

## CHAPTER 3

### STAFF PLANNING & MILITARY DECISION MAKING

#### References

FM 3-0, Operations, 14 June 2001

FM 100-10, Combat Service Support, 3 October 1995 <sup>1</sup>

FM 101-5, Staff Organization and Operations, 31 May 1997

USALMC Support Operations Course Military Decision-Making Process Phase II Handbook, January 1999,

<http://www.almc.army.mil/TLLDD/ALMC-SO/Phase II Book/INTROTOC.HTM>

#### Objectives

- Understand the different staff positions, their duties and responsibilities.
- Comprehend the Military Decision-Making Process (MDPM) and how to use it.
- Know what is required to develop a PERSONNEL or LOGISTICS ESTIMATE.
- Identify what is required in Paragraph 4 of an OPLAN or OPORD.
- Develop those elements considered vital to a Concept of Support Briefing.

#### Introduction

Commanders, no matter how talented, smart, or capable cannot be everywhere, gather all needed information, or know everything in order to make an informed decision. While some commanders may think this is possible, the good ones know that they need to rely on the support of highly trained and capable staff officers. To support their decisions, commanders rely upon information, advice and recommendations of the staff.

A staff, at any level in any organization, is there to assist the commander in making and executing decisions. Each staff member must know their duties and responsibilities in detail, and must be familiar with the duties and responsibilities of other staff members. Working together, a staff can develop recommendations for plans, policies, and procedures for the commander.

With the increase in technology a staff officer must be able to recognize and anticipate battlefield activities in order to decide and act faster than the enemy. He must be able to take battlefield information/**situational awareness** (realizing something is happening) and convert it to **situational understanding** (knowing what is going on) and then process it to **situational dominance** (how to take advantage of the situation and beat him) quicker than his adversary. This entire process achieves informational dominance that is a cornerstone of Joint Vision 2020 (JV 2020)

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<sup>1</sup> FM 100-10 is under review and will be reissued as FM 4.0; details to be confirmed.

## Staff Types and Groups

Staffs at every level of command are structured differently, but there are a number of commonalities. The basic model for all staff structures includes a chief of staff (CofS) or an executive officer (XO) and three staff groups: coordinating, special, and personal. The number of coordinating, special, and personal staff officers within each staff group varies depending upon the level of the command.

The CofS or XO is the commander's principal staff officer. At Brigade or Group level and below, the XO serves as the **Deputy Commander**, at Division and higher an officer is specifically appointed as the deputy commander. The CofS/XO's job is to manage the coordinating and the special staffs. By overseeing the staff, the commander is free to focus on fighting and winning the battle with the confidence that the staff will support him. An example of staff groups is shown at Figure 3-1 below.

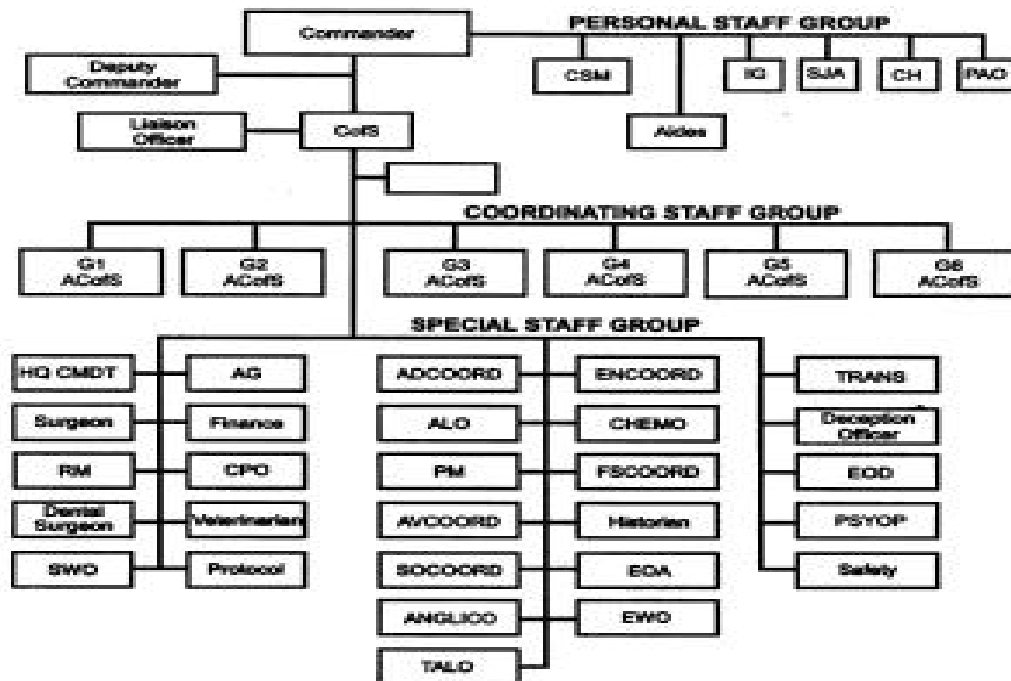


Figure 3-1. Example of Staff Structure

## Staff Duties

Coordinating Staff Group – These officers are the commander's principal staff assistants and are directly accountable to the CofS/XO. They are responsible for one or a combination of broad fields of interest. They help the commander coordinate and supervise the execution of plans, operations, and activities. Collectively, through the CofS/XO they are accountable for the commander's entire field of responsibilities.

A coordinating staff officer's authority is limited to advising, planning, and coordinating actions within his field of interest. He also coordinates and integrates appropriate special staff officer activities into operations. The commander might also give a coordinating staff officer added authority to act on specific matters within his field of interest. Unit SOP's or organization and functions manuals give procedures that specify primary responsibilities and requirements for coordination.

Coordinating staff officers are responsible for acquiring information and analyzing its implications for and impact on the command. More important, coordinating staff officers must provide timely and accurate recommendations to the commander. While doing so, coordinating staff officers must often request and receive information and recommendations from special staff officers. However, they must be sure to inform all other coordinating staff officers, as required. Though not exhaustive, Figure 3-2 provides a broad list of duties performed by a staff officer.

