INTRODUCTION

1. This topic brings out the importance of orchestrating warfighting operations, the tools, additional frameworks and considerations for doing so. Once a commander understands the desired outcomes and the audience they need to influence, they assess the objectives that need to be achieved, and the effects they must create. In visualizing 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.

2. The operational and tactical frameworks are closely related. 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 operations at the battlegroup level (which are relatively well bounded in terms of time, space and purpose), the tactical framework is the norm. It is also used at higher levels for specific tasks. For more complex or enduring missions, the operational framework has broader applicability, from subunit level upwards.
AIM

3. The aim of this discussion is to introduce to students of the Senior Command and Staff Course to Orchestrating of Operations.

LEARNING OBJECTIVE

4. By the end of this presentation, students should be able to understand the importance of orchestrating warfighting operations, and the tools, additional frameworks and considerations for doing so.

SCOPE

5. The presentation will cover the following:

a. Operational framework.
b. Tactical framework.
c. Geographic framework.
d. Physical, virtual and cognitive dimensions.
e. Combined, joint, inter-agency, intra-governmental or multinational (CJIIM).
f. Organization of warfighting forces.
g. Types of warfighting forces.
h. Tactical functions.
i. Commanding warfighting operations.
j. Sustaining warfighting operation.

CONDUCT

6. The discussed is programmed for two periods. Emphasis should be on the different warfighting frameworks, the warfighting forces involved and how to command warfighting operations. It is recommended that the discussion be conducted as follows:

a. Clarify matters arising from reading and presentation- 10 mins.
b. Discussion and questionnaire- 70 mins.
c. Sum up- 10 mins.

7. The Questionnaire (See Annex A) has been arranged in such a manner that it logically follows the subtopics as encompassed in this study guide.

**OPERATIONAL FRAMEWORK**

8. The operational framework comprises decisive, shaping and sustaining actions underpinned throughout by a constantly refreshed understanding of the environment. At any level of command, it describes how the missions and tasks of subordinates interact in terms of their purposes, and in their contribution to decisive actions essential to the achievement of the mission. Actions to understand, shape and sustain, support those that are decisive and often endure throughout an operation. By applying the operational framework, commanders and staff ensure a balanced concept of operations and a clear and unambiguous main effort.

**TACTICAL FRAMEWORK**

9. The tactical framework is a simplified version of the operational framework. It is based on the four core functions: FIND, FIX, STRIKE and EXPLOIT. The tactical framework is designed for use against an enemy in combat, 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; which are 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 to follow.
10. The way in which operations in the land domain 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 relative to the close battlespace of operations in and around the main forces of a formation. Geography in the land domain is important because it describes where operations take place, and the terrain, and who controls it, can be key (or even vital) to operational success. Even in a non-linear battlespace, the concepts of deep, close and rear, give a sense of range and proximity and aid understanding. When used in combination with the operational and tactical frameworks, they provide a powerful method of visualizing, organizing and integrating activity. Any or all of the activities described by the tactical functions can be applied anywhere in the geographic framework.

a. **Deep Operations.** 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, 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.** 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, deception, direct fire and rapid manoeuvre.

c. **Rear Operations.** 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.
PHYSICAL, VIRTUAL AND COGNITIVE DIMENSIONS

11. Commanders will achieve their intent through the conduct of lethal and non-lethal actions in the physical, virtual and cognitive dimensions. Each domain is defined as follows:

   a. **The Physical Dimension.** The sphere in which physical activity occurs and where the principal effects are on capability. Physical dimension considerations include geography, terrain, infrastructure, populations, distance, weapons ranges and effects, and known enemy locations. They also include other related factors that influence the use of friendly or enemy capabilities, such as climate and weather. When considering the physical dimension, commanders and staffs should not restrict thinking to the land domain in isolation.

