions

Command

- 8-12. Command is the tactical function that enables all other tactical functions. It is through command that the tactical functions are balanced, resourced and directed when orchestrating and contributing to Integrated Action. It encompasses the authority of appointed individuals and the ways and means by which authority is exercised (through decision making, leadership, control, using information as a resource, and communication systems). Other activities that have a significant information element are covered by the tactical functions of intelligence, information activities, fires and protection.

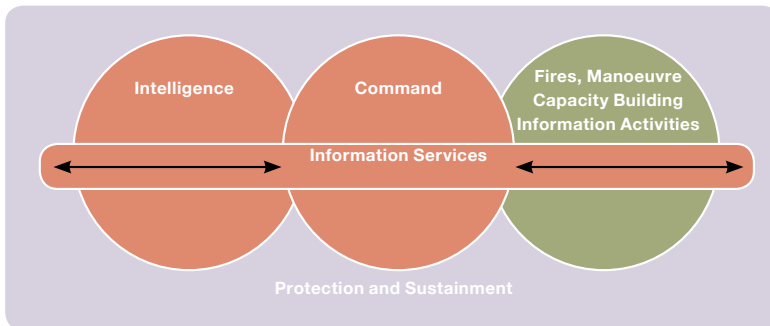


Figure 8-2. Command enables all other tactical functions

- a. The command and control aspect includes: interaction with other force elements, their commanders and staff; effective planning; the management and execution of operations and tactical activities, including battle procedure; the design and management of command and control relationships within the force, and battlespace management; and the design, organisation and location of command posts.

- b. The use and transmission of information are also aspects of the command tactical function. Managing the force's information as a resource (information management and exploitation), and establishing and maintaining assured information to the point of need within the force (command and information systems) are both critical to operational success at all levels. A coherent, robust and secure network of information services, as illustrated in Figure 8-2, underpins the effectiveness of all tactical functions.

Given the centrality of command to land forces' doctrine, Chapter 6 describes Mission Command and Chapter 9 explains the application of command.

Intelligence

For the commanders in particular...the priority design determinant of the strategy and campaign is the acquisition of information, to learn about the enemy and the people and to find out what separates one from the other.

General Rupert Smith, Fighting Instructions

- 8-13.** Intelligence is the tactical function that makes the most significant contribution to understanding. Intelligence is a product,³⁷ a critical resource that is used to inform the force's activities. Relevant information is gathered and kept updated about the audience and actors, adversaries and enemies, the information environment and the physical aspects of the area of intelligence interest. Intelligence as a tactical function encompasses the activities of commanders, staff and collection assets to generate intelligence product. Those involved do this by giving direction on requirements and, following collection and processing, disseminating the product in a timely manner to inform operations.³⁸
- a. Intelligence activity is guided by the intelligence collection plan, which is constructed to meet the commander's intelligence requirements. This prioritisation is essential to focus activity on the needs of the operation, because of the abundance of information and the friction inherent in conflict. Commanders require intelligence about the characteristics, culture, capabilities, locations, intentions, relationships and objectives of the audience whose understanding and behaviour they seek to influence. Intelligence about the information and physical aspects of the land environment supports commanders' understanding of the freedoms and constraints affecting operations.
 - b. The tactical function includes collecting information through intelligence, surveillance and reconnaissance (ISR) activity. This includes activity, for example, by force elements responsible for electronic surveillance and human intelligence. It also includes specialist ISR activity by manned and unmanned aircraft, armoured and light cavalry, artillery and combat engineer special-to-arm capabilities, and battlegroup close reconnaissance. But they do not have sole responsibility for ISR activity. The whole force contributes to generating intelligence from all parts of the area of operations. Increasingly, open source information is also highly relevant in informing tactical decisions.

37 Intelligence is defined as: the product resulting from the directed collection and processing of information regarding the environment and the capabilities and intentions of actors, in order to identify threats and offer opportunities for exploitation by decision-makers. AAP-06.

38 See AJP-2, *Allied Joint Doctrine for Intelligence Procedures*, JDP 2-00, *Understanding and Intelligence Support to Joint Operations*, and the AFM series for comprehensive principles.

- c. Information about the relevant audience, the information environment and the physical geography is passed to the relevant staff both to inform immediate tactical decisions and for more considered analysis. Analysis of information about these subjects is fused to provide commanders with a common intelligence picture to inform decision-making. The analysis of privileged or highly classified information is just one element of intelligence, which also exploits the potential of ever-improving technical processing tools applied to the wealth of open source information.
- d. Dissemination is the activity that distributes relevant information to those who need it, in time to inform their decisions and actions. This balances 'need to know' with 'responsibility to share'.

8-14. Above all, intelligence collection is continuous. Dynamic and adversarial situations constantly evolve, previous truths can rapidly become ill-founded assumptions, and adversaries will actively seek to deceive. It is vital that commanders give significant attention to formulating their information and intelligence requirements; amendments may reduce the tempo of a force and add undue friction. Nevertheless, these requirements must be responsive to the situation and kept under constant review.

Manoeuvre

Everything which the enemy least expects will succeed the best.

Frederick the Great

- 8-15.** Manoeuvre is the employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect to the enemy to accomplish the mission. The tactical function involves physical movement and positioning of force elements over land, water or through the air.³⁹
- 8-16.** Manoeuvre can have a range of unique effects, because only it can allow forces to take possession of terrain. Through the Manoeuvrist Approach it offers the means of concentrating force or the threat of force decisively in time and space to achieve surprise and shock, and create opportunities for exploitation. Manoeuvre can have an effect that compels adversaries to respond by acting in ways that are not in their interests. In stability operations, placing or moving forces to reassure or provide security is a form of manoeuvre as much as manoeuvre in combat. Manoeuvre is also often an important element of deception (for example, a feint) or deterrence (for example, a show of force). It can be used precisely against physical and human targets (for example, in a raid, or targeted search). Manoeuvre, therefore, contributes to Integrated Action through its effects on actors' understanding, physical capability, and will and cohesion.
- 8-17.** Manoeuvre enables and is enabled by activities grouped under the other tactical functions. Command and intelligence direct it. In combat, organic and supporting fires are the critical enablers, helping to generate shock and demoralisation that manoeuvre

³⁹ 'Information Manoeuvre' is a term that is sometimes used to describe all information-related activity classified under the tactical functions. Manoeuvre as a tactical function means physical manoeuvre to a position of advantage. Integrated Action is intended to create advantageous physical, virtual and cognitive effects.

can exploit. Information activities can be used to magnify its impact. Protection activities may conceal it to help generate surprise, and sustainment is always essential.

Battles are won by slaughter and manoeuvre. The greater the general, the more he contributes in manoeuvre, the less he demands in slaughter

Winston S Churchill

- 8-18.** Land manoeuvre is the combination of ground and air manoeuvre enabled by manoeuvre support. Ground manoeuvre is best conducted by combined arms forces, appropriate to the terrain and task. Air manoeuvre can act as an accelerant to ground manoeuvre, or be decisive itself, supported by ground manoeuvre. For example, ground forces can disrupt or destroy enemy air defences and open up avenues of approach for exploitation by air manoeuvre forces. Alternatively, air manoeuvre forces can seize, clear and hold key terrain to enable exploitation by ground manoeuvre forces. Manoeuvre takes different forms: frontal, penetration, infiltration, envelopment and turning movements. These are explained in the AFM series.

Fires

- 8-19.** The tactical function of fires refers to the use of weapons to create a specific lethal or non-lethal effect on a target. Without fires, armed organisations have no force to apply or threaten. Lethal fires include the direct and indirect weapon systems of land, maritime and air forces designed to destroy, neutralise or suppress an enemy. This definition includes the organic fires of manoeuvre forces: small arms, anti-tank and structure missiles, mortars, and the main armament of armoured fighting vehicles. However, this tactical function is mainly concerned with fires directed and controlled at all levels of command, particularly the fires available to a corps or division, mainly provided by air, attack helicopters and artillery. Non-lethal fires include offensive cyber electromagnetic activities that have physical effects. These may, for example, degrade or deny electronically-controlled systems, including communication and information systems as well as other equipment and infrastructure.
- 8-20.** Fires have immediate effects on both precise and area targets, including destroying, fixing, disrupting or dislocating enemy forces. More importantly, when applied effectively at the right time and place, they have secondary effects on an enemy's will and cohesion. Fires can have a devastating effect on enemy morale. They can also be used to destroy, damage or influence critical physical and virtual resources, nodes and linkages that form part of an enemy force's cohesion. They can also be used to bolster the will and cohesion of friendly actors.
- 8-21.** Fires are closely dependent on other tactical functions. They rely on actionable intelligence and the post-engagement assessment that it provides. Fires are essential to enable manoeuvre, but the two enhance each other. As part of shaping actions, Fires are sometimes used independently, but they are more likely to be used in conjunction with ISR and information activities. Attack helicopters and artillery are a critical capability of any force and therefore a priority for protection. They also generate significant sustainment demand.

- 8-22.** From battlegroup mortars upwards, for fires to be most effective they are commanded at the highest level but controlled at the lowest appropriate levels, to optimise concentration of force and responsiveness. When fires support manoeuvre forces, for example, the manoeuvre commander controls the fires, but seldom commands them.

Information activities

- 8-23.** As a tactical function, information activities⁴⁰ covers all the ways of deliberately communicating messages to the audience. They have a common purpose – to affect understanding. The activities grouped under this tactical function include psychological operations, engagement, deception, cyber electromagnetic activity, media operations, and presence, posture and profile. All of these can have first as well as second order effects on behaviours and are fundamental to Integrated Action.

I say to you that we are in a battle, and that more than half of this battle is taking place in the battlefield of the media.

Ayman al-Zawahiri (Al-Qaeda)

- 8-24.** Information activities should be used to enhance and exploit the effects of manoeuvre, fires and capacity building; indeed if this is not done, these physical activities do not achieve their full potential. As any actions detectable by the audience are a form of communication, they can be used to support and substantiate information activities. Information activities do not only enhance our own actions, they can limit enemies' and adversaries' ability to exploit their own successes, and be pivotal in protecting the cohesion of our force.
- 8-25.** Key to the success of information activities is coherence and consistency of messages and actions, from the strategic to tactical levels. This requires the active involvement of the whole force, using Mission Command to align the force with the overall commander's intent. The conduct of certain information activities requires specialist knowledge and skills, much of which comes from outside the British Army. Commanders at all levels have a responsibility to integrate that expertise within the force. Notwithstanding the specialist aspects of Information Activities, the entire force has a role to play, for example, in engagement (direct communication to or dialogue with the audience), deception, and media operations, as well as conforming to the force's required presence, posture and profile.
- 8-26.** For all the benefits of information activities, commanders and staff at all levels should be aware of the risks, which include varying interpretations, and the unpredictability of subsequent effects. Even a consistent set of messages can be complicated by varying interpretations. The presence of tanks in a particular village during a peace support operation may, for instance, send conflicting messages: to one audience it may reassure; to another it may suggest an insecure environment. The first order effects of a message designed to be relatively immediate are often assessable: for example, a division commander's phone call to a key actor may stimulate observable action,

⁴⁰ Note that this definition is narrower than that of NATO which describes information activities as activities designed to affect information or information systems. NATO also includes civil military cooperation within information activities, which in UK doctrine is part of capacity building. See AJP 3-10, *Allied Joint Doctrine for Information Operations*.

or a battlegroup's deception plan might be successful in fixing an enemy reserve. However, the subsequent effects are hard, perhaps impossible, to predict. Longer term messaging, perhaps to wider audiences, is also hard to gauge, and is more vulnerable to counter-messaging. Therefore, effective information activities require considerable understanding of the audience, and continuous monitoring and assessment by specialist intelligence activity. This enables land forces to adapt their activities to remain in step with the changing understanding and behaviours of audience.

- 8-27.** Although many aspects of information activities are conducted or reflected by all elements of the force, their nature means that the divisional headquarters is normally the lowest level of command with access to the full range of capabilities and the means to command and control them.

Capacity building

- 8-28.** Capacity building, as a tactical function, concerns those actions taken to improve military, and when necessary civil, security and infrastructure capability. Security capacity building often involves training host nation partner forces. Advise and assist tasks involve the provision of support to help the partner build their capability, including institutionally. Accompany tasks involve partnering on operations. Infrastructure capacity building may require reconstructing or repairing infrastructure that has been damaged during combat operations.
- 8-29.** Capacity building has first order effects on actors' behaviours and their Fighting Power. It can also have second order effects through developing capabilities that subsequently contribute to behavioural outcomes. Normally, unlike manoeuvre and fires, security capacity building takes a long time, perhaps years, to have lasting effect, as it involves building Fighting Power. Like all other physical activity, capacity building enhances and is enhanced and exploited by information activities. It also requires a comprehensive (or between UK agencies, full-spectrum approach), to work in harmony with UK, host nation and sometimes Allied governmental and other agencies. Even direct assistance to host nation military forces is inherently political in nature and but one line of wider security development which necessarily involves non-military actors. Cooperation between the land force and other actors is essential for creating unity of effort.
- 8-30.** The requirement and opportunity to conduct capacity building depends on the size of the land force involved, its tasks and the type of operation. A land force may conduct capacity building as a discrete type of operation, where capacity building activities are likely to be the main effort, supported by the other tactical functions. In other types of operation, dependent on resources and requirement, land forces will either deliver capacity building as a tactical function directly, or support or be supported by others doing so.

Protection

- 8-31.** The tactical function of protection refers to those actions taken to protect the Fighting Power of a force. These include physical and information protection activities and measures. It has two inter-related purposes: to enable freedom of action; and to maintain operational effectiveness by preserving combat power (people, equipment, materiel, installations and information).

- 8-32. Protection depends on continually refreshed understanding of the risks facing the force and the level of risk appetite. It is important to understand, mitigate and protect both the vulnerabilities of one's own centre of gravity, and threats posed by adversaries and the environment. These inform the level and application of physical and information protection measures required.
- 8-33. Physical protection is created by a combination of activities and force protection measures. The activities are actions taken to protect the force from enemy ISR and attack. These include guards, screens, air defence, concealment and counter-chemical, biological, radiological and nuclear (CBRN) measures. In addition, commanders select appropriate force protection measures. These include equipment and procedures to reduce the likelihood of casualties, and procedures to reduce non-battle injuries and ill-health. Information protection requires appropriate measures of operational and information security. Care is required to ensure that a vigorous approach to protection does not undermine other key objectives.
- 8-34. Critically, the moral component of the force must also be protected. In the same way as the Manoeuvrist Approach emphasises effects on an enemy's cohesion and will to fight, so too must we protect our own will and cohesion. The physical and information protection measures described are necessary, but not sufficient for maintaining the force's moral component, which is developed over time, before and during operations.

Sustainment

- 8-35. Sustainment enables land forces to operate and provides them with freedom of action, by providing for the personnel, logistics, equipment, medical and other support required to conduct operations. Sustainment consists of supplying a force with consumables and replacing combat losses and non-combat attrition of equipment to maintain the force's combat power for the duration required to meet its objectives.
- 8-36. Sustainment is a key enabler of Integrated Action. Without sustainment, military operations and Integrated Action simply are not possible. In particular, manoeuvre and fires often generate very high demand, particularly in combat, so assured sustainment is critical to success in battle. Sustainment, therefore, is central to commanders' decision-making, as they have to balance the desired effects with the resources available. Sustainment is not only an enabler of Integrated Action; it can also contribute to its outcomes. How a land force sustains itself, whether it draws resource from a host nation, which port of entry is used and what local contracts are established are all considerations that can have positive and negative, intended and unintended consequences in relation to actors' behaviour. It is, therefore, dependent on intelligence and can complement information activities, offering economic substance to narratives. Sustainment is the subject of Chapter 10.

Operational art

- 8-37. Operational art is defined as the employment of forces to attain strategic and/or operational objectives through the design, organisation, integration and conduct of strategies, campaigns, major operations and battles. It is the orchestration of a series of tactical actions, if necessary along multiple tactical lines of activity. Operational art is often regarded as an aspect of command at the operational (joint) level. It is described here because although its understanding and application is implicit to land force commanders with operational-level responsibilities, tactical commanders also

need to understand it. It informs the design of the campaign or operation to which they contribute, and is therefore the source of their higher commander's intent. It is also relevant as a tool at the tactical level, when sequencing multiple tactical activities to achieve objectives, which in turn contribute to operational level outcomes. This is often relevant in the case of a unit with long-term responsibilities for an area of operations.

- 8-38.** At the land component level, and usually at the higher tactical (corps and division) level, operational art translates strategic direction into tactical execution. The land force contributes to joint campaign decisive conditions, which leads to achieving the desired end state. This means that it is the principal way in which tactical activities are designed and managed in concert with other agencies. Operational art in the contemporary land operating environment is, therefore, the orchestration (design and management) of Integrated Action.

Nine-tenths of tactics are certain, and taught in books: but the irrational tenth is like the kingfisher flashing across the pool, and that is the test of generals.

TE Lawrence

The stroke of genius that turns the fate of a battle? I don't believe in it. A battle is a complicated operation that you prepare (for) laboriously. If the enemy does this, you say to yourself I will do that. If such and such happens, these are the steps I will take to meet it. You think out every possible development and decide on the way to deal with the situation created. One of these developments occurs; you put your plan into operation and everyone says, "What genius..." whereas the credit is really due to the labour of preparation.

Field Marshal Foch

- 8-39. Operations design** establishes the sequence and purpose of critical actions, assigning missions and priorities to subordinates and supporting commands. These actions are nested within, and contribute to, the higher commander's objectives – a requirement that may cause tension in a multinational environment when balancing national and operational command requirements, but which should not be overlooked. Operations design leads to the scheme of manoeuvre and provides the basis for control of the operation (Annex 8C describes different types of operation). Operations design, through review and refinement, is continuous; the situation will change, so the operation and the force must adapt in response to actions, reactions and the unavoidable consequences of chance and friction. Commanders on enduring operations accept that their periods in charge cover only a proportion of a longer campaign. This requires a high degree of humility in command and awareness of the context for individual contributions. It does not routinely require a re-design of a campaign, operation or even tactical activities every time commanders and staffs change over or troops are relieved.
- 8-40.** As explained in the operational overview (paragraphs 8-03–8-09), Integrated Action requires operations design that aligns actions, effects and objectives with desired outcomes. Each level of the land force nests its activity under the superior level; indeed some force elements in some circumstances may not even have outcomes: the successful attainment of their objectives may contribute to higher level outcomes.