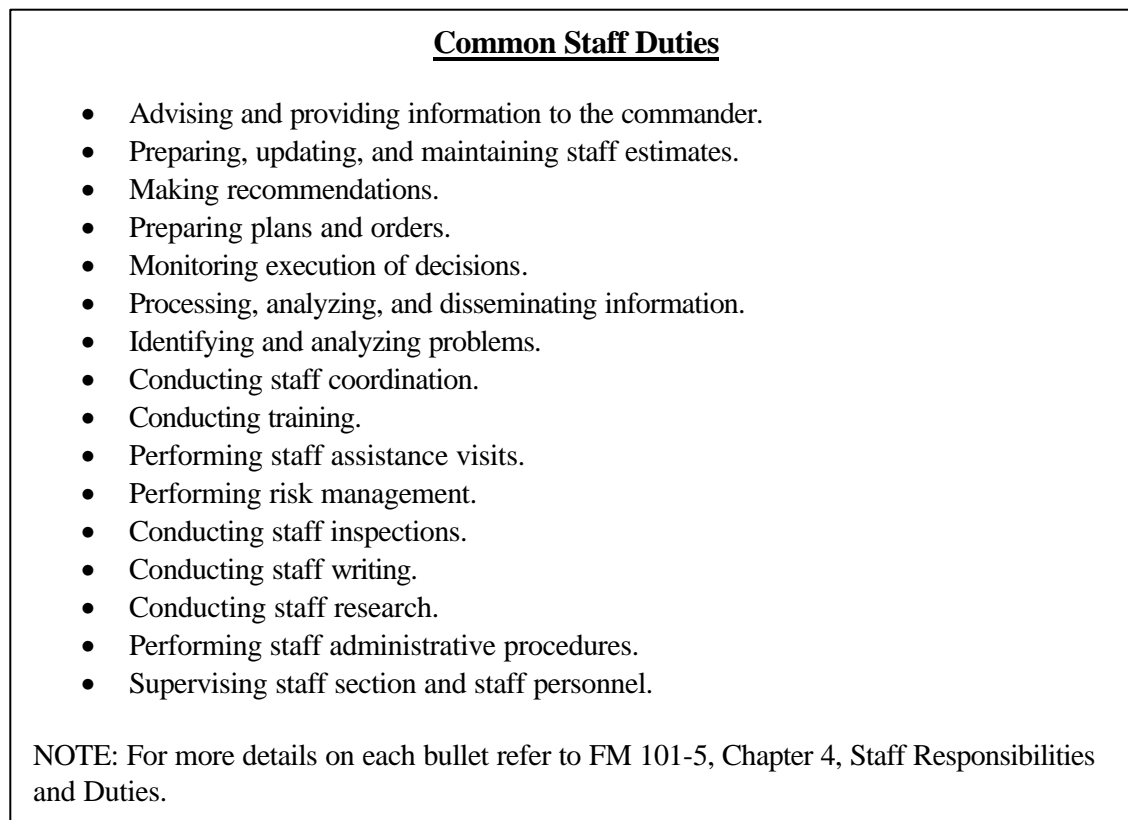


Figure 3-2. Staff Officer Duties & Functions

**Special Staff Group** – These officers help the commander and other members of the staff in their professional or technical functional areas. The specific number of special staff officers and their duties vary at each level of command. Special staff sections are organized according to functional areas. For example, the fire support coordinator (FSCOORD) staff officer specifically coordinates that function alone. In certain cases, a special staff officer may be a unit commander, e.g., a Division Artillery Commander or an Engineer Brigade Commander at division or corps.

The commander assigns responsibilities to specific coordinating staff officers for each of the special staff functions. Although special staff sections may not be integral to a coordinating staff section, there are usually areas of common interest and habitual association. Therefore, a coordinating staff officer might be responsible for coordinating a special staff's actions. For example, at division level, the G3 coordinates all matters relating to fires and engineers with the FSCoord, the engineer coordinator (ENCOORD), the air/naval gunfire liaison company (ANGLICO) commander, and the aviation coordinator (AVCOORD), and the air liaison officer (ALO).

Personal Staff Group – The personal staff members work under the commander's immediate control. They also may serve as special staff officers as they coordinate actions and issues with other staff members. When performing special staff officer duties, personal staff officers may work through the CofS or under a specific coordinating staff officer for coordination and control purposes. Members of the personal staff include –

- Personnel specifically authorized by the TOE or TDA as personal assistants, such as sides-de-camp.
- Personnel the commander desires to supervise directly.
- Personnel, who by law or regulation, have a special relationship to the commander.

Typical personal staff members include the command sergeant major (CSM), chaplain, inspector general (IG), public affairs officer (PAO), surgeon, dentist, and staff judge advocate (SJA). Members may perform some duties as personal staff officers and some as special staff officers or members of a coordinating staff section. For example, the SJA is also responsible for his staff section's operations.

## Staff Activities

Staff activities focus on the purpose of the staff – to assist the commander. This is accomplished mainly by staff contributions to the timely making and executing of decisions. The commander and staff should be continually alert to opportunities to streamline cumbersome or time-consuming procedures. Staff activities must contribute to mission accomplishment and the procedures employed must be the means to accomplish the mission in an effective manner – not ends in themselves. The broad staff functions are given at Figure 3-3.

Assistant Chief of Staff, G1 (S1), Personnel – The principal staff officer for all matters concerning human resources (military and civilian), which include personnel readiness, personnel services, administrative support, and headquarters management. A personnel officer is located at every echelon from battalion through corps **to theater**.

Assistant Chief of Staff, G2 (S2), Intelligence – The principal staff officer for all matters concerning military intelligence (MI), counter intelligence, security operations, and military intelligence training. An intelligence officer is located at every echelon from battalion through corps **to theater**.

**Broad Staff Functions**

- Personnel (G1 / S1)
- Intelligence (G2 / S2)
- Operations and training (G3 / S2)
- Logistics (G4 / S4)
- Civil-military operations (G5 / S5)
- Signal operations (G6 / S6)
- Resource Management (RM)
- Support Operations (SPT OPS)

NOTE: At Brigade level and below, staff positions are designated S-1, S-2, etc., with corresponding duties; they referred to as a unit staff and designated - S staff. At Division and above, the staff is referred to as the **general staff** and is designated accordingly - G staff.

Figure 3-3. Staff Duties and Responsibilities

Assistant Chief of Staff, G3 (S3), Operations – The principal staff officer for all matters concerning operations and plans, training, and force development and modernization. An operations officer is located at every echelon from **battalion through corps to theater**.

Assistant Chief of Staff, G4 (S4), Logistics – The principal staff officer for coordinating the logistics integration of supply, maintenance, transportation, and services for the command. The G4 (S4) is the link between the support unit and his commander plus the rest of the staff. The G4 (S4) assists the support unit commander in maintaining logistics visibility with the commander and the rest of the staff. The G4 (S4) must also maintain close and continuous coordination with the G3 (S3). A logistics staff officer is located at every echelon of command from battalion through corps.

Assistant Chief of Staff, G5 (S5), Civil-Military Operations – The principal staff officer for all matters concerning civil-military operations (the civilian impact on military operations and the impact of military operations on the civilian populace). The G5 (S5) has responsibility to enhance the relationship between military forces and civilian authorities and personnel in the area of operations to ensure the success of the mission. The G5 (S5) is required at all echelons from battalion through corps level but authorized only at division and corps level. Once deployed, units and task forces below division level may be authorized an S5.

Assistant Chief of Staff, G6 (S6), Signal – The principal staff officer for all matters concerning signal operations, automation management, network management, and information security. A G6 (S6) is located at all echelons of command from battalion through corps.

Support Operations Officer (Only in Support Commands/Battalions) – The principal staff officer for coordinating logistics and combat health support to supported units. He provides the technical supervision for the CSS mission of the support command. He is the key interface between the supported unit and the support command providing the support. A support operations officer is located in support commands and battalions.

For more information on Special Staff Officers, and Personal Staff Officers, please refer to FM 101-5, Chapter 4, Staff Responsibilities and Duties.

## **MILITARY DECISION MAKING PROCESS (MDMP) (FM 101-5, Chapter 5)**

*It is better to be guilty of commission rather than omission. To do  
nothing is inexcusable.*

*Anonymous*

There is nothing worse for a commander than to have to make a decision without having the right information available. However, not making a decision is worse than making the wrong one! At least when you make a decision you can go from there, not making one does not give you a way to adjust due to the situation.

The military decision-making process (MDMP) is a single, established, and proven analytical process conducted in seven distinct steps. These steps are shown at Figure 3-4. It is an adaptation of the Army's analytical approach to problem solving. It is a tool that will assist the commander and staff in developing estimates and a plan. The MDMP is the foundation on which planning in a time-constrained environment is based. The products created during the full MDMP can and should be used during subsequent planning sessions when time may not be available for a thorough relook, but where existing METT-TC factors have not changed substantially.

The MDMP helps the commander and his staff to examine a battlefield situation and reach logical decisions. The process helps them apply thoroughness, clarity, sound judgment, logic, and professional knowledge to reach a decision. The full MDMP is a detailed, deliberate, sequential, and time-consuming process used **when adequate planning time and sufficient staff support** are available to thoroughly examine numerous friendly and enemy courses of action (COAs). This typically occurs when developing the commander's estimate and operation plans (OPLANs), when planning for an entirely new mission, during extended operations, and during staff training designed specifically to teach the MDMP.

The MDMP is a continuous and sequential process allowing the commander and his staff to examine possibilities of the battlefield and reach logical decisions. A seven step process with each step building upon the previous step, using the outputs developed. These outputs then help to drive the next step in the process.

<b>Step 1.</b>	Receipt of Mission.
<b>Step 2.</b>	Mission Analysis.
<b>Step 3.</b>	Course of Action (COA) Development.
<b>Step 4.</b>	Course of Action Analysis.
<b>Step 5.</b>	Course of Action Comparison.
<b>Step 6.</b>	Course of Action Approval.
<b>Step 7.</b>	Orders Production.