   b. **The Virtual Dimension.** The sphere in which intangible activity occurs, such as the generation, maintenance and transfer of information. The principal effects are on understanding. The internet is part of the virtual dimension. Virtual dimension considerations are concerned with activities and capabilities in cyberspace with commanders (supported by national assets) assigning priorities for what should be targeted as well as protected. In warfighting, the virtual dimension may be used by the enemy to transfer messages and ideas which can energize the causes for which they may fight.

   c. **The Cognitive Dimension.** The sphere in which human decision making occurs as a product of assimilated knowledge acquired through thought, experience and sense. The principal effects are on will and understanding. Cognitive dimension considerations are focused upon the decision making, perceptions and behaviour of the enemy, the local population and friendly forces. Military information activities (predominantly media and information operations) are the primary tools for operating in the cognitive dimension, but can also incorporate a wide range of non-military methods and actors, including commerce, finance, counter-corruption and proxy forces.

**COMBINED, JOINT, INTER-AGENCY, INTRA-GOVERNMENTAL OR MULTINATIONAL (CJIIM)**

12. Combined arms interoperability and the relationships between components and capabilities are
essential to the land warfighting force. No single force element can win in isolation, so interoperability is a prerequisite for success.

11. Interoperability with CJIIM elements is a fundamental consideration for all operations. The level of interoperability will be appropriate to the level of command; at brigade and battlegroup level fewer CJIIM elements are found whereas more can be expected to be present at the division and corps. CJIIM elements are described below:

a. **Combined.** A combined operation is one where force elements of two or more allies participate, possibly within a coalition, e.g. a Malawi Battalion in a Southern African Development Community (SADC) BDE.

b. **Joint.** Joint refers to activities, operations and organizations where the force elements of at least two services participate. For land forces conducting warfighting this is predominantly participation with the air and maritime components.

c. **Inter-Agency.** Inter-agency refers to cooperation between elements, including government departments and intelligence agencies (from both Malawi and coalition allies), non-governmental organisations (NGOs), international organisations (IOs), humanitarian groups, private military and security companies, as well as contractors. The range of agencies present in the battlespace will change as an operation develops. Key government agencies will plug in at the appropriate command level while liaison with NGOs may be less formal and may even be conducted through a third party.

d. **Intra-Governmental.** Intra-governmental organizations are created by international agreements. They include, among others, the United Nations (UN), the SADC and the African Union (AU) and could involve deployed forces.

e. **Multinational.** Multinational describes activities, operations and organizations in which forces or agencies of more than one nation participate. Future warfighting operations are highly likely to be multinational. Multinational operations bring many advantages, such as burden sharing, through to campaign legitimacy, but have significant implications for understanding and interoperability, which must be comprehended and mitigated.
13. CJIM elements can be represented at multiple levels of command. The presence of some CJIM elements during warfighting operations will depend on the context, and on the threat to those elements. In some cases, it may be appropriate (and possible) for some CJIM elements to operate forward – such as in the provision of humanitarian assistance and other rapid stability activities, but this may not always be the case. Some CJIM elements may prefer to operate from a location separate to the military, requiring the provision of LOs. It is likely that CJIM elements will have bespoke authority, accountability and command procedures.

14. The differences may be acute, with serious implications for decision making and operational tempo. Understanding these differences, including where decisions can be informed and shaped, is key to collective effort.

ORGANISATION OF WARFIGHTING FORCES

15. Warfighting forces are generally structured hierarchically into formations, units and subunits and categorized by function, type and specialist capabilities. They are organized operationally by combining arms to form a cohesive and versatile whole. Different levels of command have different responsibilities. The headquarters of battlegroups, brigades, corps and divisions are not simply bigger versions of their own levels, the represent characteristics of each level as below:

a. **Land Component Command Headquarters (LCC HQ).** The Malawi Army HQ is the senior land headquarters, coordinating the efforts of tactical warfighting formations toward the achievement of operational objectives and end-states. A corps or division can also assume the role of the LCC HQ, as the single focal point for the integrated and synchronised land force of a joint task force (JTF). Its role is to exercise command and control of land operations to be planned and executed within the JTF’s overall campaign plan. In this circumstance, the LCC HQ functions as a tactical-level headquarters and is the link between the operational and tactical level. The LCC employs land forces (usually a number of corps), supported by or supporting maritime and air forces when necessary. Its aim is to deliver military tactical actions, which contribute to the achievement of desired operational objectives and decisive conditions which, in turn, lead to the attainment of the operational end-state.