- 8-41. Operations management** integrates, coordinates, synchronises and prioritises the execution of activities within operations and assesses their progress. Adversary and enemy responses will inevitably affect the course of a campaign or operation, as will those of other actors. Assessing the course of the operation, then acting quickly in order to modify the plan to meet objectives in a new light, is the essence of successful operations management.

Doctrinal frameworks

- 8-42.** Commanders, having developed their understanding of the desired outcomes and the relevant audiences, then assess what objectives need to be achieved, and by what effects. In visualising and explaining how actions, effects and objectives contribute to achieving the outcome, commanders design their operations using one of the three doctrinal frameworks. The operational and tactical frameworks group actions by their desired effects, and the geographic framework describes where activities take place in relation to the force.
- 8-43.** The operational and tactical frameworks are closely related, as illustrated in Figure 8-3. The operational framework is suited to situations demanding more deliberate planning, whereas the tactical framework is better suited to relatively simple situations involving hasty planning. For combat missions, relatively well bounded in terms of time, space and purpose, the tactical framework is the norm at battlegroup level and below. It is also used at higher levels for specific tasks. For more complex or enduring missions, the operational framework has broader applicability, from sub-unit level upwards.

The operational framework

- 8-44.** The operational framework comprises **decisive, shaping** and **sustaining** actions underpinned throughout by continuous understanding.⁴¹ At any level of command, it describes how the missions and tasks of subordinates interact in terms of their purposes and contribution to what is decisive. Decisive actions are those that are essential to the achievement of the mission. Understanding, shaping and sustaining actions support those that are decisive and often endure throughout an operation. By applying the operational framework, commanders and staff ensure their concept of operations is balanced and able to have a clear and unambiguous main effort.

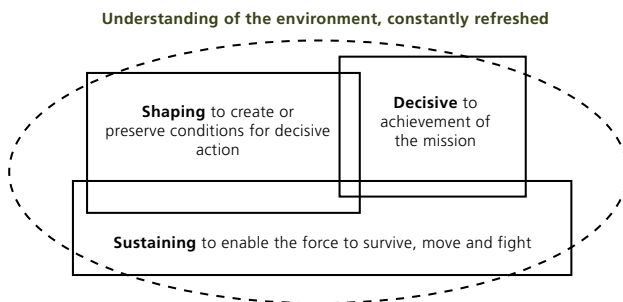


Figure 8-3. Operational framework

⁴¹ This framework corresponds to those in use by NATO. At the operational level, the NATO framework comprises functions of shape, engage, exploit, protect and sustain; at the tactical level, NATO land doctrine refers to decisive, shaping and sustaining operations. AJP-3, *Allied Joint Doctrine for the Conduct of Land Operations* and ATP-3.2.1, *Allied Land Tactics*

8-45. Actions to enable **understanding** precede and continue throughout an operation. They are designed firstly to assess the context of the operation, the relevant audience, and the information and physical aspects of the environment. Until this is done, it is not possible to estimate the likely consequences of our actions and those of other actors with confidence. Understanding must be continually reviewed and updated as it allows the force to respond to threats in time, and is the basis for adaptation. Understanding is mainly conducted by the activities covered by the tactical function of intelligence, directed by command. In combat operations, understanding includes locating, identifying, tracking and assessing an adversary or applying these skills to a situation, for example, the mood of a population. Whether establishing understanding or more simply finding the enemy, this is not simply a preliminary stage to operations but continuous; a land force's actions necessarily generate responses from actors and adversaries, which feed constantly updated understanding. The context will suggest how to generate understanding, perhaps through early deployment of specialist forces or analysis of information and intelligence already collected. In some cases, active information gathering may compromise subsequent shaping actions; in others, spurring a reaction may be essential to generate understanding for shaping or decisive actions. Commanders, therefore, express not only what they seek to understand, but also how the intelligence operation is to be conducted. More detail on the process of understanding is at Annex 8A.

8-46. Shaping actions create or preserve the conditions required for what is decisive to the mission. These conditions may relate to a broad or targeted part of the audience and hostile, neutral or friendly actors.

- a. Shaping actions can relate to other actors, the environment or the land force itself. The commander may need to shape the audience and actors outside the force to gain support or more resources for the operation, as described in paragraph 8-06. Within the force, a shaping action might include using fires to destroy or neutralise elements of enemy forces; moving into a preliminary position; denying enemy approaches; constructing infrastructure; linking up with friendly forces; or reinforcing a partner force. In audience-focused shaping actions, the purpose is to influence behaviours in our favour, such as fixing an enemy (see below), or gaining the support of an influential local actor. In all cases, land forces can draw on all or some combinations of the tactical functions, particularly manoeuvre, fires and information activities.
- b. **Fixing** is a key shaping action in combat and many adversarial situations. To fix is to deny adversaries their goals, distract them and thus deprive them of their freedom of action. This increases our own freedom of action. Adversaries who have no freedom of action cannot dictate the course of tactical events; they have lost the initiative. Depriving them of their freedom of action has both physical and psychological aspects. Physically, their force can be blocked, or pinned against an obstacle. Psychologically, they are fixed if they believe they have no freedom of action, if they feel compelled to do something, or if they believe they have to persist with something that in practice will not bring them success. Often the easiest way to fix adversaries is to threaten something that they must protect. Deception may fix them until it is too late for them to regain the initiative. Fixing can be broken down further.

(1) Denial of goals. A commander can gain freedom of action by preventing adversaries from achieving their goals and by putting them in a reactive frame of mind. The aim is to constrain them and throw them off-balance. The principal

means are to surprise, deceive and lure. When adversaries are surprised, they will be uncertain how to react, possibly until it is too late. When they are deceived, they may be confident in acting, but their confidence will be misplaced. The lure invites them to take a course of action which makes them vulnerable.

- (2) **Distraction.** Freedom of action may be gained by distracting adversaries, to reduce their ability to interfere with operations. Uncertain of their opponent's objectives, distracted adversaries may try to cover all options, thereby dissipating their force and being driven off their intended purpose.
- (3) **Deprivation of freedom of action.** A target can be fixed by being denied information, sustainment, or the ability to pass orders and to co-ordinate actions and effects. In an insurgency this can be achieved by separating insurgents from their support. In any fixing activity designed to cut down an opponent's freedom of action, their command and control system, combat service support, and ability to manoeuvre or focus effort are the primary targets.

- 8-47. **Decisive** action or actions are those essential to achieve the mission; without them, the mission is unlikely to succeed. Enabled by understanding and shaping actions, and critically reliant on sustaining actions, they can be terrain or actor focused, or both. There may be a single decisive action, short in duration, or a series of events over a protracted period. In both cases, what is decisive informs the unifying purpose of supporting, enabling and subordinate formations and units and is integral to achieving the higher commander's intent; it contains the main effort. Decisive actions usually require the use of manoeuvre, fires, and information activities and have two elements – engagement and exploitation.
- a. In combat situations, **engagement** usually includes offensive or defensive tactical activities. For example, in defence a force may block an adversary and so set the conditions for a counter-attack. Or, engagement may be through attacking in order to defeat an adversary. In non-adversarial operations, engagement seeks to affect behaviours positively, without the use of force. Engagement is seldom decisive unless vigorously exploited, and opportunities for decisive exploitation can arise without engagement occurring.
 - b. Making the most of **exploitation** opportunities, whether created through successful engagement or chance, relies upon an ability not only to identify them but to be able to generate the means to exploit them. Opportunities vary according to the nature of the operation, from identifying a gap in a main defence to sensing an armed group's interest in switching sides. It can also include intelligence exploitation after achieving an objective. These opportunities are to be sought out, not waited for. The seizure of these opportunities needs to be consolidated, using reserves and forces in echelon, not least to avoid culmination or being counter-attacked from a flank. Subordinates are encouraged and enabled to exploit opportunities that arise or that they create, in accordance with Mission Command. Exploitation requires commanders with initiative, decisiveness and a readiness to do the unexpected; it depends on effective understanding, which in turn requires capable intelligence, surveillance and reconnaissance forces. A final element of any exploitation is assessment, taking stock, so that opportunities and threats are recognised and balanced.

Always mystify, mislead and surprise the enemy, if possible; and when you strike and overcome him, never give up the pursuit as long as your men have strength to follow; for an army routed, if hotly pursued, becomes panic-stricken, and can then be destroyed by half [its] number...To move swiftly, strike vigorously and secure all the fruits of victory, is the secret of successful war.

General Stonewall Jackson

- 8-48. Sustaining** actions (broadly reflected by the tactical functions of sustainment and protection) enable land forces to survive, move and fight so that they can conduct understanding, decisive or shaping actions. Sustaining actions include supply, repair, medical, administrative and infrastructure support; reception into theatre; the assembly, movement and security of reserves or echelon forces; redeployment of forces out of contact; host nation support; the establishment and protection of own vulnerabilities, such as operating bases or lines of communication; and support for, and protection of, civilians and civilian installations. Sustaining is also about protection, through a balance of active measures to neutralise a threat and defensive measures, which include guarding, dispersal, camouflage and deception.

The tactical framework

- 8-49.** The tactical framework is a simplified version of the operational framework. It is based on four core functions: **find**, **fix**, **strike** and **exploit**. The tactical framework is designed for use against an enemy in combat operations, but can be adapted to other situations. To conform to the Manoeuvrist Approach, these core functions are conducted rapidly and in a seamless sequence. This requires anticipation and concurrent activity; part of good battle procedure. The tactical framework can also be adapted to other military activity at battlegroup level and below. Finding is as much about gaining a contextual understanding as it is about locating an enemy unit. Fixing can be achieved by a range of methods that deny enemies recourse to their desired courses of action, for example, by reducing their popular support. Striking may involve violent offensive action, or entail the launch of activity aimed at influencing an enemy's perceptions or those of their supporters. At the lower tactical level, where problems are usually relatively simple and immediate, the tactical framework is often the best framework for conducting operations.
- 8-50.** Actions to **find** occur throughout an operation. In some combat situations, it may be enough to discover the location, motivation, organisation and strength of an enemy. In more complex situations, it is important to have contextual understanding of the situation, to understand the physical and cultural aspects of the environment, and to understand the likely consequences of activity on the enemy – for example on their morale – and perhaps on a population.
- 8-51.** **Fix** is explained in paragraph 8-46, under the shaping action of the operational framework. Fixing involves denying an enemy their goals, distracting them and depriving them of freedom of action. Note that fixing can be achieved using a range of tactical methods, for example through the use of direct or indirect firepower, jamming, deception, saturation patrolling, overt surveillance.

- 8-52. Strike** is a form of decisive engagement, as described in the operational framework. To strike is to manoeuvre and then take direct action to achieve the purpose of the mission.
- a. As explained in paragraph 8-15-8-18, **manoeuvre** means more than movement in combination with fire. It allows commanders to marshal their capabilities so that they are focused for greatest effect, avoiding enemy strengths and exploiting their weaknesses. Effective manoeuvre exploits an enemy's weaknesses before they can protect them, presenting multiple threats to which they are unable to respond coherently.
 - b. **Direct action** in combat usually means seizing objectives or destroying enemy forces. In a broader sense, direct action incorporates any decisive action that is focused on undermining an opponent's will, cohesion, understanding or capability. It is generally preferable to apply concentrated violence to win quickly at minimum cost. However, a more protracted approach may be necessary. Then, actions are sequenced and sustained so that the effects are cumulative.
- 8-53. Exploit** is to seize opportunity created by previous activity in order to achieve an objective, or directly to fulfil part of a commander's intent.

The geographic framework

- 8-54.** The way in which operations in the land environment relate to each other can also be described geographically, in terms of a deep, close and rear framework. In this framework, deep and rear operations are defined in relation to the close battlespace of operations in and around the main forces of a formation. Geography in the land environment is important as it describes where intended operations take place and because so often the terrain, and who controls it, is vital or at least key. Even in a non-linear battlespace, the concepts of deep, close and rear, and a sense of range and proximity, aid understanding. When used in combination with the operational and tactical frameworks, they provide a powerful method in helping to visualise, organise and integrate activity. Any or all of the activities described by the tactical functions can be applied anywhere in the geographic framework.
- a. **Deep** operations are conducted at long range and often over a protracted timescale, against an adversary's forces or resources not currently engaged in the close battle. They may comprise intelligence gathering or fires, manoeuvre and information activities, targeting key vulnerabilities (the will, cohesion or capabilities of an adversary). Deep operations are usually conducted at the corps or divisional level, often supported by other components. Deep operations conducted by land forces are distinguished by their sustainment and communication requirements, and also by their significant potential to dislocate an adversary, if conducted at speed and with sufficient force.
 - b. **Close** operations are those conducted by the main body of a formation, often in direct contact with an adversary or situation. They are usually conducted at short range and in an immediate timescale. The means include, for example, destruction, arrest, deception, direct fire and rapid manoeuvre.
 - c. **Rear** operations establish and maintain friendly forces in order to generate freedom of action for deep and close operations. They include many administrative and logistic activities, protection of critical assets and infrastructure and real estate management. They may require stability activities to maintain or gain consent of a host nation and also the range of offensive and defensive activities through combined arms manoeuvre.

Tactical activities

8-55. There are four groups of tactical activities: offensive, defensive, stability and enabling. Each activity is intended to create or contribute to a particular effect on the understanding, physical capability, and/or will and cohesion of other actors. Competence in planning and executing the tactical activities is fundamental to a land force's Fighting Power. These tactical activities frequently occur simultaneously within a single area of operations, in accordance with idea of the mosaic of conflict. In operational design and tactics, the groups of tactical activities are closely related. Defensive and stability activities often follow offensive activities, as a force prepares to respond to an enemy counter-attack, and the force becomes responsible for the security of a captured town, for example. A classic aspect of tactics is to decide where and to what degree to concentrate force in an offensive activity and where and how much to enable that by economy of effort elsewhere – often in a defensive activity.

Offensive activities

8-56. The purpose of offensive activities is to defeat enemies, in accordance with the Manoeuvrist Approach. Offensive activities include pre-emption to gain the initiative, disruption of an adversary's offensive action, deception or diversion, seizing ground and fixing. In offensive activities, the attacker seeks to create the conditions for freedom of movement and manoeuvre; confuse the enemy's understanding; break or reduce their cohesion and will, or defeat their forces selectively. Offensive activities are conducted as part of most types of operations.

It is through offensive action that a commander seeks to gain advantage, sustain momentum and seize and retain the initiative. As it is an active rather than passive approach, it is the chief means open to a commander to influence the outcome of a campaign or a battle.

Principle of War – Offensive action

8-57. The main characteristics of offensive activities are surprise and shock; the seizure and retention of the initiative; agility, by which fleeting opportunities are taken; and superior tempo, through which the intensity and sequence of activities is maintained to keep the adversary off balance. In offensive activities, the real damage to the enemy's will is caused by surprise and shock. Inflicting physical damage is only one way of doing so. The effects of firepower, tempo, simultaneity and in particular surprise should be exploited by operating throughout the depth of an area. Manoeuvre in the enemy's depth poses a threat, to which they are obliged to respond. It will not, however, always be possible to out-manoeuve the enemy. Considerable force may have to be applied, either directly or indirectly, to neutralise or dislodge them if they cannot be by-passed. Even in operations that involve a lot of manoeuvre, it is highly likely that some force elements will be required to destroy enemy forces or seize defended terrain. Commanders seek to create surprise and shock, to achieve a break-in to an opponent's defences, followed by aggressive exploitation within and beyond them.

8-58. There are nine offensive activities, each with a specific purpose:

- a. **Attack.** An attack is an offensive action against a specified objective.
 - (1) **Deliberate attacks** mass combat power at the expense of time.
 - (2) **Hasty attacks** trade time and detailed preparation for speed, to seize fleeting opportunities.
 - (3) **Counter-attacks and spoiling attacks** seek to defeat or disrupt an enemy force made vulnerable by its own offensive action. Spoiling attacks have the more limited aim of disruption.

An attack may require a significant local advantage in combat power to succeed. A rule of thumb is a 3:1 advantage, but this usually adjusted based on other factors such as the state of the enemy; the type of combat power available to the attacking force, including supporting fires; the degree of surprise achieved; and the extent to which the cohesion of the enemy force is successfully shattered. The result of these factors may be a need for only a 1:1 ratio, possibly less. But there are times when the enemy is resolute and there is little scope for manoeuvre, so very significant firepower and/or force ratios of even 5:1 are required, and example would be the break in to a well-prepared position.

- b. **Raid.** A raid is launched as a swift penetration of hostile territory to secure information, confuse the adversary, seize a high-value individual or target, or to destroy physical positions. Raids end with a planned withdrawal upon completion of the assigned mission.
- c. **Exploitation.** Exploitation usually follows a successful attack and is designed to disorganise the enemy in depth. As a tactical activity, it is characterised by a rapid advance against lessening resistance. The purpose is both physical and psychological. Physically, the aim is to retain the initiative by preventing opponents from reorganising their defence or conducting an orderly withdrawal. The psychological effect of exploitation is to create confusion and apprehension throughout the enemy force, reducing its capacity to react. This may be decisive in itself.
- d. **Pursuit.** The role of a pursuit is to catch or cut off a hostile force attempting to escape or absconding individuals, with the aim of defeating or perhaps destroying them. It develops from a successful exploitation and starts when the target is demoralised and beginning to disintegrate under pressure. A pursuit may target enemy forces seeking to escape from their own initiated ambush. In this case, rapidly following up into their depth to cut off their extraction would be vital.
- e. **Feint.** The purpose of a feint is to distract an enemy force by seeking combat or contact with it.
- f. **Demonstration.** The role of a demonstration is to distract an enemy's attention without seeking contact. Both feints and demonstrations can contribute to fixing, and can be designed to have psychological as well as physical effects.
- g. **Reconnaissance in force.** Reconnaissance in force is used to induce an enemy to disclose the location, size, strength, disposition or the intention of their force by making them respond to offensive activity.

- h. **Ambush.** The purpose of an ambush is to inflict damage on the enemy while denying them an opportunity to counter-attack, principally through surprise, in an action concentrated in space and time.
- i. **Breakout of encircled forces.** A breakout leads to an encircled force taking offensive action to link up with a main force. The breakout attempts to surprise the encircling enemy, so there is considerable advantage in attempting to breakout at the earliest opportunity, before the encirclement solidifies.