Figure 3-4. Military Decision-Making Process (MDMP) Steps

### STEP 1. Receipt of Mission

The decision-making process **begins with the receipt of an order** from higher headquarters **or may be derived from the ongoing operations**. (Figure 3-5) The unit's operations section issues a warning order to the staff alerting them of the pending planning process. The staff then begins to prepare for the next step of Mission Analysis by gathering the tools needed to do the analysis. These tools include but are not limited to:

- Higher headquarters' order or plan, with graphics.
- Maps of the area of operations.
- Any existing staff estimates.<sup>2</sup>

Staff officers must update and collect as much information on all of the areas that will be required for the mission analysis. The use of automated systems like the Combat Service Support Control System (CSSCS) can assist the logistics planner with getting the most current near real time information on units and their supply status. This information will allow them to develop assumptions that are necessary to the planning process.

As a general rule, the commander allocates a maximum of **one-third of the available time for planning by his staff**. The remaining **two-thirds is for subordinate units** to conduct their planning and preparation. During the two-thirds timeframe, the commander and staff do their own preparation for the mission.

The remaining action in this step is to issue the warning order to subordinate and supporting units. This order must include as a minimum:

- The type of operation,
- The general location of the operations,
- The initial time line and any restrictions, and
- Any preliminary movement or reconnaissance.

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<sup>2</sup> Discussed later in this chapter.

Warning orders also facilitate parallel planning. Parallel planning means that several echelons will be working on their MDMP concurrently. This is essential to speed the process for subordinate units and allow maximum time for planning. Parallel planning

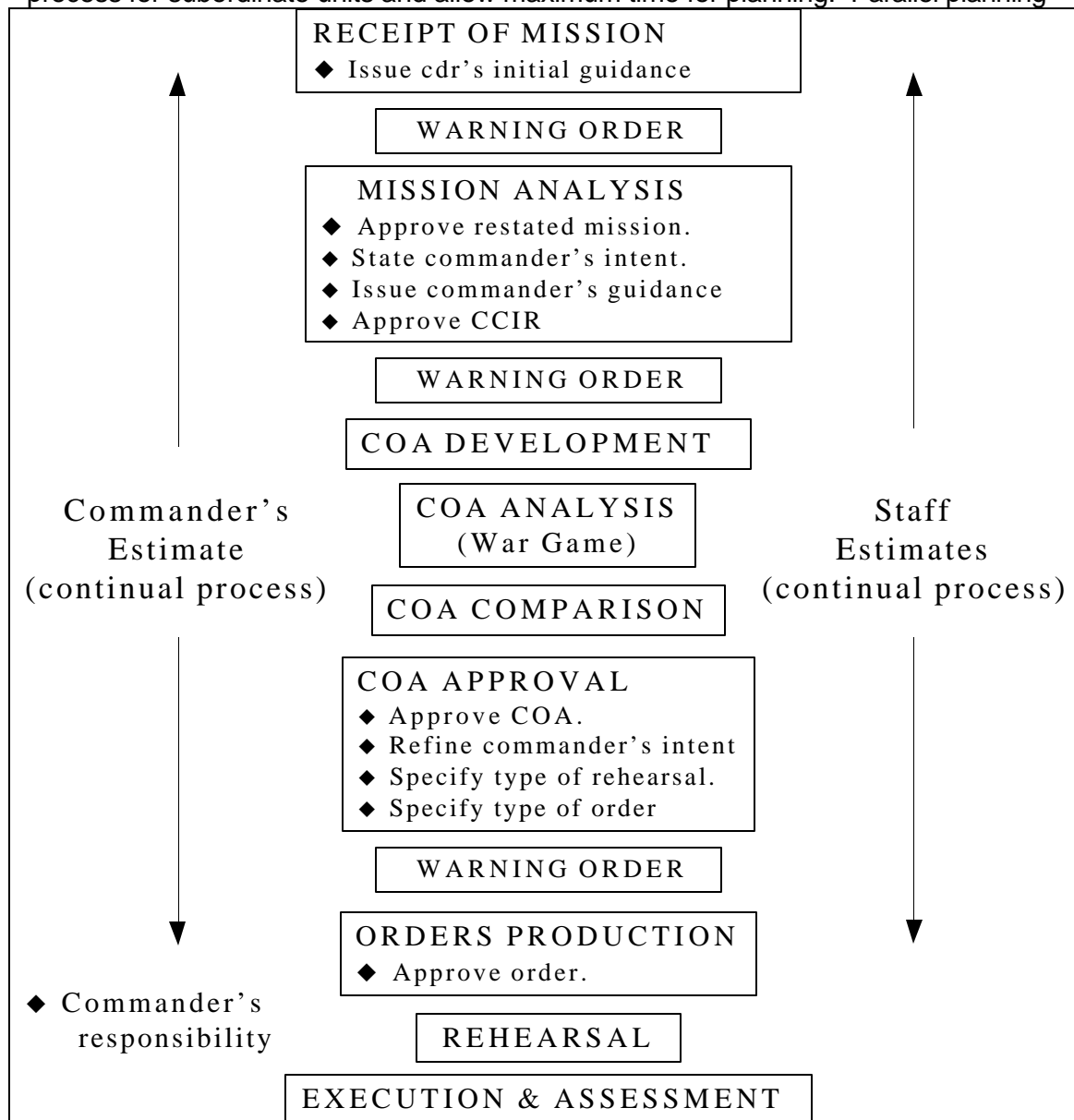


Figure 3-5. MDMP Flow.

relies on accurate and timely warning orders and a full sharing of information between echelons. Parallel planning must be a routine procedure of the MDMP.

## STEP 2. Mission Analysis

The purpose of the mission analysis is to assist the commander and staff in visualizing the battlefield by seeing the terrain, enemy, and themselves within the context of the mission. It is the beginning process of determining feasible solutions. The mission



analysis consists of 17 steps<sup>3</sup>, not necessarily sequential, and results in the staff formally briefing the commander. (Figure 3-6) While the staff is conducting its analysis the commander is conducting his own so that he has a frame of reference to assess the staff's work. During mission analysis estimates continue. Anticipation, prior preparation, and a trained staff are the keys to a timely mission analysis.

### MISSION ANALYSIS STEPS

- Step 1. Analyze the higher headquarters' order.
- Step 2. Conduct initial intelligence preparation of the battlefield (IPB).
- Step 3. Determine specified, implied, and essential tasks.
- Step 4. Review available assets.
- Step 5. Determine constraints.
- Step 6. Identify critical facts and assumptions.
- Step 7. Conduct risk assessment.
- Step 8. Determine initial commander's critical information requirements (CCIR).
- Step 9. Determine the initial reconnaissance annex.
- Step 10. Plan use of available time.
- Step 11. Write the restated mission.
- Step 12. Conduct a mission analysis briefing.
- Step 13. Approve the restated mission.
- Step 14. Develop the initial commander's intent.
- Step 15. Issue the commander's guidance.
- Step 16. Issue a warning order.
- Step 17. Review facts and assumptions.

Figure 3-6. Mission Analysis (MA) Steps.

Step 1. Analyze the higher headquarters' order. The commander and staff must thoroughly analyze the higher headquarters' order to establish horizontal and vertical nesting (a means to achieve unit of purpose whereby each succeeding echelon's concept is nested in the other), not just for maneuver, but also for all combat support and combat service support. This step is to ensure they completely understand –

- The higher headquarters' –
  - Commander's intent.
  - Mission, including tasks, constraints, risk, available assets, and area of operations.
  - Concept of the operation, including the deception plan.
  - Time line for mission execution.
- The missions of adjacent (to include front and rear) units and their relation to higher headquarters' plan.
- The assigned area of operations.

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<sup>3</sup> NB. When conducting the MDMP, take care not to confuse the MDP Steps with the 17 Steps of Mission Analysis.

Step 2. Conduct Initial Intelligence Preparation of the Battlefield (IPB). The IPB is a systematic, continuous process of analyzing the threat and the effects of the environment on the unit. It identifies facts and assumptions that determine likely threat COAs. The IPB supports the commander and staff and is essential to estimates and decision-making. It provides the basis for intelligence collection and synchronization to support COA development and analysis.

The logistician should pay close attention to the terrain, road network, weather, and built up areas. These things could have an impact on how the support to units will be conducted.

Step 3. Determine Specified, Implied, and Essential Tasks.