b. **Corps.** A corps commands multiple divisions together with functional and
multifunctional brigades. A corps synchronizes its divisions enabling land maneuver across deep, close and rear operations (commanding current battles, shaping in depth and time, prioritizing resources and task-organizing force elements) to support and sustain the corps scheme of maneuver in order to meet the operational design. A corps headquarters may be multinational and is capable of operating as the JTFHQ, an LCC HQ; it is therefore also capable of delivering the operational art required in warfighting. A Corps headquarters is expected to be staffed and commanded by officers with greater experience than those at lower levels with sufficient depth of expertise to plan and execute concurrently.

c. **Division.** A division fights the deep battle (to shape the enemy and set the conditions for success in close operations), resources the close battle (directs, enables and sustains brigade activity) and protects the rear area (to sustain the division). The division is the lowest level where operational art is practised. It is at the divisional level where the range of capabilities and a balance of arms not routinely found at subordinate levels delivers ‘the smallest formation that is a complete orchestra of war’. A division may command up to five brigades (the basis of a division’s combat capability) within a corps, JTF or theatre framework, coordinating the provision of essential combat support and combat service support to enable the brigades to manoeuvre. A division headquarters is designed to be integrated, scalable, modular and capable of distributed command and capable of planning and executing operations simultaneously. It is at the divisional level where the expertise from CJIIM elements is routinely integrated.

d. **Brigades and Battlegroups.** Brigades and battlegroups deliver manoeuvre and focus on winning single tactical actions in close operations; defeating or destroying enemy capability and seizing and holding ground. CPs must be mobile in order to keep up with the fight and to improve their own protection, as they will usually be in range of all types of indirect fire and often at risk of direct fire attack. Brigades and battlegroups need assistance from intelligence, sustainment, fires and information activities assets, either in terms of shaping the battlefield in advance and in depth, or in supporting manoeuvre. The brigade is likely to be enabled and supported by divisional assets. These may include additional manoeuvre units, aviation and aviation planning support for specific tasks, ISR capabilities, air defence, engineers, CIS support, CEMA capabilities, additional CSS, and fires. These assets may operate under direct command of the division to set the conditions for brigade activity, or they may be grouped to the brigade at specific command states for specified periods of time. Where brigades are
expected to integrate with others as part of a divisional battle, their CS and CSS assets should be able to fold coherently into the division’s plan. The division may direct that, forces are detached from the brigade to support other activity in the divisional AOO. It is not normal for brigades to hold close support artillery under command but they can expect to be supported by an affiliated artillery tactical group headed by the CO of a close support regiment which is placed OPCON or OPCOM to the brigade and is integral to the brigade staff. Brigades are reinforced with artillery as required. A brigade has the capacity to plan and execute operations simultaneously. The fundamental benefit of the battlegroup is the synergy generated by a combined arms grouping tailored for a specific mission. For task organisation to occur the battlegroup must be able to regroup easily by day and night and have common battlegroup and subunit drills which will allow the successful regrouping and employment of the redeployed elements. The battlegroup is the basic unit of tactical manoeuvre within a brigade therefore these drills should be common across the parent brigade as a minimum. In warfighting, a battlegroup is not structured or manned to concurrently plan and execute operations without augmentation. The planning and execution of operations is usually conducted sequentially within the brigade scheme of manoeuvre.