Defensive activities

- 8-59. The purpose of defensive activities is to defeat or deter a threat. They are generally intended to protect the force and to provide the right conditions for offensive activities. Defensive activities alone are not usually decisive without a subsequent offensive activity, but they can be strategically decisive, for example by creating the secure conditions required to defeat an insurgency. Like offensive activities, defensive activities apply to combat and all types of operations. Defensive activities are not synonymous with weakness or defeat. Whilst offensive action is an important Principle of War, it is just as important to be able to conduct defensive activities well.

The underlying objective [of defensive operations] should be the destruction of the enemy's offensive capability rather than the prevention of him achieving his purpose; the former contributes to victory, the latter delays defeat or at best leads to stalemates.

General Rupert Smith, Fighting Instructions

- 8-60. Defensive activities may be necessary in some operations or at certain stages in a campaign, for example, to buy time, or to generate or maintain opportunities for offensive activities. By holding key terrain or fixing the enemy in one area, the conditions for offensive activities in another can be created. The object is to force an enemy into an action that narrows its options, reduces its Fighting Power and fixes it for a counter-attack. The challenge is to seize the initiative from the attacker. While maintaining the integrity and cohesion of the force, the defenders seek to hold off the attack. They lure the attackers into situations where the defenders can create and exploit surprise, denying the attackers information, both passively and actively, for example, by attacking their command systems. Through this range of activities, defenders can fix their enemy for subsequent defeat by counter-attack.
- 8-61. The three principal types of defensive activity are mobile or area defence, with combinations of both, and delay.
- a. **Mobile defence.** Mobile defence is used to defeat an attack by focusing on the adversary's forces, rather than seeking to hold ground. Mobile defence combines a fixing element that denies the enemy freedom of manoeuvre, and an element to counter-attack. The balance between these two forces depends upon the mission and relative capabilities. The force ratios required are similar to those needed for an attack, and depend on the situation. The counter-attack element of mobile defence requires forces that can defeat the enemy and are mobile in the terrain.

- b. **Area defence.** Area defence is used to defeat an attack by denial of ground through the concentration of forces and counter-mobility effects, for example, using obstacles or field defences. The most effective area defences operate in combination with screening, delaying, blocking actions and counter-attacks, some of which require mobile defence to weaken the attackers by inflicting losses, canalising and slowing them down before they arrive at the area defence. Because this form of defence involves prepared field defences, it can usually be conducted at a numerical disadvantage to the enemy. A rule of thumb is that a well-prepared defence can defeat or block an enemy with a 3:1 advantage.
- c. **Delay.** Delaying activities are those in which a force being pressed by an attacking adversary trades space for time, reducing the adversary's momentum and inflicting damage without itself becoming decisively committed. Delay is conducted to slow an enemy force's advance, interdicting movement and gathering information about its intentions, without giving information away. Delaying activities also allow the commander to prepare for a counter-attack. These actions require a particularly high standard of collective performance in manoeuvre and command and control. A delay can only be conducted by the most mobile forces for the terrain. It is usually conducted with as much economy of effort as possible, except where ground is to be held for any length of time.

Stability activities

- 8-62. Stability activities are bespoke tactical methods used for delivering the stabilisation aspect of any land operation. They require a full spectrum approach with host nation and allied agencies. Those tasks that involve close cooperation with other agencies, and particularly host nation agencies and forces, require individuals with the right skills and personalities. These are broadly the same as the five aspects of human interoperability (language, rapport, respect, knowledge and patience). There are four types of stability activities.
- 8-63. **Security and control.** Security is a fundamental human need and is most likely to motivate and regulate behaviour. Security (human, personal, national and physical) creates the conditions in which other activity crucial to well-being can take place. People will generally give their loyalty to the group that best meets this need. Winning the contest for security is therefore essential to establishing the security of a state. Security and control activities include providing reassurance patrols, public order and population control, incident response, and protection of key sites. These activities require a lot of manpower.
- 8-64. **Support to security sector reform.** Support to security sector reform is one element of capacity building, focused on developing security capacity. Stabilising a state depends on transferring responsibility for providing security to indigenous, host nation forces. This requires a full spectrum approach to reform the security sector itself, for example by removing those who contribute to insecurity and fear, although care should be taken not to undermine the fragile security architecture that may exist. Military forces can contribute to this approach by training, advising, assisting and accompanying host nation security forces. Being able to deploy early to prevent or mitigate conflict is important and may make a larger operation less necessary. Although it is not strictly a military task, building indigenous police force capacity may also fall to land forces, so long as it does not handicap the development of the state's military forces, if they are required first.

- 8-65. Support to initial restoration of essential services.** Sustainable security depends on providing essential services, for example, medical services, electricity, water, sewerage and food. The more demanding the physical environment and the more destructive the preceding fighting, the greater the lack of services will be felt. The solutions are in the hands of the civilian components of a full spectrum approach. If the security situation is not permissive to civilian specialists, military forces need to be able to improve delivery of these services in the short-term, because they are often the outward and actual signs of a better life. It is also likely to be a framework security task to protect the key nodes and distribution points from disruption. A lack of essential services will be exploited by adversaries and will create discomfort, tension and disorder.
- 8-66. Support to Interim Governance Tasks.** Although the development of national and local legislatures, executives and courts, a constitutional and legal system and other aspects of a functioning government is not core military business, military forces will need to understand and to some extent be involved in these institutions. At the very least, they will require protection. The expertise is found elsewhere so the quicker developing capacity in governance becomes a civil lead, the better. Military activity in governance, for example support to elections, requires large numbers as well as suitable individuals. Beyond the establishment of essential services, which are linked closely to security, is the development of a state's economy and infrastructure. These are strategic and generational projects, but the degree of early progress will have a direct effect on the success of the campaign. While there is some relevant military expertise, for example in civil engineering, military forces are only likely to be capable of tactical levels of support, although this could have strategic effect. The military priority is to create the security required for trade, poverty reduction, infrastructure development and enterprise to take place.

Enabling activities

- 8-67.** Enabling activities link other tactical activities together. They include those intended to make or break contact with an enemy, and those conducted out of contact. As with offensive and defensive activities, their applicability across all types of operations is to be understood. Successful execution requires the same level of planning and training as that required for offensive, defensive or stability activities.
- 8-68. Reconnaissance.** Reconnaissance activities are missions to obtain, by observation and detection, information about, and understanding of, the human, information and physical aspects of the land operating environment. Ground reconnaissance can be mobile (scouting) or static (for example, surveillance by using observation posts) and is conducted in conjunction with reconnaissance from the air, space and cyberspace.
- 8-69. Security.** Security activities provide early and accurate warning of hostile actions in order to protect the force. The two specific security tasks are to screen (cover a force) or to guard (a screen with the addition of fires or offensive action).
- 8-70. Advance to contact.** The advance to contact seeks to gain or regain contact with an enemy under the most favourable conditions. It is normally executed in preparation for subsequent offensive activity and therefore ends when a force is positioned for the attack.
- 8-71. Meeting engagement.** A meeting engagement involves action between two moving forces. The meeting may be intentional or unintentional on either side. The general conditions for meeting engagement are that neither force is prepared for defence; both are generally moving; and there is an element of surprise on both sides. Commanders think through the possibilities and the need to gain the initiative as rapidly as possible,

by fixing their enemy and manoeuvring assertively. In a meeting engagement in particular, commanders with the most effective decision-action cycle will prevail.

- 8-72. Link-up.** The aim of a link-up is to join two or more units or formations. Link-up activities normally occur in contested territory and may involve different types of forces. A typical example is a link-up between ground and air manoeuvre forces in which the former relieves the latter in place.
- 8-73. Relief of troops.** The relief of troops occurs when one force takes over actions or activities from another. There are four types of relief action. The first is the **relief in place** in which all or part of a force is replaced in an operating area by an incoming unit. This can be a theatre level, operational level, or a tactical level action, for example, to and from a forward operating base. The second is the **relief of encircled forces**, in which a force's freedom of action and security of re-supply is restored in order for it to regain the initiative before the adversary is able to deliver a decisive action. The third is the **forward passage of lines**, in which one force moves through another, for example holding a bridgehead, or attacks through a unit in contact with the enemy. The fourth type of relief operation is the **rearward passage of lines**, in which a force moving from contact passes through another unit in defence. In all reliefs of troops, the in-place force is required to prepare for, brief and accommodate the needs of the relieving force to maintain continuity and sustain effect. These are complicated enabling actions which require very effective planning, control and integration of capabilities, particularly between the land and air environments.
- 8-74. Withdrawal.** A withdrawal occurs when a commander seeks to disengage the force from physical contact with an enemy, for example to transition to another action. Contact may be maintained through means such as indirect fire, reconnaissance or surveillance. The withdrawal is conducted so as to minimise interference by the enemy and to preserve Fighting Power. It is critical that the ability to move rapidly to offensive or defensive actions is retained. Withdrawal is also used to change conditions on the ground or to allow a reinvestment of Fighting Power in a different way. Operational withdrawal may be implemented to change the dynamic in a stabilisation context, for example by changing perceptions of occupation, or to allow indigenous capability its independence during a transition period.
- 8-75. Retirement.** A retirement is a movement by a force away from and out of contact with an enemy. Such a force may require protection, for example a screen or guard, and be wary of being interdicted by an adversary's deep missions; or surprised by the actions of a population.
- 8-76. March.** A march is conducted to move a force efficiently to its place of tactical employment. Units prepare to come into contact with the enemy, but do not expect to do so. The march is distinct from tactical movement, in which units move in battle formations and are either in contact with or expect to meet an enemy. When planned and conducted efficiently, a march adds tempo to operations. A march, and the relief of troops, requires regulation when conducted at formation level; this is often conducted by reconnaissance troops, because of their mobility and aptitude for communications.
- 8-77. Obstacle breaching.** The breaching and crossing of obstacles, for example, minefields, improvised explosive devices and rivers, normally occur during offensive activities, but may also be necessary during enabling and defensive activities. These enabling activities can occur throughout the operating area and will often involve a passage of lines. They are complicated and require extensive planning, rehearsal, and specialist capabilities because they have a significant impact on the tempo, manoeuvrability and the security of the force.

ANNEX 8A

Basics of understanding

8A-01. Figure 8A-1 illustrates how data, information and knowledge contribute to understanding.⁴²

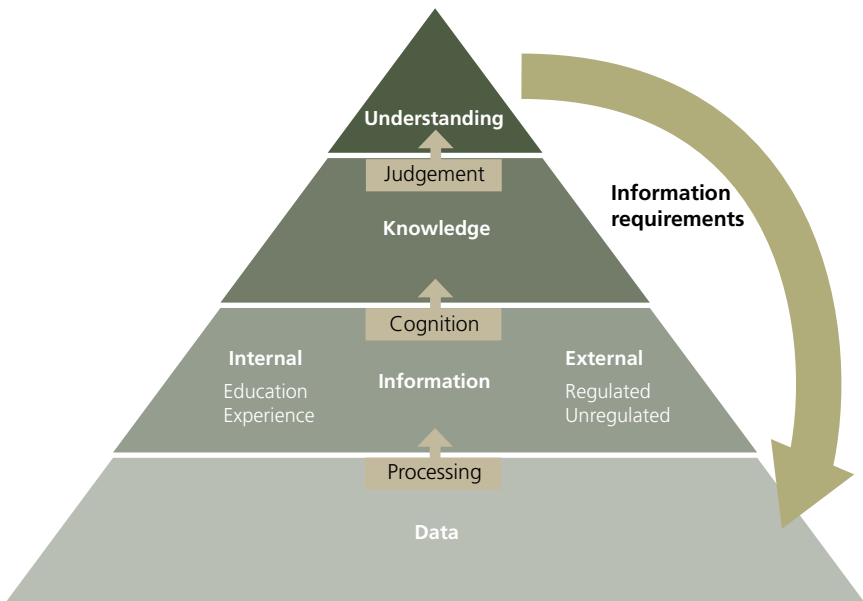


Figure 8A-1. Cognitive hierarchy

- a. **Data** is the lowest level, comprising raw signals detected by a sensor or collector.
- b. **Information** is data that has been processed to provide further meaning; it forms the basis of the common operating picture.
- c. **Knowledge** is information analysed to provide meaning and value and is derived from both internal and external sources. Internal sources comprise formal education, historical precedent and practical experience. External sources contain both regulated information, collected by ISR assets and processed into military intelligence, and unregulated information such as from the media. These sources form the basis of situational awareness.

⁴² Joint doctrine on understanding is contained in JDP O4.

d. **Understanding** comes from applying judgement to knowledge to gain a deeper level of awareness of a situation's inner relationships and implications for the future. Judgement is a purely human skill, based upon experience, expertise, and intuition. Understanding, therefore, concerns the acquisition, development and application of knowledge to prioritise information requirements, make sense of a given context, make better decisions, adapt and influence behaviours.

8A-02. Understanding falls into three types. **Individual** understanding is the personal interpretation of knowledge. **Collective** understanding is the shared perspective held by members of distinct groups that have their own ethos, creed and identity. **Common** understanding is the ability to comprehend perceptions of groups other than our own and to establish a common baseline for communication, interpretation and action. Common understanding, therefore, is key to establishing the interoperability required between arms, Services, nations and agencies when working to a common goal. It is also fundamental to planning and executing operations whose outcomes are changing or maintaining the behaviours of a range of actors.

8A-03. Understanding has four connected **characteristics**. First, since understanding is the application of knowledge to make sense of a given context, it is inherently **contextual**. Second, the context evolves over time and so understanding is **perishable** and must be constantly refreshed to remain valid. Third, understanding is **imperfect**. Important, early moves in an operation take place when understanding is low, and when adversaries are likely to understand the physical and human environments better than our own forces do. Commanders need to take the initiative and be willing to act early, taking considered risks based on incomplete understanding and rigorous assumptions. Finally, understanding is **competitive**. The ability of land forces to hold the initiative will depend on how rapidly they gain and maintain understanding and adjust to the environment relative to their adversaries. The race for understanding requires an organisational culture that places a premium on continual learning; and well-established processes to gather lessons quickly from a theatre of operations, informing concurrent force generation and the appropriate adaptation of plans and structures.

8A-04. The degree to which understanding is inherently imperfect is relative to the impact of a number of common **threats**, which must be recognised and mitigated. As understanding is perishable, it must be dynamic to be effective. It is subjective and so susceptible to a range of psychological factors. It is also entirely dependent on the accuracy and relevance of the data, information and knowledge from which it is drawn. In adversarial situations, understanding is subject to deception that purposefully aims to manipulate the data and information presented. The final two factors rest on a paradox of understanding, namely that there seems to be never enough information and yet simultaneously there is often too much information from which to glean the key elements necessary for effective understanding.

- 8A-05.** In the context of the characteristics of and threats to understanding, there are **six principles** of understanding.
- a. Sub-conscious knowledge may be so ingrained that it is difficult for us to both recognise and assess it without sufficient attention to **self-awareness**. Also, our background and psychological disposition may mean that we are liable to bias or complacency.
 - b. **Critical analysis** is the intellectual discipline that applies deliberate introspective judgement to interpret, analyse and evaluate a problem and explain the context upon which that judgement is based.
 - c. **Creative thinking** examines problems or situations from an original or unorthodox perspective. Background, training and experience can often create conditional thinking prejudicial to critical analysis. Creative thinking should be encouraged to examine a situation from a fresh perspective and to create imaginative and competing hypotheses.
 - d. In areas where change is slow, or the requirement is enduring, developing and maintaining understanding requires **continuity** in observation and expertise. A balance must, however, be struck between the imperative for continuity and the risk of gradual assimilation. Fresh perspectives should be encouraged, exposing and offering alternative points of view.
 - e. Military operations are usually inter-agency, multinational and joint and so depend on **collaboration** between all actors for success. The 'need to know' principle endures, but a collaborative environment relies on information sharing – the 'need to share'. This helps develop common understanding and trust.
 - f. **Fusion** is the blending of intelligence and/or information from multiple sources or agencies into a coherent picture. It requires common procedures between the actors and agencies involved and is essential when developing a coherent, common operating picture. It relies on effective interoperability.

Enabling understanding

- 8A-06.** Commanders set the climate in which understanding is enabled. If commanders are to make the right decisions, they must create a climate that encourages open-mindedness, critical analysis and creative thinking. They must also clearly articulate their requirements for understanding and enable their staff to work effectively.

We have learned many lessons over the last 10 years, but one of the most compelling is that – whether you are working among citizens of a country, or working with their government or Armed Forces – nothing is as important to your long term success as understanding the prevailing culture and values.

General Raymond T Odierno

- 8A-07.** Culture and beliefs influence how people, including ourselves, behave and why they engage in conflict. Many aspects of human behaviour are the same everywhere, but culture plays a very important role in shaping how people perceive situations and their understanding. Contemporary operations are both multinational and conducted among people who are likely to be from different ethnic and cultural backgrounds to us; understanding of culture is therefore non-discretionary.⁴³
- 8A-08.** As illustrated in Figure 8A-1, understanding is drawn from a broad and deep pool of information and even wider basis of data. Without effective information management, establishing individual or collective understanding is difficult. The volume of information and the speed and means of its communication are ever-increasing and if unmanaged, risk creating anarchy. Information management and exploitation aim to provide the right information to the right people at the right time. It is a function of command to ensure that these processes are sufficiently resourced and applied across a land force.
- 8A-09.** Understanding, based on data and supported by information technology, is a human activity and so subject to psychological factors. At an individual level, intelligence, personality, emotional state, experience, learning, motivation, status and role, and physical condition all affect how people think and, thus, understand situations. In group contexts, understanding, perceptions and attitudes are developed through the accumulated thinking of individuals interacting with each other. It is important to guard against a number of adverse factors. Peer pressure can be positive in terms of team building and discipline, but can also inhibit creative thinking and innovation through generating 'groupthink'. Overcoming groupthink requires acceptance of authentic dissent; commanders should be aware of this and both encourage and acknowledge dissenting views. Other factors include unconscious bias and social prejudice, which are particularly damaging in an operational context where cultural and social sensitivities and understanding are paramount. These factors cannot be eradicated, but through recognising them, conscious application of the principles of understanding and a positive command climate, they may become less prevalent.
- 8A-10.** Adherence to analysis and decision-making tools that are shared across a combined arms, joint and multinational force significantly aids individual, collective and common understanding. Analytical frameworks assist in bringing the full range of relevant factors about a given situation into consideration. PMESII (political, military, economic, social, infrastructure and information) is one such framework, widely used by NATO and the United States. It is also common to analyse actors' centres of gravity, and their strengths, weaknesses, opportunities and threats.