*Specified tasks* are those specifically assigned to a unit by its higher headquarters. Paragraphs 2 and e of the higher headquarters' order or plan state specified tasks. Specified tasks are also found in annexes and overlays. CS and CSS units may find them in paragraph 4 and 5 also.

*Implied tasks* are those that must be performed to accomplish a specified task, but which are not stated in the higher headquarters' order. Implied tasks are derived from a detailed analysis of the higher headquarters' order, the enemy situation and courses of action, and the terrain. Analysis of the unit's current location in relation to its future area of operations provides insights into implied tasks that may be required to perform specified tasks. Additionally, an analysis of the doctrinal requirements for each specified task may provide implied tasks. Only those implied tasks that require allocation of resources should be retained.

*Essential tasks* are those tasks (specified and implied) that must be executed to accomplish the mission.

This is key for the logistician. Many of the specified and implied tasks of maneuver units will drive more tasks for the logistician. Close working with the operations planners to get the listing of operational tasks will help in the development of the logistical specified, implied, and essential tasks to be done for mission accomplishment. The logistics staff officer must read the entire oplan/order and not just para 4 to identify the specified and implied tasks to be done by combat service support units.

Step 4. Review Available Assets. Review the additions to and deletions from the current task organization, support relationships, and status (current capabilities and limitations) of all units. Consider the relationship between specified and implied tasks and available assets. From this determine if there are enough assets to perform all specified and implied tasks. If there are shortages, identify how to overcome these shortages using other resources or identify additional resources needed from outside the command for mission success. The staff needs to pay particular attention to deviations from what the commander considers his normal task organization.

The key for the logistician is to identify the requirements for the needed operations. How much of each class of supply, weapon system, or personnel are required to accomplish the mission. Next review the capabilities of the assets available, both now and by the time the operation is to begin. Then take the requirements and subtract the capabilities of your unit(s). This will give you any shortfalls. If you have any shortfalls determine if it is possible for you to use other resources you have available to overcome the shortfall. Do not go to the Mission Analysis briefing having not looked for possible solutions (reallocate assets, use other sources within unit, contact higher headquarters and ask for assistance, etc.) to the shortfall.

## REQUIREMENTS – CAPABILITIES = ANY SHORTFALLS

Step 5. Determine Constraints. A higher commander normally places some constraints on his subordinate commanders that restrict their freedom of action. Constraints can take the form of a requirement to do something (for example, maintain a reserve of one company) or a prohibition on action (for example, no reconnaissance forward of a line before H-hour). The commander and his staff must identify and understand these constraints. They are normally found in the scheme of maneuver, the concept of operations, and coordinating instructions.

For the logistician this must be done to ensure the concept(s) of support being developed can actually be implemented. Not only can constraints be items identified by the commander but they can also be due to terrain, weather, types of forces available, etc.

Step 6. Identify Critical Facts and Assumptions. In this step the staff gathers two categories of information concerning assigned tasks – facts and assumptions. Facts are statements of known data concerning the situation, including enemy and friendly dispositions available troops, unit strengths, and material readiness.

Assumptions are suppositions about the current or future situation that are assumed to be true in the absence of facts. They take the place of necessary, but unavailable, facts and fill the gaps in what the commander and staff know about the situation. An assumption is appropriate if it meets the tests of validity and necessity. Validity means the assumption is likely to be true. “Assuming away” potential problems, such as weather or likely enemy options, would result in an invalid assumption. Necessity is whether or not the assumption is essential for the planning. If planning can continue without the assumption, it is not necessary and should be discarded. When possible, assumptions are cleared with the higher headquarters to ensure they are consistent with the higher headquarters’ plan. Assumptions are replaced with facts as soon as possible.

For the logistician facts and assumptions are key in developing the estimates, as well as how to provide support during war games. These must be reviewed regularly for accuracy.

Step 7. Conduct Risk Assessment. The commander and staff identify accident risk hazards and make an initial assessment of the risk level for each hazard. The

commander also makes an initial assessment of where he might take tactical risk. (See Annex J, Risk Management, FM 101-5)

The logistician must look at what he can and cannot do. Identify those items of risk that if done, or not done, may have an impact on the mission and how it would impact.

Step 8. Determine Initial Commander's Critical Information Requirements (CCIR). The CCIR identifies information needed by the commander to support his battlefield visualization and to make critical decisions, especially to determine or validate courses of action. They also help the commander filter information available to him by defining what is important to mission accomplishment. They also help focus the efforts of his subordinates and staff, assist in the allocation of resources, and assist staff officers in making recommendations. The commander must continually review the CCIR during the planning process and adjust them as situations change.

For the logistician this means identifying those assets and resources that are critical to the success of the commander's mission. For example, the fuel requirements (how much do they need and how far will this take the unit), consumption estimates of a unit (when and where will this unit need to be refueled) and how this will affect its capability to successfully complete its mission.

Step 9. Determine the Initial Reconnaissance Annex. Based on the initial IPB and CCIR, the staff, primarily the G2 (S2), identifies gaps in the intelligence available and determines an initial reconnaissance and surveillance plan to acquire information based on available reconnaissance assets.

For the logistician this provides identifying what logistical factors need to be obtained from the AO in order to provide proper logistical support. Examples would be what are the roads and their conditions, bridges, hospitals, items available from the local economy, etc.

Step 10. Plan Use of Available Time. The commander and his staff refine their initial plan for the use of available time. They compare the time needed to accomplish essential tasks to the higher headquarters' time line to ensure mission accomplishment is possible in the allotted time. They also compare the time line to the enemy time line developed during the IPB. From this they determine windows of opportunity for exploitation or times when the unit will be at risk from enemy activity. The commander and staff specify when and where they will conduct the briefings that result from the planning process and when, where, and in what form they will conduct rehearsal. The commander can maximize available planning time for his own and subordinate units by sending additional warning orders as detailed planning develops. This allows parallel planning by subordinate units. The commander also uses LNOs to stay abreast of changes at higher headquarters.

For the logistician this means not waiting till the last minute before doing anything. A staff member should be always updating status of units and stocks. This can be done through LOGSTATS, SITREPS, or using CSSCS. Do not wait for things to happen or to be told to do something, be proactive in planning.

Step 11. Write the Restated Mission. The CofS (XO) or G3 (S3) prepares a restated mission for the unit based on the mission analysis. The restated mission must contain all elements of a mission statement:

- Who (what types of forces) will execute the action?
- What type of action (for example, attack, defend) is contemplated?
- Where will the action begin?
- Where will the action occur (area of operations and objectives)?
- How will the commander employ available assets?
- Why (for what purpose) will each force conduct its part of the operation?

The element of what states the essential tasks. The restated mission will include on-order missions; be-prepared missions will be in the concept of operations.

For the logistician make sure that the restated mission is still supportable.

Step 12. Conduct a Mission Analysis Briefing. The mission analysis briefing is given to both the commander and the staff. This is often the only time the entire staff is present, and the only opportunity to ensure that all staff members are starting from a common reference point. Mission analysis is critical to ensure thorough understanding of the task and subsequent planning.

The mission analysis briefing should not be a unit readiness briefing. Staff officers must know the status of subordinate and supporting units and brief relevant information as it applies to the situation. The staff should be providing the commander and other staff sections a brief snapshot on the current condition of the unit and where it should be at the start of the operation. Through the mission analysis briefing the commander and staff should come away with a shared vision on the requirements for the upcoming operation.

For the logistician this is key. You are providing the commander and staff with the information needed on whether or not the mission can be supported with **current and projected** assets and status. Give them the information they need to be able to see how the operations will be supported.

Step 13. Approve the Restated Mission. Immediately after the mission analysis briefing, the commander approves a restated mission. This can be the staff's recommended restated mission, a modified version of the staff's recommendation, or one that the commander has developed himself. Once approved, the restated mission becomes the unit's mission.

Step 14. Develop the Initial Commander's Intent.

During the mission analysis, the commander develops his initial intent for the operations. After reviewing the mission analysis briefing and the restated mission, he modifies his intent statement if necessary.

The commander's intent is a clear, concise statement of what the force must do to succeed with respect to the enemy and terrain and to the desired end state. It provides the link between the mission and the concept of operations by stating the key tasks that, along with the mission, are the basis for subordinates to exercise initiative when unanticipated opportunities arise or when the original concept of operations no longer applies. The intent is normally expressed in four or five sentences and is mandatory for all orders. The mission and the commander's intent must be understood two echelons down.