**TYPES OF WARFIGHTING FORCES**

16. Warfighting forces are also distinguished by their force type, described as heavy, medium or light, and includes specialist capabilities such as ISR, air manoeuvre, amphibious, and capacity building forces. Combined arms groupings generally comprise more than one force type, but with one being predominant. These force types are task-organised for specific roles or tasks. In creating a force of a particular type, force design has to strike a balance between firepower, protection, mobility, and logistic demand. All forces are strategically mobile. They can go by sea or in the case of light forces, by air, anywhere in the world. Heavy, medium and light forces are described below:

a. **Heavy Forces.** The forces with the most firepower and protection tend to be equipped with heavy armoured vehicles. The firepower of a heavy force, combined with its mobility, can create a significant shock effect on the enemy. Heavy forces have the following characteristics:

   (1) **Firepower.** Heavy forces have the most integral firepower. Armour destroys
enemy armour and can defeat well prepared and hardened defensive positions. Armoured infantry vehicles can destroy enemy AFV, mechanised and light vehicles. All heavy forces can support dismounted infantry.

(2) **Mobility.** Heavy forces maximise firepower and protection which limits operational mobility due to high logistic demand. Tactical mobility is excellent enabling heavy forces to manoeuvre rapidly however, combat support, particularly engineers, and combat service support elements require compatible mobility in order to keep pace.

(3) **Protection.** The protection afforded to heavy forces increases its survivability when closing with the enemy, and enables the exploitation of mobility and firepower to achieve shock; in dense, complex terrain heavy forces require close support and security from dismounted infantry.

(4) **Sustainment.** Due to its high demand on combat supplies and intensive maintenance schedules, detailed CSS planning is required to sustain heavy forces.

b. **Medium Forces.** Medium forces are flexible forces that may be employed for a wide range of tactical tasks. If wheeled, medium forces will have greater operational mobility than heavy forces but less strategic mobility than light forces. Medium forces can include a wide array of vehicle types and capabilities. Medium forces can be grouped with heavy forces, given their mobility, or used to enhance light forces with additional 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, high levels of mobility can enable dispersion which enhances force protection and security. It also allows for the rapid concentration of forces maximising surprise and generating decisive effect. Medium forces have the following characteristics:

(1) **Firepower.** Medium force vehicles allow for the transportation of a range of support weapons. Vehicle-mounted support weapons may also be available for close support to dismounted troops. In warfighting, the availability of anti-tank weapons will
be critical.

(2) **Mobility.** Medium forces can be transported by tactical and strategic airlift, which make them well suited to being an entry force into a new theatre of operations. A medium force, particularly when equipped with integral wheeled fighting and support vehicles, allow for significant operational mobility. Modern, wheeled medium forces have excellent tactical mobility combining rapid road movement with capable cross-country mobility.

(3) **Protection.** Medium forces’ protection varies with the type of vehicle and system used; it is often the scalable, with the addition of appliqué armour. Medium force vehicles are more susceptible to light, hand-held antiarmour weapons.

(4) **Sustainment.** Although they are lighter than heavy forces, medium forces still require the regular resupply of bulky combat supplies.

c. **Light Forces.** Light forces are those optimised for dismounted operations and operations in close terrain and may be equipped with light vehicles. Light forces have the following characteristics:

(1) **Firepower.** Light forces when dismounted, carry their personal and support weapons but not normally for extended distances. Support weapons include heavy machine guns, automatic grenade launchers and anti-tank weapons.

(2) **Mobility.** Light forces are enormously flexible and can go anywhere that human beings can go; into mountains, forests, marshes, buildings, caves or subterranean structures. When light forces are supported by aircraft or vehicles they can go anywhere within a theatre very quickly with little preparation, but operational range is limited without sufficient lift.

(3) **Protection.** Light forces gain protection through the use of complex and close terrain, dispersion, concealment, rapid manoeuvre and field defences or fortifications. Because they lack armour protection, light forces can be vulnerable to fires.
(4) **Sustainment.** Light forces have fewer sustainment requirements than medium and heavy forces and are often trained to be self-sufficient. The resupply of light forces must be carefully considered as they cannot carry extensive combat supplies unless mounted in light vehicles.