43 Joint doctrine refers to three levels of cultural awareness: general awareness to mitigate threats and exploit opportunities at the tactical level; cultural competence, comprising deeper and broader knowledge, to deal directly with cultural groups; and cultural expertise developed in select individuals whose contribution is invaluable to commanders. JDP 04.

ANNEX 8B

Centre of gravity analysis

8B-01. A centre of gravity is defined in NATO as: the characteristics, capabilities or localities from which a nation, an alliance, a military force or other grouping derives its freedom of action, physical strength or will to fight. The purpose of a centre of gravity analysis is to identify actor vulnerabilities that can either be attacked or threatened, or be protected or strengthened. Designed for strategic and operational-level analysis, it is also a useful tool for land forces at the tactical level.

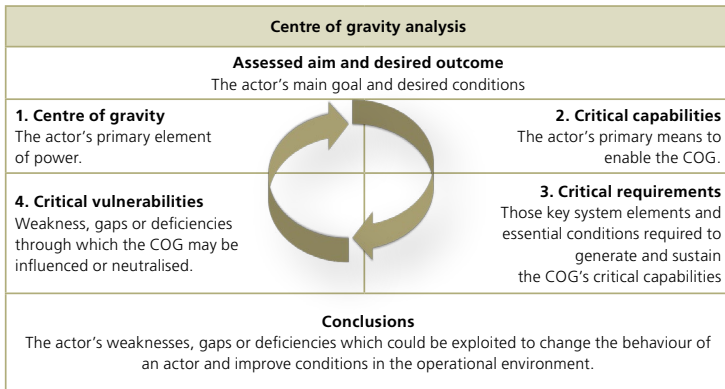


Figure 8B-1. Centre of gravity analysis

8B-02. The **centre of gravity** can be deduced from analysis of what actors need to achieve their aim. It describes the primary element of their power in relation to a particular situation. At the tactical level, a centre of gravity of military actors, friendly or enemy, is usually the principal physical element of their force. By dint of being the centre of gravity, its defeat leads to that of the force as a whole. While a centre of gravity is relatively enduring, it is not fixed; understanding must be continuously refreshed to test whether the original assessment remains valid.

8B-03. Commonly expressed as a verb, **critical capabilities** describe what a centre of gravity can do that makes it so powerful. For example, a particular armoured formation may form the tactical centre of gravity of a force, which could be our own, an enemy's or a partner's whose capacity we are building. Its critical capabilities, in this example, may be that it can manoeuvre and strike in depth.

- 8B-04. Critical requirements** are the resources or means which are essential to the realisation of critical capabilities. Usually described as a noun, following the example above, they could include specific weather conditions, avenues of approach, or the armoured formation's morale, fires, combat service support or combat engineer forces. In a capacity building context, critical requirements could also include the allocation of appropriate personnel or training resources.
- 8B-05. Critical vulnerabilities** are those critical requirements, or components of them, that are deficient, or vulnerable to neutralisation or defeat in a way that will contribute to a centre of gravity failing to achieve its critical capability. Continuing the example in a combat context, we cannot affect the weather and critical combat service support force elements may be very well protected. The combat engineer forces, however, may be particularly vulnerable and if they are dislocated, disrupted or destroyed, the force will lose the critical manoeuvre support essential to achieving its objectives. In combat, an indirect approach seeks not to target the centre of gravity directly, rather to apply strength against critical vulnerabilities. In protecting our own force and in developing the capacity of another force, the same principle applies, except that we apply strength to protect what might otherwise be vulnerabilities.

ANNEX 8C

Operations themes and types of operations

8C-01. Warfighting. In warfighting (also referred to as major combat operations), most of the activity is directed against a significant form of armed aggression perpetrated by large-scale military forces belonging to one or more states or to a well-organised and resourced non-state actor. These forces engage in combat operations in a series of battles and engagements at high intensity, varying in frequency and scale of forces involved. The immediate goal is to ensure freedom of action at the expense of their opponents. The rhythm of operations is often high with high logistics consumption. Enemy armed forces may also use irregular forces and CBRN capabilities to support conventional forces' military objectives. Operating in a context where warfighting is the predominant theme may be further exacerbated, perpetuated or exploited by other irregular actors seeking to benefit from instability, whether through insurgency, terrorism, criminality or disorder.

8C-02. Security. The transition from combat operations to multi-agency stability operations (to re-establish stability and prosperity, underpinned by the rule of law) is important to establish a perception of security. It is likely to be characterised not by the attainment of specific end states (such as absolute victory) but by incremental conditions-based outcomes (albeit they may reflect political direction to achieve particular goals according to a rough timetable). The mix of actors, and their respective motivations, will be highly dynamic. Conventional opponents, even once defeated, may re-appear as, or be reinforced by, irregular forces; the threat they pose may need to be countered at the same time as re-establishing legitimate indigenous governance and authority. Pursuing the gradual transition towards stability, land forces are likely to support the activities of other actors in protecting, strengthening and restoring civil society, governance, rule of law and the economy. Operating in a context where security is the predominant theme requires an increasing number of stability activities together with offensive and defensive activities.

Forward presence was another key element in achieving an accurate understanding of the environment. In areas where US forces were not deployed in significant numbers, even a modest forward presence enhanced situational awareness and deepened relationships.... Resultant relationships with host-nation forces at multiple echelons provided for improved exchange of information and strengthened understanding of terrorist and insurgent operations, as well as greater acceptance of US presence and opportunities for synergy in support of shared goals.

- 8C-03. Peace support.** The peace support theme describes an operating environment following an agreement or ceasefire that has established a permissive environment where the level of consent and compliance is high, and the threat of disruption is low. Where peace support is the predominant theme, land forces may expect to develop almost exclusively stability activities, even if ready for offensive and defensive activities. The purpose is to sustain a situation that has already met the criteria established by international mandate; the use of force by peacekeepers is normally limited to self-defence. Typical peace support activities include peacemaking, peace enforcement, peacekeeping, peace building. Peace support activities are most often mandated and coordinated by the United Nations, but may be delegated to a military alliance such as NATO.
- 8C-04. Defence engagement.** Defence engagement is the means by which the UK employs Defence assets and activities to achieve influence without the use or threat of force. It includes state to state military dialogue, bilateral or multinational training and exercises, and support to host nation security structures. Defence engagement spans the mosaic of conflict and types of operation; it is most effective when initiated as peacetime military engagement, continuing if necessary through conflict and into post-conflict stability operations. Its purpose is to sustain the UK's position and influence, protect and promote prosperity and security, build capacity and will and establish comprehensive relationships and understanding. Early, effective and enduring defence engagement within a full spectrum approach can help to avert instability and, if not, reduce the likelihood of it being prolonged. It is a necessary theme of all operations.

Types of operations

- 8C-05.** The types of operation reflect the breadth of utility and application of land forces as part of a full spectrum approach. Throughout, the primary purpose of land forces is to conduct combat operations – to apply or threaten to apply force. This capability provides more than the potential to defeat enemies, protecting the people of the UK and our way of life. It gives credibility in security, peace support and peacetime military engagement. It thus underpins land forces' contribution to the projection of influence and promotion of prosperity. However, while combat is land forces' first duty, it is not sufficient. To be effective across all operations themes and types of operation, it requires professional understanding, study, training and equipping for the full range of likely tasks, whether combat or stability focused.
- 8C-06. Projection.** By dint of being an island nation with global responsibilities and ambitions, projection of land forces is central to all types of operation overseas. Interventions will be launched to deter and reassure, to prevent a crisis from escalating or from spreading, to contain a threat, to reinforce a fragile peace, secure an objective or to protect a vital interest overseas. Land forces will be delivered from the sea, through the air or across the land. In the latter case, land forces manoeuvre from a secure port of entry at speed and range to gain a position of advantage. Projection requires capable military forces at varying levels of readiness, sustainable at range and imbued with an expeditionary mind-set, individually and collectively.

Combat operations

8C-07. Combat is a fight or struggle between armed groups. It is, by definition, adversarial and physically and mentally demanding. Combat is ultimately what armies are for. Combat involves a combination of friction, uncertainty, chaos, violence, danger and stress. It always has degrees of asymmetry. The aim of combat is primarily to defeat an enemy force, either by closing with it or from a distance, or to secure an objective by force.

War (on land) moves in an atmosphere composed of danger, physical effort, uncertainty and chance. Everything in war is simple, but even the simplest thing is difficult, and these difficulties, largely unforeseen or unpredictable, accumulate and produce a friction, a retarding brake on the absolute extension and discharge of violence. These difficulties consist of danger, bodily exertion, information or the lack of it, and innumerable other small and incalculable circumstances and uncertainties originated by chance. These are some of the inevitable things that always prevent wars in reality from ever approaching war on paper and in plans.

Carl von Clausewitz

- 8C-08.** In combat, operations take place in a situation usually characterised as war, in which fighting, damage, coercion and persuasion are frequent, widespread, intense and conducted by formed groupings, units or formations. Combat is necessary when interests are directly threatened. Combat is a demanding purpose because of its high tempo; the complexity of all arms, all-environment integration; the high degrees of manoeuvre, firepower and protection required; the level of risk; and the potential for destruction and loss. Combat is characterised by battles, probably at several levels of command, requiring complex control methods, sophisticated exploitation of information and situational awareness. There will be significant rates of physical activity and material consumption. Combat demands advanced levels of collective training and performance. Despite its demands, it can never be discounted or wished away: the British Army must be capable of this most demanding of roles.
- 8C-09.** Combat on a significant scale is sometimes regarded as 'conventional' or 'industrial' warfighting between uniformed, state forces in a space conveniently absent of people. This characterisation is simplistic. Instead, the threats faced are 'hybrid', blending conventional and unconventional forms of conflict, using attributable and non-attributable methods. Some areas of the battlespace are free of clutter and congestion, while others are not. Combat has always included 'hybrid' threats and asymmetric frictions, including the significance of populations, although during the Cold War, conventional military approaches did not give them sufficient attention. This does not mean that they were not there.
- 8C-10.** Combat cannot be considered in isolation from the other types of operation. It is vital, when preparing for combat, to consider how it might impact on other, perhaps subsequent, activities. It is also important that the build-up to combat does not gain unstoppable momentum. Conflict prevention, for example, through deterrence, is usually preferable to the consequences of committing to battle. However, a force will only deter if it is militarily credible and this means being capable of combat. Combat occurs, or is liable to occur, in most of the operations described below. It is the intensity of the combat that varies. Intensity can be measured in terms of scale (size and numbers), longevity, rates of consumption and degrees of violence and damage.

Stability operations

- 8C-11.** Connected to the security, peace support and defence engagement operations themes, but not exclusively, are stability operations.⁴⁴ This broad categorisation does not imply separation in time or space from combat operations. They may be conducted prior to, after or during combat, but will rarely be conducted in isolation. For example, counter-insurgency, counter-terrorism and counter-criminality operations will most likely complement each other, alongside capacity building and other stability operations. While the military instrument may lead in combat operations, albeit within a full spectrum approach, in stability operations the military instrument is in support.
- 8C-12.** This distinction is reflected in the **principles of stability operations**.⁴⁵ These apply to all land stability operations, the balance of emphasis reflecting the nature of the specific task. In all cases, primacy of political purpose is the foremost consideration.

I cannot envisage a conflict where there will be no role for stabilisation operations, but equally stabilisation is highly likely to involve combat.

General Richard Dannatt

⁴⁴ NATO doctrine describes a category of crisis response operations that encompasses all those listed here under stability operations, with the exception of capacity building. This doctrine prefers the term stability, because it broadens the scope to upstream as well as reactive operations.

⁴⁵ These are the same as joint doctrine's stabilisation security principles, with minor differences in wording to reflect the requirements of land operations See JDP 05, *Shaping a Stable World*. Note that NATO doctrine does not describe principles of stability operations.

Principles of stability operations

- **Primacy of political purpose.** All military operations have a political purpose, but in stability operations political issues are usually highly relevant to tactical actions. This principle informs all the other principles and dictates the desired outcome, planning and conduct of the campaign. Military actions must always be subordinate to and aligned with the overall inter-agency, politically-led campaign. The political authority, which may be a United Nations Special Representative to the Security General, another international appointee or the host nation government, will usually have overall responsibility for military operations. Depending on the operation, lower level representatives of the authority may play an important role in operations, even to the point of authorising military action.
- **Unity of effort.** All agencies, military and civilian, international and host nation must co-operate for the campaign to be effective. This means that within the security line of operations, the activities of the components and other actors, particularly those with intelligence and security responsibilities, should be coordinated down to at least unit level. Also, military and civilian agencies must co-operate. Coterminous military, police and government boundaries, with co-operation committees at each level of authority, are a commonly used framework to achieve unity of effort.
- **Understand the context.** To ensure that the military campaign, operations and tactical actions are consistent with the political purpose, it is necessary to understand the historical, regional and political context of the problem. Without an adequate understanding of the human terrain, land forces will be unable to influence effectively the relevant audiences, actors, adversaries and enemies. Understanding, and the intelligence networks and cultural expertise that underpin it, has to be built over time, and involves significant cooperation with other agencies.
- **Foster host nation governance and capacity.** At every opportunity the force must help to develop the host nation's ability to govern effectively. In the security sector this is likely to include the capability needed to conduct effective and appropriate security and stability operations in accordance with the other principles.
- **Prepare for the long term.** The campaign must aim for the long term under legitimate authority (the host nation). The intervening force is likely to be present for only a short time in large numbers, so its actions must be aimed at creating a foundation on which successor international and host nation authorities and forces can build.
- **Provide security for the population.** The first duty of any government is to provide security for the population. It is a task in which security forces play a major role as insecurity will usually be the main reason there is a stability operation at all. The security operation will have two aims: making the population safe from the effects of conflict (including from our own actions); and denying violent actors (such as insurgents) access to the population. Security includes human security (security as in safety stability, but also access to essential services, for example, food, health, education and justice).

Armed forces are not usually responsible for the other aspects of human security, and must therefore cooperate with those who are. It is essential to challenge and ideally deny adversaries access to the population, so that it is more difficult for them to influence the population and to get support such as money, manpower, intelligence and food.

- **Neutralise adversaries.** The neutralisation of armed adversaries and their supporters can occur in a number of ways including deterrence, defeat, dispersal, disarmament or absorption into legitimate security forces, political movements and society. Armed forces play a significant role in neutralising adversaries. Depending on the circumstances this can include combined arms manoeuvre operations, raids, patrols, searches, precision attacks and a lead contribution to demobilisation, disarmament, and reintegration (DDR) efforts. To be effective and to avoid undermining the security of the population, the military contribution to the neutralisation of adversaries requires accurate, actionable intelligence.
- **Gain and maintain popular support.** In stability operations, the state, its security forces and intervening external armed forces are in competition with adversaries for the support of the people. The side that succeeds in gaining the support of the people, and denies that support to the other side, is likely to win in the long term. Gaining and maintaining support depends in part on providing security, but it also depends significantly on the day-to-day conduct of the authorities and their impact on people's daily lives.
- **Anticipate, learn and adapt.** The effective force improves all aspects of its performance throughout the campaign. This requires formal systems to look for new ways of doing things, and learn lessons from effective and ineffective practice. The ideas and lessons must be disseminated to benefit the whole force, which requires the capacity to adjust doctrine, training, equipment and other aspects of capability.
- **Operate in accordance with the law.** The armed forces and the other agencies involved in stability operations must abide by the law and be seen to do so. This is more than a matter of the standing requirement to act lawfully. As the armed forces of a country which adheres strictly to the rule of law, our moral authority to intervene and conduct stability operations depends on our lawful conduct: it is about our integrity. This also applies to any alliance or coalition we are part of, and the host nation. It is a critical aspect of gaining and maintaining popular support, and of undermining any perceived legitimacy of adversaries. It is often the case that adversaries commit serious crimes and therefore our lawful conduct sets us apart. If members of the security forces are accused of breaking the law, legitimacy is maintained by visible and effective investigations and where necessary, prosecutions. In the end, cover-ups destroy legitimacy.

8C-13. Counter-irregular activity. Counter-irregular activities fall into three categories: counter-insurgency, counter-terrorism and counter-criminality.

- a. **Counter-insurgency.** Counter-insurgency (COIN) is defined as comprehensive civilian and military efforts made to defeat an insurgency and to address any core grievances. It encompasses those military, paramilitary, political, economic, psychological and civil actions taken by a government or its partners to defeat insurgency. The approach requires neutralisation of insurgents by killing, capturing, marginalising or reconciling them; controlling the level of violence and securing the population COIN is characterised by instances of combat, normally conducted at relatively low tactical levels. Consumption of resources and violence are low (relative to focused combat operations), but the nature of violence is likely to be more shocking because of its context, where normality is sought or actually appears to exist. For detailed land forces thematic doctrine the reader should consult the AFM series, within a context of broader understanding provided by joint and NATO doctrine.
- b. **Counter-terrorism.** Counter-terrorism describes all preventive, defensive and offensive measures taken to reduce the vulnerability of forces, individuals and property against terrorist threats and/or acts,⁴⁶ to respond to terrorist acts. Counter-terrorism operations may be conducted against state-sponsored, internal or transnational, autonomous armed groups who are not easily identified, and who may not fall under the categories of combatants defined in international law. Measures taken include those activities justified for the defence of individuals as well as containment measures implemented by military forces or civilian organisations. The latter are primarily conducted by police and special forces supported by conventional land forces. Land forces have a greater contribution to creating and maintaining effective protective measures to reduce the probability and impact of terrorist attacks against infrastructure or people.
- c. **Counter-criminality.** Counter-criminality is the action focused on preventing organised criminal groups from escalating their activities to the point where they become a threat to allied forces. The character of conflict is such that insurgency, terrorism and criminality will often feed off each other. Land forces' contribution to counter-criminality will be very much in support of specialist agencies, requiring deep contextual understanding to inform and assist these agencies as necessary.