Step 15. Issue the Commander's Guidance. After the commander approves the restated mission and states his intent, he provides the staff with enough additional guidance (preliminary decisions) to focus staff activities in planning the operation. This guidance is essential for timely COA development and analysis. By stating the planning options he does or does not want them to consider, he can save staff member's time and effort by allowing them to concentrate on developing COAs that meet the commander's intent. The commander's guidance may be written or oral.

For the logistician the commander's guidance should address, at the minimum, any additional specific priorities for combat service support.

Step 16. Issue a Warning Order. Immediately after the commander gives his guidance, the staff sends to subordinate and supporting units a warning order with the restated mission, commander's guidance, and other relative information.

For the logistician this means making sure all logistical units are aware of what is going to occur so they can begin their initial planning. Check with subordinate units to make sure they understand mission.

Step 17. Review Facts and Assumptions.

During the rest of the decision-making process, the commander and staff periodically review all available facts and assumptions. New facts may alter requirements and analysis of the mission. Assumptions may have become facts or may have become invalid. Whenever the facts or assumptions change, the commander and staff must assess the impact of these changes on the plan and make the necessary adjustments.

### **Step 3. Course of Action (COA) Development**

After receiving guidance, the staff develops COAs for analysis and comparison. The commander must involve the entire staff in their development. His guidance and intent focus the staff's creativity to produce a comprehensive, flexible plan within the time constraints. His direct participation helps the staff get quick, accurate answers to questions that occur during the process. COA development is a deliberate attempt to design unpredictable COAs (difficult for the enemy to deduce).

Each COA considered must meet the criteria of:

*Suitability* – It must accomplish the mission and comply with the commander's guidance.

*Feasibility* – the unit must have the capability to accomplish the mission in terms of available time, space, and resources.

*Acceptability* – the tactical or operational advantage gained by executing the COA must justify the cost in resources, especially casualties.

*Distinguishability* – Each COA must differ significantly from any others. Significant differences may result from use of reserves, different task organizations, day or night operations, or a different scheme of maneuver.

*Completeness*. It must be a complete mission statement.

For the logistician **it is vital that a representative from the logistics community be part of the battle staff (at all levels – battalion, brigade, division, corps, joint task force) developing the COAs**. His input may be key in identifying if it is supportable. If a plan is not supportable (only one small road to support a divisions worth of resupply) then there is not need to keep developing that COA. Identifying a COA as not supportable due to terrain, force structure, time/distance, etc, during its development prevents a waste of the staff's time. Identifying a COA as not supportable after it has been analyzed wastes everyone's time!!

#### **Step 4. Course of Action Analysis (War Game)**

The COA analysis identifies which COA accomplishes the mission with minimum casualties while best positioning the force to retain the initiative for future operations. It helps the commander and his staff to:

- Determine how to maximize combat power against the enemy.
- Have as near an identical vision of the battle as possible.
- Anticipate battlefield events.
- Determine conditions and resources required for success.
- Determine when and where to apply the force's capabilities.
- Focus IPB on enemy strengths, weaknesses, center of gravity, desired end state, and decisive points.
- Identify the coordination requirements to produce synchronized results.
- Determine the most flexible COA.

The CofS (XO) is responsible for coordinating staff actions during the war game.

The G1 (S1) analyzes COA to project potential personnel losses and determine support.

The G2 (S2) role-plays the enemy commander.

The G3 (S3) normally selects the techniques and methods that the staff will use for war gaming. He ensures the war game of the COA covers every operational aspect of the mission, records, each event's strengths and weaknesses, and annotates the rationale.

The G4 (S4) analyzes each COA to assess its sustainment feasibility. He determines critical requirements for each sustainment function by analyzing each COA to identify potential problems and deficiencies. He assesses the status of all sustainment functions required to support the COA and compares this to available assets. He identifies potential shortfalls and recommends actions to eliminate or reduce their effect for that COA. While improvisation can contribute to responsiveness, only accurate prediction of requirements for each sustainment function can ensure the continuous sustainment of the force. In addition, the G4 (S4) ensures that available movement times and assets will support the course of action.

The war game should result in the commander and staff: <sup>4</sup>

- Allocating combat, CS, and CSS assets to subordinate commanders to accomplish their missions.
- Developing a synchronization matrix and decision support template.
- Identifying the locations of the commander and unit command posts (CPs).
- Identifying additional requirements for CS and CSS support.
- Developing fire support, engineer, air defense, information operations (IO), and CSS plans and graphics.
- Determining movement times and tables.

During the COA analysis the results of each action-reaction-counteraction are recorded. They use of a **synchronization matrix** allows the staff to synchronize the COA across time and space in relation to the enemy COA. This is very helpful to the logistician because it allows him to see what support is needed where, when, and in how much. It is key because it then helps the logistics staff begin its backward planning in order to determine a timeline for the required support of the maneuver units.

### Step 5. Course of Action Comparison

The COA comparison starts with each staff officer analyzing and evaluating the advantages and disadvantages of each COA from his perspective. Each staff member presents his findings for the others' consideration. Using an established evaluation criteria, the staff outlines each COA, highlights its advantages and disadvantages. Comparing the strengths and weaknesses of the COAs identifies their advantages and disadvantages with respect to each other.

The staff compares feasible courses of action to identify the one that has the highest probability of success against the most likely enemy COA and the most dangerous enemy COA. The selected COA should also:

- Pose the minimum risk to soldiers, equipment, and mission accomplishment.
- Best position the force for future operations.
- Provide the best flexibility to meet "unknowns" during execution.

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<sup>4</sup> NOTE: There are more results than these that will come out of the war games. These are some of the key logistical items you should be aware of.



- Provide maximum latitude for initiative by subordinates.

This is not the time for the logisticians to come online and say that the COA is not supportable. That should be done as early as possible during the COA development. It can also be determined during the early portion of the war gaming. Do not wait to get to this point in the MDMP to announce to the commander, CofS, G3, and other staff officers that this is not supportable from the logistics point of view. You have just waited everyone's time in developing this COA and analyzing it.

### **Step 6. Course of Action Approval**

If the commander has observed and participated in the planning process, the decision may be rapidly apparent and the commander can make an on-the-spot decision. If the commander has not participated in the process to this point, or has not made a decision, a decision briefing will still be required. Good COA comparison charts and sketches assist the commander in visualizing and distinguishing between each COA. The staff must ensure the COAs are complete with tentative task organization, COA statement, and task and purpose for each subordinate unit. Limiting the course of action briefing to only the most critical points can also save time.

### **Step 7. Orders Production.**

Based on the commander's decision and final guidance, the staff refines the COA and completes the plan and prepares to issue the order. The staff prepares the order or plan to implement the selected by turning it into a clear, concise concept of operations, a scheme of maneuver, and the required fire support. The commander can use the COA statement as his concept of operations statement. The COA sketch can become the basis for the operations overlay. Orders and plans provide all necessary information subordinates require for execution, without unnecessary constraints that would inhibit subordinate initiative.

### **STAFF ESTIMATES (FM 101-5, Appendix C)**

Mission analysis, facts and assumptions, and the situation analysis (of the area of operations, area of interest, and enemy, friendly, and support requirements) furnish the structure for staff estimates. The estimate consists of significant facts, events, and conclusions based on analyzed data. It recommends how to best use available resources. Adequate, rapid decision making and planning hinge on good, timely command and staff estimates. They are the basis for forming viable courses of action. Failure to make estimates can lead to errors and omissions when developing, analyzing, and comparing COAs.

The commander and his staff make estimates that apply to any operational situation at all levels of command. They use estimates to look at possible solutions to specific operational missions and requirements. **These estimates can form the cornerstone for staff annexes to orders and plans.**

The coordinating staff and each staff principal develop facts, assessments, and information that relate to their functional field or operating system. Types of estimates generally include, but are not limited to:

- The commander's estimate.
- Operations estimate.
- **Personnel estimate.**
- Intelligence estimate.
- **Logistics estimate.**
- Civil-military operations estimate.
- Signal estimate.
- Special staff estimates.