**TACTICAL FUNCTIONS**

17. The tactical functions represent 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. The tactical functions help to organise activities into understandable groups and few, if any, stand alone. A larger force, with a greater mix of capability and CJIIIM representation, is more likely to conduct significant activity under every tactical function. Corps and divisions are designed to conduct activity under all the tactical functions simultaneously. Subordinate forces may be able to conduct activities under specific tactical functions to great effect, or all the functions to a lesser degree.

**COMMANDING WARFIGHTING OPERATIONS**

18. The following supports command in operations:

a. **The Principles of Command.** The five principles of command are; unity and continuity of command, a clear chain of command, a command structure, and the employment of mission command (the MDF’s command philosophy).

b. **The Role of the Commander.** The role of a commander is to make decisions regarding the actions of forces under command, to lead those forces and to control them. The commander must make decisions at a pace that contributes to the generation and maintenance of tempo and in a way that achieves success. The commander exists to make things happen and does this in two primary ways; through leadership and through decision making.

c. **Preparing for Warfighting.** Prior to the commencement of operations, the commander directs, trains and prepares the forces under command, and ensures that sufficient resources are made available. The training of subordinates is a key responsibility of all commanders in peacetime which, if neglected or under-resourced, will undermine the
operational capability and fighting power of the Army. Professional development includes evoking an interest in the conduct of war through the critical study of past campaigns and battles, in order to learn relevant lessons for the future.

d. **Command in Battle.** Command in battle requires the application of doctrine guided by the principles of war. At the tactical level, a commander is concerned with winning battles and engagements in accordance with the overall campaign plan. The commander should seek to defeat the enemy quickly and at minimum cost, while maintaining the moral and material wellbeing of their troops. Ultimately, a tactical commander’s focus should be on defeating the enemy through an understanding of the ground, effective and timely decision making and the coordination of combined arms and joint fires on the battlefield. The commander should appreciate that battle will generate fear and uncertainty and is likely to incorporate an element of luck or misfortune, while understanding that the friction of combat means operations will rarely unfold as planned; however carefully they are anticipated and rehearsed.

e. **The Role of the Staff.** The staff assists and supports the commander in making and implementing decisions. It has no authority in itself, but derives authority from, and exercises it in the name of, the commander. All activities of the staff are undertaken on behalf of the commander. Regardless of the level of command, the staff has a duty to support, advise and caution the commander and to support subordinate formations and units. The staff must also keep the wider force informed (higher, flanking, agency, allied, and partner); this is essential to delivering unity of effort, mutual understanding, and shared situational awareness.

f. **Information Services.** Managing the force’s information as a resource and establishing and maintaining assured information to the point of need, is critical to the command of successful operations. A coherent, robust and secure network of information services.

**SUSTAINING WARFIGHTING OPERATIONS**

19. Before conducting operations the commander must ensure their force is able to train, maintain, prepare, deploy, sustain and regenerate. They should understand the freedoms and constraints that sustainment provides, while considering the implications of casualties and the consumption of
materiel. They should plan, allocate and balance resources accordingly. The commander must also evaluate the risks to sustainment assets and infrastructure, and adapt their plans to reduce the impact of sustainment constraints, while seeking to exploit the tactical freedoms sustainment provides. A commander should therefore:

a. Involve sustainment advisers before, and throughout, the planning process. The success of a commander’s pre-deployment reconnaissance is likely to depend on the inclusion of these personnel.

b. Ensure the plan is realistic and accept some sustainment risk if required.

c. Bear in mind the sustainment needs of subsequent operations.

d. Where identified, include sustainment requirements in warning orders.

e. Ensure that the sustainment staff and units are informed of the concept of operations, main effort, sustainment priorities, and subordinate missions/tasks at the earliest opportunity.

**CONCLUSION**

20. In conclusion, orchestrating operations requires commanders and staff at all levels to be clear about the outcome they are seeking and analyse the audience relevant to the attainment of their objectives. They then identify the effects they wish to generate for 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, intra-governmental, inter-agency, non-governmental, private sector and multinational actors involved in the operation. What is important is to work out how to synchronise and orchestrate all the relevant levers to generate effects onto the audience to achieve the outcome.

**Annex A.** Questionnaire.