8C-14. Military contribution to peace support. Peace support activities impartially make use of diplomatic, civil and military means, normally in pursuit of United Nations Charter purposes and principles, to restore or maintain peace. Peace support cannot take place without some form of intervention having taken place first, which may be an uncontested deployment. Having intervened, land forces' freedom to operate will be determined by the willingness of the opposing parties to seek resolution. Any reluctance may result in combat, either directly or in the protection of other agencies and the local population. The distinguishing factor of peace support operations is that land forces are neutral, supporting an international mandate rather than a host nation government necessarily. Peace support efforts include conflict prevention, peacemaking, peace enforcement, peacekeeping and peacebuilding. Defence engagement is intrinsic to all. This categorisation does not represent a sequential process where one necessarily

46 NATO Military Committee *Concept for Counter-Terrorism*, (2016).

leads to the next; for example, peacekeeping will not necessarily be preceded by peace enforcement. However, land forces must understand how the different types of efforts relate to, complement or overlap each other so that their actions support, rather than undermine, an on-going political process. Figure 8C-1 provides a basic conceptual framework to visualise how these activities may relate to each other.⁴⁷

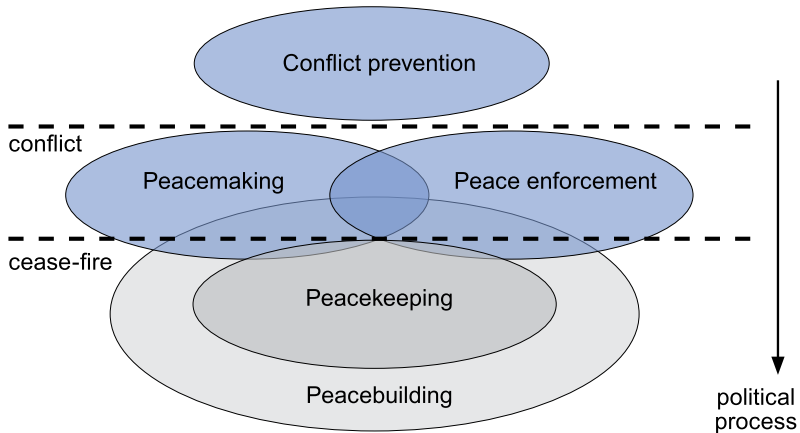


Figure 8C-1. Military contribution to peace support

- a. **Conflict prevention.** A range of activities, including defence engagement to keep inter and intra-state disputes from escalating into armed conflict.
- b. **Peacemaking.** Conducted after the initiation of a conflict to secure a ceasefire or peaceful settlement involving primarily diplomatic action supported, when necessary, by direct or indirect use of military assets.
- c. **Peace enforcement.** Designed to end hostilities through the application of a range of coercive measures, including the use of military force. It is likely to be conducted without the strategic consent of some, if not all, of the major conflicting parties.
- d. **Peacekeeping.** Designed to assist the implementation of a ceasefire or peace settlement and to help lay the foundations for sustainable peace. It is conducted with the strategic consent of all major conflicting parties.
- e. **Peacebuilding.** Designed to reduce the risk of relapsing into conflict by addressing the underlying causes of conflict and the longer-term needs of the people. It requires a commitment to a long-term process and may run concurrently with other types of peace support efforts.

⁴⁷ See AJP-3.4.1, *Allied Joint Doctrine for the Military Contribution to Peace Support Operations* and the AFM series for further detail.

- 8C-15. Military contribution to humanitarian assistance.** Humanitarian assistance is the use of available military resources to assist or complement the efforts of responsible civil actors in the operational area or specialised civil humanitarian organisations in fulfilling their primary responsibility to alleviate human suffering. They may occur in response to both natural and man-made disasters, and result from conflict or flight from political, religious or ethnic persecution. Military support to humanitarian assistance is limited in scope and duration. In a NATO context, it includes disaster relief, dislocated civilian support, security, technical support and CBRN management. For UK humanitarian assistance and disaster relief operations, joint doctrine should be consulted.
- 8C-16. Military contribution to stabilisation and reconstruction.** Stabilisation and reconstruction is normally a civilian-led process that commonly takes place during or after crisis in states that have lost the capacity to govern themselves effectively. As such it is best undertaken by those actors and organisations that have the relevant expertise, mandate and competences required. There may, however, be situations when the military is obliged to assume temporary responsibility until such time as the security situation allows for appropriate experts to assume the lead.
- 8C-17. Capacity building.** Capacity building can be a discrete type of stability operation, occurring across the mosaic of conflict, as well as a tactical function. As an operation, it may be conducted discretely or alongside other operations; it may form part of peacetime military engagement or in less benign circumstances, including in combat situations. Capacity building concerns those actions taken to improve military and, when necessary, civil and infrastructure capability. The military's contribution is but one element of a broader integrated or full spectrum approach, which requires cooperation among all agencies engaged.

An understanding of the many different models that exist internationally for internal security, policing and criminal justice is essential. But those models cannot be considered in isolation because what works in one country will not necessarily work in another which may have very different traditions. It is therefore critical for the Security Sector Reform strategy to take full account of the history, culture and inherited practices of the country or region in question. The strategy also needs to be informed by the views and aspirations of the local population.

Sir John Chilcot, The Iraq Inquiry (2016)

- 8C-18. Evacuation.** Evacuation operations relocate specific actors to a place of safety and generally take place during crises.
- a. Non-combatant evacuation operations.** Non-combatant evacuation operations (NEOs) are national diplomatic initiatives, but may see UK land forces supporting or supported by allies. NEOs are conducted to relocate (to a place of safety) non-combatants threatened in a foreign country.
 - b. Extraction operations.** Extraction operations are those operations where a force conducts or assists in the withdrawal of military missions and units from a crisis region.

Military aid to the civil authority – United Kingdom operations

8C-19. The security of the UK's national territory itself is the primary concern of the UK Government and hence the priority for the use of military forces. The UK needs to be secured by operations at a distance because it is usually insufficient or too late to protect the state only at its borders. Land forces are to be prepared to contribute to home defence and to support the civil authorities when required. This is distinct from operations to protect UK territorial integrity, for example from invasion, although that would be the ultimate form of home defence. Military support to internal operations are described under the heading military aid to the civil authority or MACA. MACA includes the following.⁴⁸

- a. Assistance may be provided by the Armed Forces to other government departments for urgent work of national importance, responding to emergencies or in maintaining supplies and essential services. Also, UK Armed Forces may be asked to provide assistance to communities for special projects or events of significant value, or through the attachment of volunteers.
- b. Military support may be provided to civil law enforcement agencies, such as the police or Border Force, in the maintenance of law, order and public safety using specialist capabilities or equipment beyond that of civil powers.
- c. Training and logistic assistance may be provided to civil authorities, through the provision of the defence estate or facilities for either training or operational support to other agencies carrying out their duties. For example, allowing the police to use an army training centre to assemble and brief a large number of police officers, even though military personnel or equipment might not be involved.

8C-20. Resilience. Resilience, which is covered in detail by joint doctrine, is the overarching term used to describe activities and structures that ensure the UK Government can continue to function and deliver essential public services in time of national crisis, including terrorist attack and industrial action, or in civil crises such as floods. The British Army's regional command structure, mass, technical skills, MACA activities, and secure real-estate and infrastructure are examples of capabilities that contribute significantly to national resilience.

ADP Land Ops **Chapter 9**



Commanding Operations



CHAPTER 9

Commanding operations

Introduction

- 9-01.** The land force must have the capability to command complex and dynamic operations in the land environment, integrating the effects of joint, inter-agency and multinational partners to achieve the desired outcomes.
- 9-02.** Command is the authority vested in an individual of the armed forces for the direction, co-ordination and control of military forces. It includes the processes by which commanders, supported by their staff, make decisions, convey intent, and impress their will in order to accomplish missions. Command is a blend of subjective art and objective science. It is founded on an understanding of the desired outcome; an appreciation of concepts, missions and priorities; and the allocation of resources. Its subjective elements include assessment of factors such as the impact of surprise, politics and morale; decision making where there is little or no information; and anticipating the enemy. It also requires objective analysis to control the operation and to resolve issues relating to the mechanics of movement, logistics, and communication and information systems (CIS). Control, as a function of command, is the oversight, direction and coordination of assigned forces in accordance with the commander's plan and intent.⁴⁹
- 9-03.** This chapter describes the principles of command and the key characteristics of the human components of a successful command system – the commander and the staff. It then explains how command is exercised through standard command relationships and introduces the basic requirements for the control of operations. It concludes with an overview of the operations process, whereby commanders and their staff plan and execute operations.

Commanding operations

- Introduction
- Principles
- The human components of command
- Command relationships
- Control of operations
- The operations process
- Annex:
 - Risk

Principles of command

- 9-04.** Joint and NATO doctrine describe five principles of joint and multinational command.
- a. Unity** of command provides the necessary cohesion for planning and executing operations. Command relationships, by which commanders achieve this authority, must be determined when a force is established.
 - b. Continuity** of command describes the ability for command authority to be exercised continuously over time in a given area of operations. It depends on appropriately trained, structured and resourced command support as well as on measures for deputising that are widely understood.

⁴⁹ Note that AAP-06 describes control in a broader sense as the authority exercised by a commander over part of the activities of subordinate organisations, or other organisations not normally under his command, that encompasses the responsibility for implementing order or directives.

- c. A **chain of command** describes the succession of commanders from a superior to a subordinate through whom command is exercised. It is a hierarchical structure that links points of command and defines their relationships. A clear chain of command, understood by all, strengthens integration between formations and units and enhances unity of effort. Subordinates must be in no doubt as to the command state within which they are operating, to whom they are responsible and for what. On multinational operations absolute clarity must be established over national responsibilities and those of the coalition or alliance.
- d. The command structure should ensure that the capabilities of the force are **integrated** to achieve the commander's objectives in the most effective way. The specific task organisation will reflect the higher commander's requirements.
- e. **Mission Command**, which is described in Chapter 6.

Diverse are the situations under which an officer has to act on the basis of his own view of the situation. It would be wrong if he had to wait for orders at times when no orders can be given. But most productive are his actions when he acts within the framework of his senior commander's intent.

Field Marshal von Moltke (the elder)

- 9-05.** In addition to the overarching principles of joint and multinational command, the following **considerations** are relevant to the command of land operations:
- a. There is a limit to the number of subordinates (and thus subordinate organisations) that a commander can effectively command in land operations while maintaining tempo and momentum; this is known as the span of command. This number will depend upon several factors including complexity of the task, geographical spread and nature of the organisation. The number of external organisations, including agencies, allies, coalition members and host nation force elements with which a commander has to interact are also considerations. The British Army's experience suggests that for complex manoeuvre operations in contact with the enemy, a span of command should not exceed five subordinate manoeuvre groupings. This rule is not absolute but is a good principle for organising brigades, battlegroups and sub-units. Fewer subordinate units or a smaller headquarters increases potential for tempo; but too few subordinates or too small a headquarters can reduce the momentum or meaningful outputs achievable.
 - b. Commanders and their headquarters must be flexible, energetic and agile. Headquarters are scalable by design so that they can configure themselves (possibly with augmentation) to adapt and undertake a number of different roles and tasks. The size and shape of the force under command, the range of actors with which the headquarters must interact, as well as the directed task will determine how a headquarters will be configured. A headquarters generates one or more command posts from which command is exercised.
 - c. Commanders of multinational land forces require political acumen, patience and tact. Their challenges include interoperability, the application of Mission Command, achieving unity of effort where unity of command does not exist, and fostering

organisational agility. In addition, they need a detailed understanding of each national contingent's strengths and weaknesses as well as their ethos, history and culture. Initially, consensus and cooperation may be based on little more than an agreement on the art of the possible.

The human components of command

- 9-06.** The key human components of any command system are the commanders and their staff. While these are essential, they do not describe the entirety of a command system, which also requires a range of additional command support measures, including infrastructure, CIS and processes.

Clausewitz described two indispensable qualities of command: "First, an intellect that, even in the darkest hour, retains some glimmerings of the inner light which leads to the truth; and second, the courage to follow this faint light wherever it may go." Churchill's view was that "...there is required for the composition of a great commander not only massive common sense and reasoning power, not only imagination but also an element of legerdemain, an original, queer and sinister touch, which leaves the enemy puzzled as well as beaten."

Commanders

- 9-07.** The role of commanders at any level is to make things happen: to make decisions on the actions of forces under command; to lead and control them; to judge and accept risk. Commanders must do so at a pace that contributes to the generation and maintenance of tempo relative to adversaries. It is also the role of commanders to create and foster an effective command climate. By the nature of their personality, leadership, command style and general behaviour, commanders have an enormous influence on the morale, sense of direction and performance of their staff, subordinate commanders and soldiers. Successful Mission Command depends on a climate of command which encourages subordinate commanders at all levels to think independently, to take the initiative and to be uninhibited in telling their superior accurate and unwelcome information. It is the commander's responsibility to foster such a climate.
- 9-08.** To be effective, commanders require particular skills and qualities. There is no formula for the right combination, but deficiencies in any one compromise the ability of the commander to enforce their will. First, and of primary importance, are the functions of command; the ability to lead, decide and control. To perform these functions, commanders must understand the context and nature of the operation and direct their staff accordingly. In addition, they must have vision, intellect and initiative to simplify the complex and produce a battle-winning intent. However brilliant commanders' powers of analysis and decision-making may be, they are of no use if they cannot express their intentions clearly to subordinates of all ranks. Finally, commanders must have the ability to build relationships on many levels; both up and down the chain of command and with a range of joint, inter-agency, and multinational actors. Whilst robust leadership may be required, commanders must be empathetic and patient, prepared to collaborate and compromise through persuasion and negotiation.

- 9-09.** Integrated Action and Mission Command focus commanders on seeking and exploiting opportunities, while anticipating and managing risk. Risks to the force and risks to the mission can be caused by adversaries, the environment and our own actions. It is a commander's responsibility, supported by the staff, to judge and accept risks to the force or the mission, or both. This requires commanders to understand the evolving risk appetite of their higher commanders, their partners, and to ensure that their subordinates understand their own risk thresholds. This is fundamental to the successful application of Mission Command. Annex 9A explores risk in more detail.
- 9-10.** Commanders decide where they can best understand and influence events and outcomes. They identify the best position to observe, assess and lead in relation to their force, the means of command at their disposal and their mission. The enduring moral requirement to lead from the front will influence this decision, particularly at the tactical level. However, when positioned forward there is always a real risk of being distracted by the immediate dangers and losing the ability to command. The following factors, applicable to all levels of command, shape this decision.
- a. The ability to assess the situation**, including judging the condition and morale of the force and being able to impose will upon it.
 - b. Access to other actors**, including those in the task force, key agencies and the host nation.
 - c. Secure and reliable communications** to the points of command.
 - d. Access to staff support** for planning and decision-making to maintain continuity.
 - e. Security**, including physical and electronic protection and influencing decisions on the size and signature of a command post and its constituent parts.

The commanders decided what must be achieved; the Services actually did the various jobs; the Staff coordinated the whole and prepared the detailed instructions. So, if the chain of command drove the Army, then the Staff might be defined as its lubrication.

John Masters, The Road Past Mandalay

Staff

- 9-11.** The staff assists and support the commander in making and implementing decisions. It has no authority by itself, but derives authority from and exercises it in the name of the commander. All the activities of the staff are undertaken on behalf of a commander. Regardless of the level of command, the staff has three main roles:
- a. The staff has the duty to support, advise and caution the commander.** The staff supports by focusing on the two primary functions of control – coordinating and monitoring. Under the function of coordinating, the staff supports the commander by gathering, processing, analysing and presenting information in a manner that helps the commander to select a particular course of action. The staff is then responsible for planning, preparing and disseminating control measures, normally promulgated as orders. In the second and overlapping function of monitoring, the staff provides part of the feedback mechanism essential for subsequent timely decision-making. The staff needs to realise the commander's intent and always strive to find opportunities to

make it a reality. Nevertheless, the staff must not shy away from presenting considered, accurate, cautionary advice that may be unwelcome, but critical to success.

- b. The staff also needs to **support subordinate formations and units**, whose ability to live, train and fight depends to a large extent on the actions of the staff of their superior headquarters. In the eyes of both superior and subordinate commanders and staff, the hallmark of a proficient headquarters is its staff's capacity to work in a timely, efficient and co-operative manner. Staff must not sit on information. It is the responsibility of the staff to ensure that all relevant information is passed to subordinate and flanking formations and units. The staff need to have a two-down mind-set; it is the staff's responsibility at all levels to put subordinate forces into action to best advantage.
 - c. The third role of the staff is to **inform the wider force**, in particular higher, flanking, agency, allied and partner headquarters. This is essential to delivering unity of effort, mutual understanding and shared situational awareness.
- 9-12. The headquarters and its staff cells are organised so that the headquarters can conduct planning and execution appropriate to its level of command. Functional expertise is harnessed and integrated to provide support across all the horizons required by the operation. This may, for example, see functional cells integrated into future plans, plans and operations cells. This integration is led by the chief of staff, who, as the principal staff officer in a headquarters, ensures that the commander's intent is turned into workable plans, communicated to, and understood by, subordinate, superior and flanking formations.
- 9-13. Many of the qualities required by commanders also apply to staff officers. This is particularly so for senior staff officers in national and multinational appointments. They may have considerable delegated powers of command or management authority and responsibility. In addition to the fundamental quality of leadership, shared by all officers, good staff officers must have loyal and trustworthy characters with independence of thought and judgement; the intellect to assess and communicate with accuracy and precision, and to understand the broader context in which they are operating; an appetite for hard work as well as team work; technical competence on associated CIS; and high levels of cultural awareness and political sensitivity.
- 9-14. The effectiveness of the staff depends on human relationships. These include those between the commander and the staff, the staff and other levels of command, and amongst the staff themselves.
- a. Although the opportunity for a close relationship with the commander will depend on the size and level of headquarters and the role of the staff officer, the fundamentals of the relationship between commander and staff endure. It should be characterised by a climate of loyalty, respect and individual initiative rather than one that is sycophantic and unquestioning; the independence of thought and timely action implicit in Mission Command is vital.
 - b. How the staff interact with subordinates, flanks and superior headquarters is critical. A staff should develop open and positive relationships with other staffs, based upon mutual respect and developed through a conscientious, determined and helpful approach to problem solving. Anything less will undermine confidence in the exercise of command at all levels.