Normally, commanders and staffs do not produce formal written estimates. Units normally do staff estimates by exception, graphically representing data and statistics on charts to assist the commander in decision-making. The use of automated systems like CSSCS are vital in helping the logistics staff officer capture data required to prepare an in-depth and proper estimate.

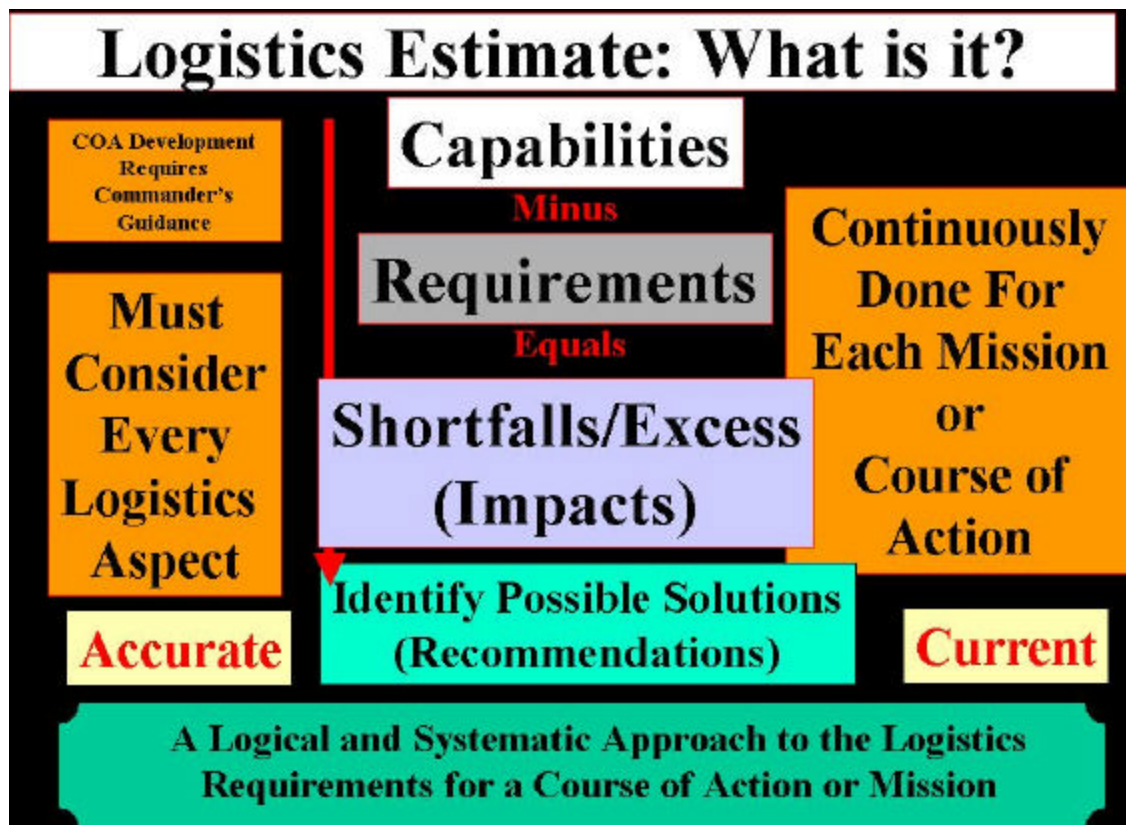
Personnel/logistics estimates should be kept current. As factors that influence operations change, new facts are developed and assumptions become facts or become invalid. The estimates are an integral part of any commander's decision-making process.

### **Personnel Estimate**

The G1 (S1) prepares the personnel estimate, which is an analysis of how all human resources and personnel factors impact soldier and unit effectiveness before, during, and after the mission. It includes a current overall personnel status of the organization, its subordinate units, and any attached or supporting elements. It should include an analysis of all human resources and personnel factors on soldier and unit effectiveness. The estimate should include predictive losses (where and when losses could occur); and when, where, and if such losses cause a culmination of an operations. Personnel status includes assessments of the following tangible and intangible factors:

- Medical evacuation and hospitalization.
- Unit-strength maintenance.
- Replacements.
- Soldiers' readiness.
- Organizational climate.
- Cohesion.
- Discipline, law, and order.

The personnel estimate contains the G1's (S1's) conclusions and recommendations about the feasibility of supporting major operational and tactical missions.



This graphic illustrates the basic estimate concept of balancing requirements against capabilities – the cornerstone of a successful estimate.

## Logistics Estimate

The G4 (S4) prepares the logistics estimate, which provides an accurate and current assessment of the CSS situation of the organization, its subordinate units, and any attached or supporting elements. The logistics estimate is an analysis of how service support factors can affect mission accomplishment. It contains the G4's (S4's) conclusions and recommendations about the feasibility of supporting major operational and tactical missions. **This estimate includes how the functional CSS areas of: supply, transportation, services, maintenance, labor, facilities, and construction affect various COAs.**

## STAFF ESTIMATE FORMAT <sup>5</sup>

The single generic staff estimate format, shown below, standardizes the way staff members construct estimates. The G2 (S2) (with input assistance from all staff members) will still conduct and disseminate the initial intelligence preparation of the battlefield as a separate product.

1. **MISSION.** Restated mission resulting from the mission analysis.

2. **SITUATION AND CONSIDERATIONS.**

a. Characteristics of area of operation.

(1) Weather. How will weather, both current and forecasted, affect the different aspects of the military operation with respect to specific staff areas of concern and their resources?

(2) Terrain. How will terrain affect the different aspects of the military operation with respect to specific staff areas of concern and their resources?

(3) Other pertinent facts. Analyses of political, economic, sociological, and psychological factors and infrastructure (key for logisticians), as they relate to the area.

b. Enemy Forces. Enemy dispositions, composition, strength, capabilities, and COAs as they affect specific staff area of concern.

c. Friendly Forces.

(1) Friendly courses of action.

(2) Current status of resources within staff area of responsibility. (Vital to know for a staff logistician. Can find near real time status from CSSCS).

(3) Current status of other resources that affect staff area of responsibility.

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<sup>5</sup> FM 101-5.

(4) Comparison of requirements versus capabilities and recommended solutions. This is a key item for the logistician to do. Failure to do this may cause an inaccurate development of support plan.

(5) Key considerations (evaluation criteria) for COA supportability.

d. Assumptions.<sup>6</sup>

3. **ANALYSIS.** Analyze each COA using key considerations (evaluation criteria) to determine advantages and disadvantages.

4. **COMPARISON.** Compare COAs using key considerations (evaluation criteria). Rank order COAs for each key consideration. Comparison should be visually supported by a decision matrix.

## 5. **RECOMMENDATION AND CONCLUSIONS.**

a. Recommended COA based on the comparison (most supportable from specific staff perspective).

b. Issues, deficiencies and risks with recommendations to reduce their impacts.

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## **SAMPLE FORMAT FOR A LOGISTICS ESTIMATE**

**A staff estimate (logistics or personnel) is not a replacement for an order or a concept of support. However, if done sufficiently a staff estimate will considerably shorten the time it takes to fully develop a course of action.** A good estimate will identify any key CSS weaknesses inherent in the force structure. The following is a simplified format for preparation of a logistics estimate. It is adaptable for any size CSS unit from FSB to a COSCOM or from any CSS unit operating in the COMMZ. It can be readily incorporated into the formal decision making process. This format provides a method for determining requirements, comparing the requirements to current capabilities, and identifying shortfalls. It uses the current CSS functions to compartmentalize the analysis of support requirements.

It can be used by the support operations officer to determine direct support requirements and supplement the G4/S4 logistics estimate or as a stand-alone logistics estimate (estimating unit, DS, and GS requirements). This format is useful for logistical analysis and subsequent comparison of each course of action (COA) during a supported unit's mission analysis process (i.e. in support of the brigade's MDMP). When each COA is analyzed separately a clearer picture of the advantages and disadvantages of each can be developed. Normally some type of decision matrix is used to compare the

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<sup>6</sup> Include all assumption used ensuring each is realistic and suitable: all should be challenged for accuracy.

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courses of action and facilitate reaching the best recommendation to the commander. See FM 101-5, Staff Organization and Operations for additional information.