- c. The creation of an effective and closely knit staff team within the headquarters and between the headquarters and units is essential. There must be no secrets between branches and no avoidance of responsibilities. Team building is a command skill which requires effort and practice.

Command relationships

- 9-15. States of command and control** explain the relationships between land force organisations. States of command are concerned primarily with the ability to assign an independent mission, to reorganise a subordinate organisation to suit its task, or to direct specific tasks within an agreed mission. They exist to allow a higher headquarters to prioritise resources and effort, and to assist with task organisation when working with limited resources. When assigning states of command, commanders balance the need to maintain flexibility and generate tempo (which are best enabled by passing control to the lower level) while ensuring that they retain the ability to concentrate force and rapidly switch priorities (best achieved by commanding at a higher level). To establish the status of units under command, a commander seeks answers to the following four questions.
- a. Can the commander use the unit for any purpose; in other words, give it a mission?
 - b. If a mission cannot be assigned, can the commander give the unit tasks within the given mission and so direct the mission's execution?
 - c. Can the commander break up a unit into smaller groupings?
 - d. Are there any caveats on the use of units, for example employment limited to use for a specified duration?
- 9-16. Deputising command** is not necessarily synonymous with appointing deputy commanders. There is a requirement for deputising when one or more of the following conditions apply: when there is a need to provide short term relief for the commander (for example, when resting or temporarily absent); when succession in the chain of command is necessary (for example, in the event that the original commander is killed or wounded in action, or relieved of command); or when there is a need to reduce the burden on a commander by delegating responsibilities.
- a. In the absence of established deputy commanders, staff officers can provide **reliefs** for commanders for short periods. Lack of sleep can have a significant effect on the physical and cognitive performance of a commander. Attention lapses, reduced insight, leading to reduced understanding and an over-estimation of one's own abilities are some of the common symptoms. Commanders have a duty to impose adequate sleep routines on themselves and on their subordinates.
 - b. Seconds-in-command provide **succession** at the lower tactical levels and are normally available to assume command at little or no notice if the original commander is no longer available to exercise command. At formation level, procedures for alternate command rest on nominating a subordinate commander to assume command.
 - c. **Delegating** command responsibilities allows the senior commander to concentrate on particular areas or concerns, leaving a nominated assistant or deputy to concentrate on others.

- d. **Deputy commanders of multinational forces** are appointed in the main to help strengthen the collective command of an alliance or to bond coalition forces together, giving a visible expression of national stake and representation in the higher command. In these circumstances it is possible, although not ideal, to have more than one deputy commander, each of whom must have clear functional roles.
- e. The scale and complexity of operations, particularly at divisional level and above, means that command cannot be exercised without the support of a **deputy commander** who exercises command when the commander is absent from the headquarters. The deputy commander may also be used to control a particular phase or geographical area of the operation which requires forward command.

9-17. The **command post** (CP) is a location from which command is exercised, consisting of a physical structure, the staff and its associated CIS. A force element's headquarters may be able to create a number of command posts. A CP supports the commander by presenting relevant information, and by providing the means of control and the communications through which orders are passed and information is exchanged. Depending on the level of command, a headquarters is organised to operate a number of command posts. Possible types of command post include a Main CP; a Forward CP to allow commanders to command in the forward areas of operations; a Tactical CP to allow the commander and key staff to deploy to the point of battle with a lower profile; and an alternate/step – up CP, to assume control if or when the main CP is unable to do so for tactical or administrative reasons. This combination provides flexibility, reach and endurance but comes with a cost in terms of manpower, protected mobility, infrastructure and communications equipment. In the same manner that commanders reach back from a tactical CP to the main CP for intelligence analysis and other outputs not practically deliverable forward, so too they may be able to reach back for command support outside the theatre of operations. Command exercised from a number of CPs is a distributed command system. Commanders also consider the balance of command outputs to be delivered at subordinate levels and how much the higher formation may need to support the subordinates, or **vice versa**. Factors include CIS, CP infrastructure and manpower and the nature of the operation.

Control of operations

9-18. Control involves the oversight, direction and coordination of assigned forces in accordance with the commander's plan and intent. At the lowest tactical levels, command and control are often vested in a single individual. At higher levels, it is a key function of the staff to exercise control over certain aspects of operations in accordance with the principle of Mission Command.

If it is necessary for a commander to interfere constantly with a subordinate, one or the other should be relieved.

- 9-19. Mission Command provides staff and subordinates with the opportunity to accomplish the commander's intent by using their initiative. Normally this approach takes place through decentralised execution, where commanders increase the freedom of action of subordinates, controlling only when absolutely necessary. However, there are times when more centralised execution and tighter levels of control are required, for example during complex operations that involve more than one subordinate operating in close proximity to each other, such as during withdrawals, reliefs of troops, and obstacle crossings. In such cases, commanders need to impose and exercise greater levels of control to ensure the tempo of the operation is sustained and that the possibility of fratricide is minimised. Mission Command is still exercised during these operations but the control of individual elements is more coordinated. Control has two basic forms which are not mutually exclusive and can be used simultaneously.
- a. **Procedural control** relies on the implementation of commonly understood procedures across a force for the regulation of activity within and between force elements. Examples are standard operating procedures, boundaries and NATO standardised procedures. Procedural control can, for example, be used to allocate a volume of battlespace to individual elements for a period of time. Although sometimes perceived as an air control technique, procedural control is applied across all environments. For successful Mission Command, the commander always uses only the minimum essential procedural control measures.
 - b. **Positive control** allows for active control of activities in real time. It is used when a commander wishes to direct control in a particular place or on specific elements, for specific periods of time. However, even where resolution of the position of friendly forces is good, that of adversaries and the population is seldom sufficiently timely nor accurate enough to support positive control as the sole means of battlespace management.
- 9-20. Land operations necessarily demand degrees of control over the activities of many different groups, on the ground and in the air, within a given geographical area. Those aspects of an area of operations that require active management are described as the battlespace, and **battlespace management** refers to the adaptive means and measures that enable the dynamic synchronisation of activity. Applying battlespace management provides the control mechanisms for effective and efficient execution of Integrated Action, synchronizing, integrating and coordinating battlespace activities with respect to time, forces and capabilities. The key challenge for commanders and staff is enabling maximum freedom of action for subordinates whilst maintaining control consistent with the context and nature of the mission. Of note, tighter measures are typically required as the density and complexity of the battlefield increases. At the tactical level, the spectrum of battlespace management tools include commonly understood symbology used to identify units, locations and functions, to fire support control measures, and information exchange procedures and processes on CIS and targeting systems.
- 9-21. Command and control procedures must be simple, efficient and flexible to enable timely and effective decision making. **Standard operating procedures** (SOPs) (which are set by a higher authority or formation to its subordinates) and **standard operating instructions** (how SOPs are implemented in a given context) must be clearly written, understood, rehearsed and used.

- 9-22.** Headquarters must be adept at using **information** to exercise control effectively. This requires appropriate procedures and communications systems.
- a. At times of high tempo, it is vital to have robust, consistent and well-understood methods. A headquarters requires proficiency in information management (integrated processes and services to provide exploitable information); information exploitation (use of information to gain advantage); information assurance (the confidence that information is reliable, accurate and secure); and information superiority (possessing better information and able to exploit it faster relative to an adversary).
 - b. These procedures all in turn depend on CIS. These enable control measures to be specified with a high degree of accuracy, allow for changes to be rapidly disseminated across the command, and provide near real-time feedback on the progress of operations to commanders and their staff. CIS capabilities and limitations, such as range, bandwidth and security are factors of all plans.
- 9-23. Directives, plans and orders** provide the principal means by which a commander's intentions are conveyed to subordinates as well as the control framework for the operation. Directives, plans and orders must be concise, clear, accurate and timely.
- a. A **directive** is used at the higher levels of command to initiate activity and to give both general and specific guidance to subordinate commanders. It will be less formal, rigid and prescriptive than an order.
 - b. **Plans** are mainly issued for contingency planning purposes and have no executive authority until activated by an order. A 'plan' is also the term used to describe the output from the planning process prior to conversion into directives and orders by the commander and staff.
 - c. **Orders** are written or oral communications that direct the conduct and synchronisation of action. They are issued in whole or in part to subordinate forces for planning or execution.

I have (had) published under my name a good many operational orders and a good many directives...but there is one paragraph in the order that I have always written myself...the intention paragraph.

Field Marshal Slim

The operations process

- 9-24.** Commanders are responsible for making decisions. The primary outputs from their decision-making are the plan, followed by its execution. The process by which commanders and staff conduct planning and execute the plan is called the **operations process**⁵⁰, as illustrated in Figure 9-1. This is a decision-making tool used by NATO tactical formations and by the United States Army up to corps level. Activities within this process include **assessment, planning, preparation and execution**. The outputs from this process are operations designed to achieve the desired outcomes through objectives, effects and actions.

⁵⁰ UK land forces previously used the PREE process (plan, refine, execute, and evaluate)

- 9-25.** The way in which the operations process is approached depends on a range of factors. These include the context, type of operation, time available, level of headquarters and associated resources. The process is therefore scalable, requiring commanders and staff to be flexible and to focus on the ends rather than be slaves to the process. In all circumstances, commanders and staff must recognise that planning is a command-led activity, and that the operations process is not necessarily sequential. Assessment, which directly influences the other three activities, is constantly refreshed, tested and refined; preparation and planning are continuous.

Assess

- 9-26.** Assessment is the monitoring and evaluation of the current operational picture. It is continuous throughout planning, preparation and execution. Effective assessment is dependent on good situational awareness, to which it also contributes, and provides the basis for the decision-making of commanders and staff. It is a critical supporting activity in the constant fight for understanding. As it surrounds and permeates the entirety of the process, specific discussion of assessment within plan, prepare and execute activities is captured in the relevant paragraphs below. Assessment after the operation is also a key contributor to adaptation. Adaptation leads to the adjustment of doctrine (tactics, techniques and procedures), and the generation of requirements for new or adjusted capability.

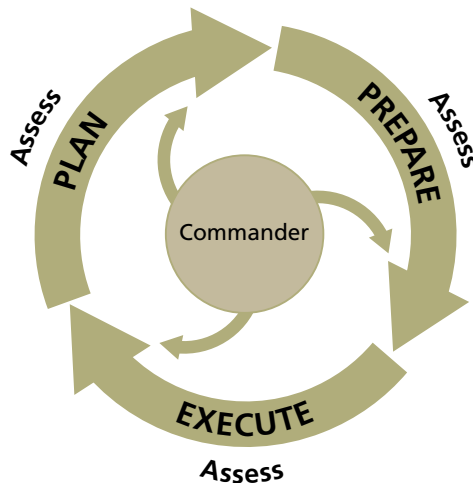


Figure 9-1. The operations process

Plan

- 9-27.** Planning determines the commander's initial balance of effort, within a framework of available time, resources and freedom of action. However, in a dynamic operating environment, pragmatic and flexible plans are more likely to be successful than those that are prescriptive. The commander needs to develop contingency plans to address other outcomes that could be foreseen, and must be poised to cope with the unexpected. Military planning is based on an estimate process.
- 9-28.** An **estimate** is a logical process of reasoning by which a commander, faced with an ill-structured problem, arrives at a course of action to be taken to achieve the mission. Commanders at all levels use estimates appropriate to the complexity of the problems. The estimates used by the British Army all follow the same broad approach: continuous understanding of the situation; identification of outcomes, objectives and effects to be achieved; selection, resourcing and programming of a particular course of action; and preparation of orders. Depending on the nature of the problem, level of command and immediacy of execution, contingency and branch plans may also be produced for subsequent refinement.
- 9-29.** The British Army routinely uses three recognised planning processes. These are compatible with those of other components and NATO land forces, who often employ their own national decision-making processes particularly at the lower tactical level. Interoperability depends more on making the right deductions and knowing how different estimate processes relate to each other, than on adopting a single approach across a joint or multinational force. The use of a particular planning process is determined not by the level of the force, but by the nature of the problem, the time available and the procedural interoperability requirements of the task.
- a. Operational-level planning process.** At the operational level, commander and their staff use the operational-level planning process to produce a campaign or operational plan. See AJP-5 Allied Joint Doctrine for Operational-level Planning (with UK national elements).
 - b. Tactical estimate.** The tactical estimate, also known as the '6-step estimate', is designed for circumstances where military problems are complex and plans may be longer term and involve significant sequencing. The tactical estimate is suitable where there is an emphasis on detailed planning and understanding rather than high-tempo decision-making. It can be used by division, brigade and battlegroup headquarters.
 - c. Combat estimate.** The combat estimate, also known as the '7 questions', is derived from the tactical estimate but presents the analysis, plan creation and decision-making in a sequence of 7 questions. This is intended to make it easy to focus on rapid understanding of the problem and decision-making as part of accelerated battle procedure. It is used at formation level for similarly urgent situations. It can be adapted for more complicated, deliberate actions. It assumes that the operating environment and general tactical situation are already well understood. The combat estimate is designed mainly for use at battlegroup and below to generate plans for single, urgent tactical problems.

- 9-30. Orders** are used in all spheres of military activity and at all levels of command. They follow standardised formats to enable swift delivery, comprehension, extraction and execution. Orders are as comprehensive as time allows. An **operation order** and its subsidiaries, for example, **fragmentary orders**, include the detail necessary for subordinate commanders to be able to understand the context for the operation. They also need to understand the intent, extracting what it means for them, and what it means to others. Mission Command requires orders which concentrate on imparting an understanding of the context of the operation and what needs to be done rather than how. Attention to detail when producing orders is of paramount importance.
- 9-31.** The means of delivering orders is contingent on the level of command, time available, nature of operation, physical dispersion of forces and CIS. In combat operations at battlegroup and below, verbal orders (either in person or via CIS) accompanied by a one-page summary are sufficient. At higher levels of command and in more complex scenarios, more detailed written orders will be required. At all levels, orders can be accompanied by diagrams, overlays and schematics to show how dynamic activity is intended to occur in time and space. Wherever possible, a commander issues orders in person and so imbues subordinates with a common purpose and understanding. Subordinates then back-brief their commander to clarify intent, confirm understanding and, where appropriate, recommend further refinement to the plan.
- 9-32. Assessment during planning.** Assessment is procedurally ingrained within UK estimates, especially within intelligence preparation of the environment, mission analysis and course of action evaluation. As the plan develops within the estimate process, it is tested against the constantly changing situation to refine the decisions made as well as identify and mitigate risks. Such refinement, drawing on tools of red-teaming, wargaming and operational analysis, precedes the issuing of orders. Of note, planning is typically the stage in the operations process where the staff creates the initial common operating picture from which to achieve shared situation awareness and identify opportunities, threats and information requirements. Assessment during planning also identifies measurements of effectiveness and performance that are used for subsequent assessment during preparation and execution.

- **Format of orders.** Orders follow a standardised format of: **situation; mission; execution** (including concept of operations, missions and tasks, coordinating instructions); **combat service support**; and **command** and **signal**.
- **Concepts of operations.** The concept of operations describes how the commander intends to achieve the mission. Where possible, the commander would confirm it with the superior commander through the backbrief process. The concept of operations flows directly from his decision and has three elements to it:
 - **Intent.** Intent is a concise and precise statement of what the commander intends to do and why, expressed as effects to be created. It is as brief as possible and easy to remember, so that subordinates can know it. It is formulated by the commander.
 - **Scheme of manoeuvre.** The scheme of manoeuvre expands the intent to describe how the commander sees the operation unfolding. It explains where, when, how and with what, in relation to each other, the force is to achieve its purpose, so that subordinates can understand their roles in the plan and the effects and actions that they and others are to realise. A clear intent minimises the length of the scheme of manoeuvre, where brevity is an important quality. Schemes of manoeuvre generally use the doctrinal frameworks as a structure. Phases should be used with caution as they can serve to over-control subordinate action.
 - **Main effort.** The main effort is defined as: the concentration of forces or means in a particular area and at a particular time to enable a commander to bring about a decision. It is a conceptual tool by which a commander concentrates forces on the activity considered crucial to the success of the mission and the achievement of the higher commander's intent. The commander gives it substance by allocating sufficient resources and focusing the task of the force element assigned to it. It is an implied task for all other force elements to enable or support the main effort. The main effort can change during an operation, but this can detract from the crucial activity. It is expressed as an action together with the primary force undertaking it.
- **Mission statement.** A mission statement is a clear and direct order to a subordinate and consists of actions to be taken and a unifying purpose (effect), preceded by the words 'in order to'. There are three types of mission: a single statement with a unifying purpose; a series of tasks with a unifying purpose; and for reserves, a series of 'be prepared to' tasks, without a unifying purpose. Missions are listed in a logical order of activity rather than in British Army precedence as this will aid the visualisation of the operation. Tasks contained within mission statements are substantive. Lesser tasks, such as conducting preliminary moves or establishing liaison will normally be omitted from the mission, but may be included elsewhere in the orders, in coordinating instructions for example. Depending on the level of command and circumstances, mission statements are written or approved by the commander personally.

Prepare

- 9-33.** Preparation includes activities conducted by the formation or unit before execution. These activities are designed to improve the formation or unit's ability to conduct the operation and include, but are not limited to, plan refinement, back-briefs, rehearsals, coordination, reconnaissance and preliminary movement. Preparation of a formation or unit for a specific operation starts with receipt of a warning order and ends when execution begins. Sound, efficient battle procedure is key to making preparation fit the time available, in order to contribute to tempo.
- 9-34. Assessment during preparation.** Assessment during preparation monitors the progress of readiness to conduct the operation and assists in plan refinement. In relation to the latter, commanders need the agility to adjust the plan based on new information and changing circumstances. For example, the enemy will do the unexpected, unforeseen opportunities may arise, assumptions on which the plan is based may be proven true or false and friendly forces status may change. In any of these cases the change must be assessed against the plan and the commander must decide if the new information:
- a. validates the plan with no further changes;
 - b. requires minor adjustments to the plan;
 - c. requires major adjustments to the plan; or
 - d. invalidates the mission and so requires direction from the superior commander. If there is not time to consult higher, then commanders act to support the one-up intent and main effort whilst considering the context of the two-up intent.
- 9-35.** The operations process places significant emphasis on the requirement to continually assess, test and refine a plan. At corps and division level, there may be a significant time gap between the initial preparation of a plan and its execution, demanding a focused effort to refine and adjust the plan to reflect the latest understanding of the requirement and context. At brigade level and below during combat operations, planning may flow immediately into execution. In all circumstances, commanders and staff continually monitor the situation and must be prepared to refine a plan even after orders have been delivered.