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### EXAMPLE LOGISTICS ESTIMATE

1. **MISSION.** Clearly state the mission of the unit you are directly supporting. This may be the proposed mission statement of the support battalion or the mission statement of the corps troops slice (CSB) or division (MSB).

2. **COMMANDER'S INTENT.** Clearly state the maneuver commander's intent. May be copied from another order (i.e. brigade). This paragraph is intended to provide direction for the support operations officer. It may be a synopsis of the commander's guidance.

3. **SPECIFIED, IMPLIED, AND ESSENTIAL TASKS.** List all specified, implied, and essential tasks taken from the mission statement and the commander's intent. These tasks may need to be subdivided by phases, depending upon the length and complexity of the COA. These tasks provide the initial analysis of tasks to be conducted by the support battalion. It is useful to express these in tabular format for clarity and to expedite understanding.

	Task	Specified Tasks	Implied Tasks	Essential Tasks
a. Preparation (Enabling) Phase				
b. Execution Phase				
c. Follow-On Phase (As Required)				
d. Post Operation Phase				

4. **FACTS AND ASSUMPTIONS.** List facts and assumptions pertinent to the estimate. Facts are statements of known data concerning the situation, including available troops, unit strengths, and material readiness. Assumptions are suppositions about the current or future situation, which are assumed to be true in the absence of facts. For simplicity, facts and assumptions may be listed as part of a specific annex under paragraph 5. Assumptions should include planning factors used to support requirements, i.e. gallons, per man, per day; water and combat profiles for class V and maintenance. Like the previous section, a table helps the reader digest this information.

a. Logistics Estimate: use this table for a logistics estimate

<i>FUNCTIONAL AREA</i>	<b>FACTS</b>	<b>ASSUMPTIONS</b>
GENERAL (Log)		
SUPPLY (Log Est)		
MAINTENANCE (Log Est)		
TRANSPORTATION (Log Est)		
FIELD SERVICES (Log Est)		
EOD (Log Est)		

b. Personnel Estimate: use this table for a personnel estimate

<u>FUNCTIONAL AREA</u>	<b>FACTS</b>	<b>ASSUMPTIONS</b>
CHS (Per Est)		
HUMAN RESOURCES (Per Est)		
FINANCIAL MANAGENENT (Per Est)		
RELIGIOUS (Per Est)		
LEGAL (Per Est)		
BAND (Pes Est)		

5. **LOGISTICS SITUATION.** List the annexes with a short discussion (a brief synopsis of the major concerns) in the base document here to provide a quick reference for COA comparison. Address the details of each CSS function that pertains to the operation in an annex.

**(Logistics Estimate – These CSS functions are normally included in this estimate)**

- a. SUPPLY: Concise summary (See Annex A).
- b. MAINTENANCE: Concise summary (See Annex B).
- c. TRANSPORTATION: Concise summary (See Annex C).
- d. FIELD SERVICES: Concise summary (See Annex D).
- e. EOD: Concise summary (See Annex E).

**(Personnel Estimate -- These CSS functions are normally included in this estimate)**

- a. COMBAT HEALTH SUPPORT: Concise summary (See Annex A).
- b. HUMAN RESOURCES: Concise summary (See Annex B).
- c. FINANCIAL MANAGEMENT: Concise summary (See Annex C).

- d. RELIGIOUS SUPPORT: Concise Summary (See Annex B).
- e. LEGAL SUPPORT: Concise Summary (See Annex D).
- f. BAND SUPPORT: Concise Summary (See Annex B).

6. **CONCLUSION.** State whether or not the mission is logistically supportable. Paraphrase major logistical problems and possible ways to overcome them. If it is addressed as a problem here it must be addressed in the appropriate annex.

Option 1 -- The mission is supportable without issue/risk. Identify key elements for success.

Option 2 -- The mission is supportable with the following issues/risks.

ANNEXES:  
(As Required)

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#### **ANNEX A (SUPPLY) TO LOGISTICS ESTIMATE**

1. Logistics Situation: (Brief description of the overall concept for this function)
2. Functional Units Available: List all units assigned to the task force. Include any augmentation they have such as additional teams or contract/host nation support. Different the units involved by the different supply levels.
  - a. DS Units:
  - b. GS Units:
3. Computations (focus on worst case scenarios): Break out all requirements for each level of supply. Include separately identified GS requirements even if your task organization has no GS capability. This information will assist in development of the final COA.
  - a. DS Level Requirements:

Category	Total Requirement s	Total Capabilities	Shortfall	Excess Capacity
Class I				
Class II				
Class III (P)				
Class IV (C)				
Class VI				
Class III (B)				
Class V				
Class IV (B)				



## b. GS Level Requirements:

Category	Total Requirements	Total Capabilities	Shortfall	Excess Capacity
Class I				
Class II				
Class III (P)				
Class IV (C)				
Class VI				
Class III (B)				
Class V				
Class IV (B)				

## 4. Analysis:

- a. Issues (excess capacity or shortfall): Indicate all shortfall and excess capabilities. In this era of limited CSS footprint, there is no room for idle logistics assets. An excess capacity in one supply class could be used to counter a shortfall in another.
- b. Vulnerabilities/Risk: Indicate how any supply shortfalls can impact on the outcome of the maneuver commander's mission. Be thorough and forward.
- c. Recommendations: Indicate how you think the CSS commander can either reallocate internal CSS assets, find a way to reduce consumption, or increase his capability to counter any shortfalls. Also indicate how to best make use of idle CSS assets.

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**ANNEX B (Maintenance) TO LOGESTIMATE (xxxxx)**

1. Logistics Situation: (Brief description of the overall concept for this function)
2. Functional Units Available: Indicate maintenance units for DS and GS. Indicate any and all additional augmentation teams assigned or attached to the units to scale or augment normal capability.
  - a. Ground Maintenance:
  - b. Missile:
  - c. Aviation Maintenance:

3. Computations (focus on worst case scenarios): Include your estimate of the maintenance workload and how you think readiness will be affected.

Category	Total Requirements	Total Capabilities	Shortfall	Excess Capacity
Ground				
Area Support				
MST Support				
MST Augmentation				
Recovery				
Class IX				
Class VII				
Missile				
Area Support				
MST Support				
Augmentation				
Class IX				
Aviation				
Area Support				
MST Support				
Augmentation				
Recovery				
Class IX				

4. Analysis:

Issues (excess capacity or shortfall): Indicate all shortfall and excess capabilities. In this era of limited CSS footprint, there is no room for idle logistics assets. An excess capacity in one supply class could be used to counter a shortfall in another.

Vulnerabilities/Risk: Indicate how any supply shortfalls can impact on the outcome of the maneuver commander's mission. Be thorough and forward.

Recommendations: Indicate how you think the CSS commander can either reallocate internal CSS assets, find a way to reduce consumption, or increase his capability to counter any shortfalls. Also indicate how to best make use of idle CSS assets.

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## ANNEX C (Transportation) TO LOGESTIMATE (xxxxx)

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1. Logistics Situation: (Brief description of the overall concept for this function)
2. Functional Units Available:
  - a. Mode Operators
  - b. Terminal Operations
  - c. Movement Control
3. Computations (focus on worst case scenarios):

Category	Total Requirements	Total Capabilities	Shortfall	Excess Capacity
General Supplies				
Class III Bulk				
Class V				
Class VII				
Passengers				
Terminal Operations				
Movement Control				

4. Analysis:

Issues (excess capacity or shortfall): Indicate all shortfall and excess capabilities. In this era of limited CSS footprint, there is no room for idle logistics assets. An excess capacity in one supply class could be used to counter a shortfall in another.

Vulnerabilities/Risk: Indicate how any supply shortfalls can impact on the outcome of the maneuver commander's mission. Be thorough and forward.

Recommendations: Indicate how you think the CSS commander can either reallocate internal CSS assets, find a way to reduce consumption, or increase his capability to counter any shortfalls. Also indicate how to best make use of idle CSS assets.