Execute

- 9-36.** The execution of an operation begins when committed assets physically enact their issued orders. Overcoming friction, maintaining tempo and enabling Mission Command relies heavily upon the personal involvement of the commander, supported by the staff. Command is complemented by control which is further sub-divided into two elements – monitoring and coordination. The latter is a function of the headquarters staff who implement the commander's plan and make adjustments when required. Maintaining accurate and timely situational awareness across the span of command is fundamental to successful execution.

9-37. Assessment during execution. During execution of an operation, assessment considers the unfolding situation against that which was planned for and allows refinements to be made to mitigate or exploit the identified change. The situation may change for a wide variety of reasons. Friendly, enemy, neutral and environmental activity and information will all have an impact and cause an under- or over- delivery of the plan. At the lower tactical levels and during simple operations, the commander may be able to conduct the assessment function with limited support. During more complex operations, the commander will rely more heavily on the staff to analyse the situation and so assist decision making. The two key measurements to inform this analysis are measurement of performance (assessment of the performance of a task and achievement of the associated purpose) and measurement of effectiveness (assessment of change against intended progress). The way in which performance and effect are measured are considered in the planning stage.

Post operational assessment

9-38. At every level in the force, after each operation or major event and continuously during longer campaigns, commanders review the performance and capability of the force to enable rapid and successful adaptation. To be genuine, this commanded activity requires an appropriate command climate, and engaged, flexible and objective participants. The aim is to identify experiences, examples and observations that can contribute positively to future tasks and operations. It relies on commanders at all levels to recognise that success on operations depends significantly on rapid and relevant learning across the whole force, in competition with adversaries and enemies. In the operations process, post-operational assessment informs planning for the next cycle of operations. Post operational assessment is also central to deeper institutional learning and capability development. Capability is improved only when the lessons identified and observations are implemented by those in the home base responsible for force development, equipment acquisition, doctrine and training.

ANNEX 9A

Understanding risk

War...is in its nature hazardous, and an option of difficulties.

Major General Wolfe

- 9A-01.** Land operations require commanders at all levels to identify and seize opportunities. But they also necessarily involve significant and often fatal risks. Understanding risk is therefore essential. Military organisations broadly understand risk as: potentially damaging; made up of cause, effect and consequence; explained in terms of likelihood or probability and impact; and something that has to be accepted on the route to success. Distinction is also made between operational and operating risks. Clarity of communication within the land force and with NATO allies is imperative and so this doctrine uses the term risk as it is commonly understood and defined by the Concise Oxford English Dictionary: “the possibility that something unpleasant may happen”. Risks, therefore, are described as the possibility of negative outcomes in relation to the force or the mission.⁵¹ The events or conditions that lead to those negative outcomes are causes. The interplay between cause and effect is inherently uncertain and requires commanders and staff to manage risk. Risk management is the process of identifying, assessing, and controlling risk arising from operational factors, and making informed decisions that balance risk with mission benefits.
- 9A-02.** To achieve success, **commanders have to judge and accept risks**. Taking risk is inherent in effective military operations, in which commanders at all levels achieve their intent by seeking opportunities then vigorously seizing and exploiting them. But adversary and enemy actions and the difficulty of overcoming friction mean that operations are not guaranteed to succeed and the force may incur losses. Enemies and adversaries aim to defeat or destroy the force or elements of it, or in other ways to prevent the mission from being achieved. Many military activities are inherently dangerous even without enemy involvement; friction compounds the difficulty. Even when a mission or task is successful, equipment may be lost and casualties taken. The nature of conflict means that military activity is seldom, if ever, risk-free.
- 9A-03.** Risk has different implications at different levels of operations, with actions taken at one level potentially incurring risk at another. Many contemporary operations are conducted in a context where there is a low tolerance of casualties. At the tactical level, to judge what is appropriate, commanders need to understand the **risk appetite** at the higher levels of command. For example, if there is little political appetite for casualties in an operation, then tactical actions that incur casualties can cause strategic risk. Conversely, if strategic risk might be caused by the failure of a particular mission, then tactical commanders may have to

51 Note that JDP 0-01 defines risk as having positive or negative consequences.

accept the risk of a greater loss of life to achieve it. Risk appetite is not fixed; it is contextually dependent and differs from one operation to another, as well as within a single operation. It will also differ between allied and coalition partners.

9A-04. There are two different types of **operational risk** that a land force and its commander face: risk to force, comprising its loss or damage to its Fighting Power; and risk to mission. These risks are not mutually exclusive; for example loss of Fighting Power can prevent achievement of the mission. Multiple, compound risks, where as one risk materialises it exposes a force to the others, are the most dangerous.

a. Risk to force.

- (1) The risk of **loss of the force**, or elements of it, is often associated with warfighting, but at low level in stability operations, the loss of a patrol or a sub-unit can be a risk (a risk with strategic consequences). There are many famous historical examples of this risk being accepted; the expedition to recover the Falkland Islands in 1982, and the Battle of Goose Green during that campaign are two examples. Of course acceptance of the risk does not guarantee operational success; at the Battle of Arnhem in 1944 a British airborne division which dropped behind German lines was destroyed as the corps due to link-up with it failed in its mission, with the result that a crossing over the Rhine was not achieved for several months. It is rare to knowingly accept a high risk of loss of part the force, unless it is the best or only way to achieve the overall mission and the context is such that the risk is tolerable.
- (2) The second risk to the force is that of **damage to Fighting Power**. In isolation this risk is the chance of casualties or loss of equipment and materiel with little risk to the overall force or the outcome of the operation. In combat, the risk of casualties is often high, even unavoidable. The degree to which this risk is acceptable depends on the circumstances. At a purely practical level, loss of equipment, materiel and personnel reduces the physical and moral components of the force's Fighting Power and damages the force's reputation. However, even if these losses are tolerable at the tactical level, they may be intolerable at the strategic level. Such situations require very acute judgement of appropriate risks by commanders and staff. They must fully understand the strategic context and risk appetite and ensure that operations are conducted accordingly. At the same time, they must not allow the force to develop such a protective mind-set that it cannot achieve the mission. Operational design must seek to protect this strategic vulnerability from attack at the tactical level.

b. Risk to mission. On its own, this risk is the possibility that the mission will not succeed, but there is no significant risk to the force. The risk might range in severity from the risk to a single task, to the risk that an entire campaign may fail. In these cases if the mission is imperative then the risk can only be mitigated by, for example, finding a different course of action, applying more resources, or finding some other way of changing the risk equation. If the mission or task is not imperative to achieving intent then it may not be worth carrying out the task or mission.

- 9A-05.** Some risks can be foreseen and so planned against; others cannot and arise through chance and friction, intrinsic to the nature of conflict. By thinking laterally and constantly updating their situational understanding, land forces will be better prepared when managing emergent risks. Foreseen or unforeseen, the **causes of military risk** fall into three broad groups – adversary actions, environmental factors and our own actions. These groups are not exclusive.
- a. In conflict, forces are in a contest with their adversaries and enemies; each side is seeking to create, identify and exploit weaknesses in the other side. All enemies and adversaries are intelligent, dynamic actors, directed by their command and control authorities and systems. They can be the cause of both types of risk: threatening the cohesion or even existence of the force or elements of it; or preventing achievement of tasks, missions or wider objectives.
 - b. Terrain, distance, climate, weather, disease and darkness are examples of environmental factors that cause friction. These factors can increase the probability of mission failure and attrition of the force.
 - c. Inappropriate actions can cause the force or elements of it to fail to achieve their objectives, or can increase its vulnerability to enemy action or environmental factors. These can be, for example, errors of judgement, planning, execution and resourcing, either independent of the enemy threat or environmental factors, or in relation to those threats. In some cases it may simply be bad luck, for example, an equipment failure, but more often the cause is either incompetence or a misreading of the situation.
- 8A-06. Risk management.** Ultimately the commander of any force, supported where applicable by the staff, is responsible for judging and accepting risk. This involves understanding in each case the potential causes, the likelihood or probability of the risks, their impacts and the context of operations. The key is to recognise the risks, mitigate the causes where possible, knowingly accept the residual risk, and where possible prepare contingency plans to deal with the causes and their consequences if required. Three factors warrant particular consideration when managing risk.
- a. **First, human beings can easily misjudge risk.** They can over- or under-estimate it or fail to notice it altogether, depending on the operational situation, group context and dynamics (for example, informed by unit culture) and individual personalities. Objective guides can be very useful, allowing the staff to identify, assess and track risks to act as a 'handrail' for commanders' decisions. At formation level, risk management tools, supported by operational analysis, can provide a useful, objective measure of risk; these are described in joint and lower-level Army doctrine. At the lower tactical levels, certainly at unit level and below, risk management is usually straightforward. Units usually operate in a formation context, so much of the risk management is done for them. In that context, units and sub-units identify and plan mitigation by using the combat estimate process, including wargaming and rehearsals. This allows concurrent considerations of risks and opportunities.

- b. Second, the least controllable cause of risk is other actors, particularly enemies. Environmental factors may be hard to overcome, but they do not fight back. Friendly causes involve the complication of human actions but the threat from this source can be mitigated. Mitigation measures include selection of appropriate commanders and staff, training and allocation of adequate resources. The enemy, however, actively seeks to cause casualties, prevent us achieving the mission, and if they can, to defeat or even destroy us. A passive, reactive approach cannot succeed in fully eliminating the enemy threat. The risk that the enemy presents can ultimately only be overcome by active measures. The Manoeuvrist Approach emphasises offensive action to seize and retain the initiative, compelling enemies and adversaries to respond to our actions. Stability operations also require us to take the initiative. Whenever there is a human threat, it is usually best to act to make the threat respond to our actions, rather than the other way round.
- c. Operating some capabilities (including, for example, helicopters) involves complex technical risks to life that can only be fully understood by qualified and experienced specialists. Defence places a personal duty on specific individuals to manage these **operating risks**, both in training and during operations. The commander must seek the advice of the duty holder or the delegated representative if the capability is to be employed in a way that increases the risk to life above the level that would be tolerated in routine activities. On operations, the commander judges whether the operational risk to the mission warrants acceptance of increased operating risk. Exceptionally, a commander may also decide to employ the capability without specialist advice if urgency precludes consultation.

ADP Land Ops **Chapter 10**



Sustaining operations



CHAPTER 10

Sustaining operations

Introduction

10-01. Sustainment is the business of maintaining the force. Through logistic and administrative support, it seeks to enhance the force's resilience and enable it to endure for as long as operationally necessary. It is hugely important to military success, as only forces that are adequately sustained can succeed. Sustainment is a key factor underpinning the concept of culmination.

A force that over-reaches itself will become increasingly unsustainable, and its tactical options will be reduced to the point of being ineffective. Throughout military history successful commanders have recognised this significance. As a divisional commander during the 1991 Gulf War, General Rupert Smith put it simply: "... a commander [should] only fight the battle he can sustain."

10-02. Before conducting operations commanders must ensure that they are able to deploy, sustain and regenerate their forces. They must understand the freedoms and constraints that sustainment provides including considering the implications of casualties and the consumption of materiel. They then plan, allocate and balance resources accordingly. Commanders also evaluate the risks to their sustainment assets and infrastructure, and then adapt their plans to reduce the impact of sustainment constraints while exploiting the tactical freedoms sustainment provides.

10-03. Sustaining a land force depends on strategic and joint operational level systems, processes and resources, but within the land environment at the tactical level it is fundamentally a land component responsibility. This chapter defines key terminology, and describes the philosophy and principles of land sustainment. It then introduces the functional groupings that sustain tactical land forces, before explaining how sustainment is planned and executed in the land environment.

Sustaining operations

- Introduction
- Terminology
- Philosophy and principles
- Functional groupings
- Planning
- Execution

Terminology

10-04. Given the inherently joint context of sustainment, adherence to joint and NATO terminology is important. See AAP-06 and JDP 4-00, *Logistics for Joint Operations* for further detail.

- a. Sustainability** is the ability of a force to maintain the necessary level of combat power for the duration required to achieve its objectives without culmination. It is a Principle of War.
- b. Sustainment** describes those logistic and administrative activities and resources necessary to sustain a force. It is a tactical function.

- (1) **Logistics** is the science of planning and carrying out the movement and maintenance of forces. Logistics comprises the development, acquisition, storage, movement, distribution, maintenance, recovery and disposal of materiel; transport of personnel, acquisition and construction; maintenance, operation and disposal of facilities; acquisition or furnishing of services; and medical and health services.
 - (2) **Administration** is the provision and implementation of regulations and procedures related to the management of an organisation in support of the accomplishment of the mission.
- c. **Combat service support** is the support provided to the force, primarily in the fields of administration and logistics. This term is usually used in reference to functional groups of logistic, health service, equipment, infrastructure and administrative support.

Philosophy and principles

- 10-05.** At the tactical level in the land environment, the British Army is guided by the **philosophy of land sustainment**. First, sustainment is central to Fighting Power; the capability of a land force depends on its sustainability. Second, sustainment is a means to an end. Sustainment should always support the mission, although there may be occasions where it is the mission, for example, in humanitarian assistance operations. Third, sustainment is everyone's responsibility; all members of the land force have an individual and collective responsibility for sustainment. Fourth, the agility of the force depends on agile sustainment, which in turn requires a support network rather than just linear supply chains. Finally, while sustainment requires specialist skills, those military personnel who provide sustainment are soldiers first and specialists second.
- 10-06.** The **principles of logistics** inform the planning and execution of sustainment by land forces. The descriptions of each principle reflect the context of tactical land forces, and so have been adapted from those of NATO which focus on operational level sustainment. NATO, joint and lower-level land doctrine describe complementary functional principles, relevant to specific forms of sustainment (for example, AJP-4.10, *Allied Doctrine for Medical Support* describes the fundamental principles of medical support.)

I told my staff that G2 existed to tell me what I should do to the enemy and when, G4 existed to tell what was possible given my constraints in supply and transportation. And then, when I had made my decision, G3 did it.

General Omar Bradley

The principles of logistics

- **Collective responsibility.** Collective responsibility requires all elements of the land force to share logistic information, capabilities and resources to support the force. Such cooperation combined with robust sustainment command and control provides the foundation for the flexible and efficient use of sustainment capabilities thereby contributing to operational success.
- **Authority.** When responsibility is assigned for the sustainment of forces, it must be accompanied with the appropriate level of authority to direct and control activities to achieve the sustainment required.
- **Primacy of operational requirement.** Sustainment effort is focused to meet the requirements necessary to support operational activity. Although prioritisation may be required, for example when preparing forces for theatre exit, the needs of operational activity come first.
- **Coordination and cooperation.** Cooperation and coordination in all sustainment activities including between civilian and military providers, will contribute to the best use of limited resources. Cooperation is best engendered through shared training, developing interoperability, team spirit and cohesion. It relies upon: mutual trust and goodwill; unity of purpose, if not command; and agreed understanding of responsibilities, freedoms and limitations.
- **Assured provision.** Commanders at all levels ensure the provision of sustainment resources to support the forces and capabilities allocated to them.
- **Sufficiency.** Sustainment is available in the necessary quantity and quality, when and where it is required throughout all types of operations and tactical activities.
- **Efficiency.** Efficiency involves achieving the maximum level of support for the least sustainment effort to make the best use of finite resources, the supply network and lines of communication. Logistic and administrative efficiency will ultimately determine the most appropriate operational structures and resources to support an operation.
- **Simplicity.** The complexity of sustainment activity demands a robust plan that is widely understood and that absorbs friction. Simplicity enables plans, systems and organisations to react well to the unforeseen.
- **Flexibility.** Sustainment must be adaptive and flexible to be effective. Adequate planning allows force elements to react in a timely manner to changes in the operational situation.
- **Visibility.** Commanders require timely, accurate and relevant information to make effective decisions and to plan and coordinate sustainment activity. Visibility of the wider force's support arrangements (for example, lines of communication and transit areas) will assist commanders in the planning and execution of operations.

Functional groupings

- 10-07.** There are five main combat service support **functional groupings**: logistic support, health service support, equipment support, infrastructure support and administration.
- a. Logistic support** links a deployed force to its sustaining nodes using four echelons: unit, formation, force or theatre, and the strategic base. The activities of logistic support groupings include the provision of materiel which includes the procurement, storage, management and configuration, assurance and distribution of supplies; the provision of movement to deploy a force and provide movement within a theatre; and a wide range of logistic support services which include enabling, health, safety, sanitation and other services directly in support of the maintenance of morale.
 - b. Health service support** contributes to the physical and moral components of Fighting Power through maximising, protecting and restoring the health of the force. It provides effective and timely treatment and, where necessary, evacuation of those who become ill and injured. When deployed, it provides the capability to manage casualties from the point of injury (or onset of illness) to definitive treatment. Health service support has logistic and administrative aspects and, apart from the furthest forward units, is usually planned and conducted as a joint capability.
 - c. Equipment support** seeks to keep the required quantity of operational equipment available to the force. This is achieved by the active management and maintenance of equipment and equipment components. Maintenance is organised into four levels which are determined by the complexity and engineering requirements of the task.
 - d. Infrastructure support** provides the operational estate which consists of operational and host nation infrastructure. Infrastructure includes fixed installations, fabrications, physical structures and facilities, including utilities. Infrastructure is built and sustained through engineering. This engineering is provided by a combination of a military construction force and contractors.
 - e. Administrative support** is the management and execution of all non-tactical military preparation and activity. It includes staff and personnel support; medical force preparation and preventative health service support; welfare support; provost support, including military police and investigative services; budget and financial advice; and civil and policy affairs advice.
- 10-08.** Within the tactical land environment, the force is sustained by a **support network**. This network has two features. First, it interconnects the primary lines of communication, making the supply chain more efficient and responsive. Logistic movement in a network is lateral as well as forward and back. Materiel and people are moved to and from points of need through a network of nodes and links. This requires an imaginative approach, exploiting alternative routes and unconventional means. This is only possible with shared understanding enabled by logistic information systems. Second, the support network is resourced through all available means, harnessing contracted, joint, allied and host nation capabilities alongside those of land forces as part of the whole force approach. The network will then be adaptive (able to adjust quickly to the loss of key nodes or routes) and agile (able to cope with rapidly changing demands). Early and comprehensive logistic planning, especially when operating over extended distances, is essential. It informs the likely logistic requirements, appropriate development of the support network and significantly influences the design of the entire operation.

Planning

- 10-09.** The sustainment estimate considers the logistic and the administrative requirements of an operational plan, including the requirements and structure of the support network. It is undertaken concurrently and in collaboration with the main estimate process and needs to be delivered in time for operational commanders to assess whether they need to adjust their plans. Guided by the philosophy of sustainment and principles of logistics, the sustainment estimate should include consideration of sustainment planning factors, sustainment reach and risks, and contractor support.
- 10-10.** Sustainment activity often has long lead times. An understanding of four key **sustainment planning factors** helps to predict requirements in order to meet them on time. These are known as the 'four Ds' – destination, distance, demand and duration. They apply to both troops and materiel.

Fighting Power, freedom of action and operational success rest on the sustainability of the force through every stage of a campaign, from force preparation through to redeployment and recuperation. A rigorous assessment of logistic realities is essential to operational planning; indeed, it is often the deciding factor in assessing the feasibility of an operational choice.

Principle of War – Sustainability

- a. **Destination** refers to the physical environment of the operation, including the degree of dispersion of the force. How the environment might affect equipment and personnel informs appropriate preventative measures.
- b. **Distance** refers to strategic, operational and tactical lines of communication, including the threats to them, their capacity and topography. These factors affect how troops and resources are deployed, and guide the design of the resupply and evacuation aspects of the support network.
- c. **Demand** is influenced by the type and grouping of the force requiring support, and its corresponding rates and amounts of consumption. Demand stems from the commander's intent and the tactical activities that it leads to. It has three elements.
 - (1) Steady-state demand represents daily sustainment needs that have little variation, such as predictable non-battle injuries or the consumption of rations.
 - (2) Cyclical demand represents additional needs to the steady state, caused, for example, by seasonal conditions.
 - (3) Surge demand is driven by increases in activity. It is the least easy to predict and the most susceptible to variation. Surge demand requires a network of responsive command systems, reserve stocks and a delivery capability able to switch between priorities.
- d. **Duration** refers to the length of the operation. This and the rate of demand inform the quantities of personnel and materiel required, and the need to rotate or replace them. Commanders must balance the risks of a rapid, lightly-supported operation against those of a better-resourced, more deliberate operation that takes longer to mount.

Logistics comprises the means and arrangements which work out the plans of strategy and tactics. Strategy decides where to act; logistics brings the troops to the point.

Antoine-Henri Jomini

- 10-11.** Commanders and staff must also consider **sustainment reach**. This defines the limit at which a force can assure sustainment. It requires an assessment of the optimum design for the support network required and the balance between directed logistics and stockpiling forward. Beyond this reach, a force may culminate, be cut off or become fixed, unless stockpiles are created. Reach is affected by the availability of stocks and movement assets as well as by the 'four Ds': destination by terrain, obstacles, and climate; distance by the length of the re-supply loop, dispersal of force elements and timeliness of casualty evacuation; demand by the type of operation; and duration by stock consumption. Reach starts in the sustaining base or node and ends where the item is used.
- 10-12.** In effective sustainment, concentration of resources at critical points is informed by a commander's designation of the main effort and may require risk to be taken elsewhere. In planning, two aspects of **sustainment risk** should be considered:
- a. Sustainment planning should assess where risks may be taken so as to achieve adaptability and agility while enhancing freedom of manoeuvre. This is done by expressing sustainment reach in terms of options available to the commander, with resulting constraints or freedoms. Excessive pessimism or attempting to over-insure should be avoided.
 - b. Reduction in the volume of stocks increases the vulnerability of supply to unforeseen circumstances. Sustainment assets have an easily identifiable signature and they operate along obvious lines of communication between potentially obvious nodes, so they need to be protected against detection and attack. They can be protected by enhancing their integral defence capability; using deception and camouflage; integrating them into a scheme of manoeuvre; or by allocating other forces to their defence.⁵²

⁵² Note that while the Geneva Conventions offer certain protection to medical facilities, this limits the level to which they can be camouflaged.

- 10-13.** Contractors and Defence agency personnel in the strategic base and on deployed operations are elements of the **whole force approach**. They can significantly enhance the ability to provide sustainment to the force. Their involvement releases finite military logistic resources and provides niche capabilities beyond military functional skills. Although the employment of deployed contractors will depend on the permissiveness of the environment, contractors will feature in the battlespace even during combat. To maximise the benefits of contractors and to minimise the risks inherent in their use, it is essential that they are integrated into the force at the earliest opportunity and under a clear commercial strategy. However, there will be constraints, such as contractual limitations; requirements to provide force protection; ability to coordinate contractor activities and influence their behaviour in the battlespace; and dealing with the risks of using them, not least that they might withdraw from operations.

The history of war proves that nine out of ten times an army has been destroyed because its supply lines have been cut off.

General MacArthur

Sustainment execution

- 10-14.** Sustainment execution consists of synchronised activity covering the overlapping stages of prepare, project, sustain and the restoration of combat power.
- 10-15. Prepare.** Sustainment preparation and pre-deployment activities include defining the requirements for lines of communication, developing a sustainability statement, preparing a force administratively and medically, and determining theatre and logistic command structures. The identification, acquisition and integration of urgent capability requirements and establishing the theatre entry standards of equipment is undertaken as early as possible. Early logistic planning allows the assessment of potential deployment areas, including infrastructure such as ports of disembarkation, road, rail and inland waterways, materiel and resources. It will indicate the potential for using host nation capability to support the force. Stocks are checked, configured and prepared for out-loading, including those required for reception, staging and onward integration (RSOI).
- 10-16. Project.** Projecting forces into a theatre establishes the lines of communication and the initial support network to receive and prepare incoming forces. It includes mounting, strategic deployment and RSOI. Enabling capabilities, such as reconnaissance, and movement teams, are among the first into theatre with the joint theatre entry operation. Stocks can be moved by air, sea or land to sustain the force. RSOI is normally provided by a joint force logistic organisation, another formation headquarters or the headquarters of one of its units. The land force commander is responsible for ensuring that RSOI is conducted effectively.
- 10-17. Sustain.** The type, range and scale of sustainment tasks will naturally differ depending on the nature of the force being sustained. However, the size of a force will not always be directly reflected by the scale and complexity of the support required, for example sustaining a small team operating in isolation and at reach can require considerable sustainment effort relative to its size. In general terms, establishing and operating the support network to sustain the deployed force involves a number of key activities.

- a. Sources of supply are located to support tactical activities and so ensure the supply and distribution of materiel, and the management of casualties. Assistance may also be required to support, for example, the redeployment of formations.
- b. Infrastructure and facilities are created to sustain the force in theatre. Their purpose is to link incoming units and formations with their equipment; carry out modifications; and deploy the force to its training, acclimatisation or operational locations. Infrastructure and facilities can then be used to sustain the force during operations. Logistic expertise is required to coordinate port, maritime, movements, supply, local purchase, fuel handling, catering, water, sanitation and engineering and construction tasks. These activities all contribute to Integrated Action: local employment may be created; resources are injected into the economy; and infrastructure improvements that benefit the force, should be designed to also benefit the local population wherever possible.
- c. Legal tasks include advice to the commander on International Humanitarian Law, ROE and targeting, the Regulatory and Investigatory Powers Act and detention. Finance tasks include the provision of civil secretariat assistance to funding and accounting.
- d. Interruption of operational sustainment by adversaries or the impact of the actions by actors should be expected. Dedicated forces may be required to protect nodes, installations and lines of communication.

10-18. Following combat, or at the conclusion of an operation, **restoring combat power** is enabled through the rehabilitation, reconstitution, redeployment and recuperation of the force.

- a. The **rehabilitation** of personnel and equipment and the **reconstitution** of units and formations may be required during and after combat or other types of operation. Rehabilitation and reconstitution usually take place in-theatre and the resources for rehabilitation are usually controlled at the operational level.
- b. When an operation has been concluded, the force (personnel, equipment and stocks) are **redeployed** back to the home base. Redeployment of the force is planned at the strategic level. Redeployment can be as simple as executing the deployment Force Element Table in reverse, or it can be a highly complex process. Regardless of the level of complexity, it is vital that redeployment is planned and correctly synchronised, with planning undertaken as part of the initial deployment process. Redeployment from operations includes recovery into a port of embarkation; clean-up and rehabilitation of equipment; repackaging of unused materiel; environmental clean-up; and movement back to a home base. An explicit theatre closure phase may be required, requiring additional logistic units to be deployed and an additional logistic unit headquarters to provide command and control for the theatre drawdown. Specific capabilities may deploy to help close locations, assist with drawing down support activities and provide specialist assets, skills and advice to redeploy personnel and materiel. Contractors may deliver this function when enabled through early planning and integration.
- c. **Recuperation** mainly takes place in the strategic base and is designed to bring force elements and materiel back to their pre-operational readiness level. It has two components:

- (1) **Recuperation of people** needs to be planned in detail during the operation and includes the rest, care and employment of casualties and care of the families of casualties. Recuperation also involves remembrance; recovery of the training foundation, particularly for those units who were deployed in new roles and need to revert to others; learning lessons from operations; and education and personal career development. Recuperation of people is an essential part of restoring the moral component of Fighting Power.
- (2) Recuperation is also the process by which unused stocks are inspected and returned for storage or disposal, depleted stocks are replenished, and materiel and equipment is returned to pre-operation standards and levels of availability. **Recuperation of materiel** is a complex activity that is likely to involve lengthy, in-depth planning, a considerable amount of time to execute and significant force elements and other resources to conduct. An attitude must be fostered across the force that the equipment that has served it on operations should be made ready immediately, before the force stands down, for future operations.

Whole force responsibility

10-19. Sustainment not just a matter for specialists: it is the business of everyone in the force. All professional soldiers should understand the nature of sustainment and the freedoms and constraints it provides so their operational intentions can become actionable plans, actions and effects. Two general requirements for individuals, teams and the chain of command flow from this.

- a. Every member of a land force requires sufficient **awareness** of how the force is sustained, logistically and administratively, to be able to contribute positively to both. At an individual level, this includes: doctrinal understanding; flexibility and pragmatism; anticipating needs; expressing requirements clearly; and sufficient familiarity with equipment and materiel to use them responsibly and efficiently.
- b. **Diligence** requires a consistent, conscientious level of attention to detail and care. It requires a professional attitude of mind that abhors waste, conscientiously maintains equipment, infrastructure and materiel, and is meticulous in administration.

Gentlemen, the officer who doesn't know his communications and supply as well as his tactics is totally useless

General George S Patton

Sustainment - Marlborough's March to the Danube 1704

The Duke of Marlborough is perhaps best remembered for his great victory at Blenheim in 1704 during the War of the Spanish Succession (1702-1715). But this victory was only possible because of the care given by Marlborough to the sustainment of his forces in the manoeuvres leading up to the battle.

In May 1704 a possible Franco-Bavarian invasion threatened to knock Austria out of the Grand Alliance against France. In a decisive move Marlborough led his army (one third British, two thirds German and Danish) on a surprise march down the Rhine from the Netherlands, so that with the Austrians he could pre-emptively defeat the invaders in Bavaria. He had to move his army of over 40,000 men more than 250 miles. In the 18th century, such long marches were seldom attempted, as they were so hard to sustain. Armies of that period typically used a system of wagon-based supply tied to static magazines. This made it difficult to sustain forces beyond about 60 miles from their depots. But Marlborough's march was superbly organised. One of his officers noted that "never was such a march carried on with more order and regularity, and with less fatigue to both man and horse." The Duke unshackled his army from the limitations of the existing supply system by utilising river supply, local contractors and political leverage. Supply officers preceded his army and organised the positioning ahead of the army of the necessary logistic support at key points along the march. These supplies were obtained by local contractors, who were well paid for their services, and through arrangements with local political authorities.

Marlborough's meticulous planning provided a series of wagon convoys which included nails, ropes, saddlery, medical supplies, bricks to make bread ovens, along with hundreds of ammunition wagons. Given the primitive transport systems of the time, the Duke and his staff worked wonders. Apart from the men's needs, Marlborough had to provide for 14,000 cavalry horses, 5,000 artillery horses and 4,000 draft animals. The horses alone needed 100 tons of oats a day to remain in good health.

Nothing escaped Marlborough's methodical eye. When the army arrived in Heidelberg, the infantry found fresh boots waiting for them. Weeks before, the Duke's funds had set local cobblers to work, resulting in 14 battalions being newly shod. In 35 days Marlborough's army had covered over 250 miles and linked up with Eugene's Austrians. Two weeks later they fought and won the battle of Blenheim forcing Bavaria to withdraw from the war and saving Vienna.

C.

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Glossary of terms

This glossary defines or describes key doctrinal terms used in ADP Land Operations. The sources of definitions are shown in brackets. Where the source is the Concise Oxford English Dictionary, the abbreviation COED is used.

For other terms used in this doctrine, readers should consult Allied Administrative Publication (AAP) 06, *NATO Glossary of Terms and Definitions*, Joint Doctrine Publication (JDP) 0-01.1, *UK Supplement to the NATO Terminology Database* and the *Staff Officers' Handbook*.

Action. A task performed by land forces to create a particular effect. (ADP)

Note: all actions have intended and unintended consequences.

Actor. A group or person that takes action or directly exerts influence. (ADP)

Adaptability. The ability to learn quickly, to adjust to changes in a dynamic situation, and to amend plans that, in the light of experience, seem unlikely to lead to a suitable outcome. (ADP)

Adversary. A group or person that seeks to prevent us from achieving our objectives. (ADP)

Note: this is consistent with the NATO definition of a party acknowledged as potentially hostile and against which the legal used of force may be envisaged. (AAP-06)

Attributes of land forces. An attribute is a quality or feature regarded as characteristic or inherent. (COED)

Note: Land forces have four attributes: people, presence, persistence and versatility. To be effective, land forces require additional qualities, of which adaptability is key.

Audience. All those relevant to the attainment of our objectives. (ADP)

Full spectrum approach. This term describes the coordinated actions of military and non-military actors in a NATO context, where the high level of integration achievable in a national operations may not be possible. For more information, see AJP 01 and JDP 05.

Cyber electromagnetic activities. This term describes the integration of activities in cyberspace and the electromagnetic environment, including cyberspace operations, electronic warfare and spectrum management operations. For more information, see JDP 0-50.

Cyberspace. An operating environment consisting of the interdependent network of digital technology infrastructures (including platforms, the Internet, telecommunication networks, computer systems, as well as embedded processors and controllers), and the data therein spanning the physical, virtual and cognitive domains. (JDP 0-50)

Domain. A sphere of activity or knowledge. (COED)

Note: UK joint doctrine describes three domains— physical, virtual and cognitive. Domain is not a NATO term. In US Army doctrine, domain refers to what NATO and UK describe as an environment.

Effect. A change which is a result or consequence of an action or other cause. (COED)

Enemy. A group or person that seeks to defeat us through armed lethal means. (ADP)

Environment. The surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna humans and their inter-relations. (AAP-06)

Note: from a military perspective, environments include maritime, land, air and space, and cyberspace.

Full spectrum approach. The approach taken by UK government departments to ensure that the UK's national power is coherently applied. The term 'full spectrum' (as opposed to NATO's 'comprehensive') implies a greater level of collaboration which may not always be possible during coalition operations. For more information, see JDP 0-01.

Functions of land power. This doctrine describes four functions of land power: fight, engage, secure and support. These functions can be exercised independently or in combinations. They are broadly aligned with the NATO operations themes.

Hybrid warfare. The application of conventional and unconventional forms of conflict, using both attributable and non-attributable means. (ADP)

Integrated Action. The Army's unifying doctrine. For more information, see Chapter 4.

Interoperability. The ability to act together coherently, effectively and efficiently to achieve tactical, operational and strategic objectives. (AAP-06)

Joint action. The deliberate use and orchestration of military capabilities and activities to affect actors' will, understanding and capability, and the cohesion between them to achieve influence. (JDP 3-00)

Land power. The ability to exert control within the land environment and to influence the behaviour of actors and the course of events. (ADP)

Leadership. A combination of character, knowledge and action that inspires others to succeed. (Army Leadership Doctrine)

Manoeuvrist Approach. The Army's fighting doctrine for the tactical level. For more information, see Chapter 5.

Mission Command. The Army's command philosophy. For more information, see Chapter 6.

Objective. A clearly defined and attainable goal for a military operation. (AAP-06)

Operations process. The process by which commanders and staff conduct planning and execute the plan. (ADP)

Note: activities within the process include: assessment, planning, preparation and execution.

Operations themes. The general conditions of the operating environment and the main activities which the force will be required to conduct. (AJP-01)

Note: there are four themes – warfighting, security, peace support and defence engagement. This doctrine uses the term defence engagement instead of NATO's peacetime military engagement.

Outcome. Joint doctrine defines a desired outcome as a favourable and enduring situation, consistent with political direction, reached through intervention or as a result of some other form of influence. (JDP 01)

Note: in land operations, where appropriate to the tasks assigned and the resources available, outcomes are described in terms of changed or maintained behaviours. NATO does not define the term outcome.

Risk. A possibility of a negative outcome in relation to the force or mission. (ADP)

Tactical activities. There are four groups of tactical activities – offensive, defensive, stability and enabling. Tactical activities were formerly described as tactical actions.

Tactical functions. These describe the full breadth of a land force's activities when conducting operations. They are: command, intelligence, manoeuvre, fires, information activities, capacity building, protection and sustainment.

Types of operation. A sequence of coordinated actions with a defined purpose. (AAP-06)

Note: there are a number of types of operation. This doctrine categorises combat, stability, and military aid to the civil authority as types of operation. Stability operations (which NATO describes as crisis response operations) and military aid to the civil authority are UK terms. Types of operation were formerly described as military activities.

Understanding. In the context of decision-making, understanding is the perception and interpretation of a particular situation in order to provide the context, insight and foresight required for effective decision-making. (JDP 04)

Whole force approach. UK Defence places human capability at the heart of its decision-making and ensures that Defence outputs are delivered by the right mix of capable and motivated people. For more information, see JDP 0-01.

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