**ANNEX D (Field Services) TO LOGESTIMATE (xxxxx)**

1. Logistics Situation: (Brief description of the overall concept for this function)
2. Functional Units Available:
  - a. DS Units:
  - b. GS Units:
3. Computations (focus on worst case scenarios):

Category	Total Requirement s	Total Capabilities	Shortfall	Excess Capacity
Water Production				
Aerial Delivery				
Mortuary Affairs				
SLCR				
Food Production				
Other				

4. Analysis:

Issues (excess capacity or shortfall): Indicate all shortfall and excess capabilities. In this era of limited CSS footprint, there is no room for idle logistics assets. An excess capacity in one supply class could be used to counter a shortfall in another.

Vulnerabilities/Risk: Indicate how any supply shortfalls can impact on the outcome of the maneuver commander's mission. Be thorough and forward.

Recommendations: Indicate how you think the CSS commander can either reallocate internal CSS assets, find a way to reduce consumption, or increase his capability to counter any shortfalls. Also indicate how to best make use of idle CSS assets.

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**ANNEX E (EOD) TO LOGESTIMATE (xxxxx)**

1. Logistics Situation: (Brief description of the overall concept for this function)
2. Functional Units Available:
3. Computations (focus on worst case scenarios):

Category	Total Requirement s	Total Capabilities	Shortfall	Excess Capacity
Area Support				
Other				

4. Analysis:

Issues (excess capacity or shortfall): Indicate all shortfall and excess capabilities. In this era of limited CSS footprint, there is no room for idle logistics assets. An excess capacity in one supply class could be used to counter a shortfall in another.

Vulnerabilities/Risk: Indicate how any supply shortfalls can impact on the outcome of the maneuver commander's mission. Be thorough and forward.

Recommendations: Indicate how you think the CSS commander can either reallocate internal CSS assets, find a way to reduce consumption, or increase his capability to counter any shortfalls. Also indicate how to best make use of idle CSS assets.

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**ANNEX A (Combat Health Support) TO PERSONNEL ESTIMATE (xxxxx)**

1. Logistics Situation: (Brief description of the overall concept for this function)
2. Functional Units Available:
3. Computations (focus on worst case scenarios):

Category	Total Requirement s	Total Capabilities	Shortfall	Excess Capacity
Command & Control				
Treatment				

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Hospitalization				
Preventive Medicine				
Evacuation				
Combat Stress Control				
Veterinary				
Dental				
Laboratory				
Class VIII				
Other				

4. Analysis:

**Issues (excess capacity or shortfall):** Indicate all shortfall and excess capabilities. In this era of limited CSS footprint, there is no room for idle logistics assets. An excess capacity in one supply class could be used to counter a shortfall in another.

**Vulnerabilities/Risk:** Indicate how any supply shortfalls can impact on the outcome of the maneuver commander's mission. Be thorough and forward.

**Recommendations:** Indicate how you think the CSS commander can either reallocate internal CSS assets, find a way to reduce consumption, or increase his capability to counter any shortfalls. Also indicate how to best make use of idle CSS assets.

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**ANNEX B** (Human Resources) TO PERSONNEL ESTIMATE (xxxxx)

1. Logistics Situation: (Brief description of the overall concept for this function)
2. Functional Units Available:
3. Computations (focus on worst case scenarios):

Category	Total Requirements	Total Capabilities	Shortfall	Excess Capacity
Area Support				
Postal				
Band				

Replacement				
Religious Support				
Other				

## 4. Analysis:

**Issues (excess capacity or shortfall):** Indicate all shortfall and excess capabilities. In this era of limited CSS footprint, there is no room for idle logistics assets. An excess capacity in one supply class could be used to counter a shortfall in another.

**Vulnerabilities/Risk:** Indicate how any supply shortfalls can impact on the outcome of the maneuver commander's mission. Be thorough and forward.

**Recommendations:** Indicate how you think the CSS commander can either reallocate internal CSS assets, find a way to reduce consumption, or increase his capability to counter any shortfalls. Also indicate how to best make use of idle CSS assets.

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**ANNEX C (Finance) TO PERSONNEL ESTIMATE (xxxxx)**

1. Logistics Situation: (Brief description of the overall concept for this function)
2. Functional Units Available:
3. Computations (focus on worst case scenarios):

Category	Total Requirements	Total Capabilities	Shortfall	Excess Capacity
Area Support				
Finance Support Teams				
Other				

## 4. Analysis:

**Issues (excess capacity or shortfall):** Indicate all shortfall and excess capabilities. In this era of limited CSS footprint, there is no room for idle logistics assets. An excess capacity in one supply class could be used to counter a shortfall in another.

**Vulnerabilities/Risk:** Indicate how any supply shortfalls can impact on the outcome of the maneuver commander's mission. Be thorough and forward.

**Recommendations:** Indicate how you think the CSS commander can either reallocate internal CSS assets, find a way to reduce consumption, or increase his capability to counter any shortfalls. Also indicate how to best make use of idle CSS assets.

#### **ANNEX D (Legal Support) TO PERSONNEL ESTIMATE (xxxxx)**

1. Logistics Situation: (Brief description of the overall concept for this function)
2. Functional Units Available:
3. Computations (focus on worst case scenarios):

Category	Total Requirements	Total Capabilities	Shortfalls	Excess Capacity
Military Justice				
International Law				
Civil Law				
Claims				
Legal Assistance				
Other				

4. Analysis:

**Issues (excess capacity or shortfall):** Indicate all shortfall and excess capabilities. In this era of limited CSS footprint, there is no room for idle logistics assets. An excess capacity in one supply class could be used to counter a shortfall in another.



**Vulnerabilities/Risk:** Indicate how any supply shortfalls can impact on the outcome of the maneuver commander's mission. Be thorough and forward.

**Recommendations:** Indicate how you think the CSS commander can either reallocate internal CSS assets, find a way to reduce consumption, or increase his capability to counter any shortfalls. Also indicate how to best make use of idle CSS assets.

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## **FORMAT AND INSTRUCTIONS FOR DEVELOPING/BRIEFING A CONCEPT OF SUPPORT**

### **Introduction**

After the commander selects a specific COA, the staff communicates this decision by publishing the operation plan/order (OPLAN/OPORD). The G4, with input from the other logistic staff elements (G1, G5, surgeon, finance and personnel officers, and the support command) will prepare paragraph 4 of the plan. This paragraph contains CSS information as follows

1. Paragraph 4a is the concept of support. This concise, but comprehensive, paragraph tells the maneuver commander and his primary staff those critical or unusual logistic actions that will occur **before, during, and after** the battle to support the concept of the operation.
2. Identify the time frames of **before, during, and after** with the event that will begin or conclude it. Do not use time due the fact that the time may change but the events should not. Example, **the "during" phase** begins when forces cross the LD. If you put at 0730 hours and there is a delay does the phase still begin?
3. Additional subparagraphs can be used to provide more detailed CSS information by functional area. Usually, however, these subparagraphs are omitted, and this detailed information is published as part of the service support order to the plan. The G4 prepares this order with input from the other logistic staff elements.
4. The G4 also can prepare a CSS overlay to show supported units supply route locations and supporting logistic organizations. Finally, routine, doctrinal, or constant information is incorporated into the unit tactical standing operating procedures (TSOP) to avoid repetition.

### **Developmental Guidelines**

1. General rules for paragraph 4a.
    - a. Use language that is clear, concise, and comprehensive. Avoid technical terminology.
-

b. Focus on what the **non-CSS commander** needs to know about how the operation will be sustained. **This makes paragraph 4a the logistic equivalent to the concept of the operation.**

c. Consider the CSS functions in the context of actions accomplished before, during, and after the operation. The operative term is "*consider*." The intent is not to address each function unless it is critical or unusual. If the operation is phased, then the logistic support for the 'during' portion of the concept of support should also be structured by phase.

d. The concept of support establishes priorities of support for before, during, and after the operation. The commander establishes these priorities in his intent statement (e.g., main effort) and in the concept of the operation (paragraph 3). This could include prioritizing such things as personnel replacements; maintenance and evacuation, by unit and by system (aviation and surface systems would be given separate priorities); fuel and/or ammunition; road network use by unit and/or commodity; and any resource subject to competing demands or constraints.

e. **Synchronize the concept of support with the concept of the operation.** THIS IS KEY!! If not synchronized then the support provided may not be what is required, when required, and where required.

d. Formations comprised of units that are not part of the same organization or, as a minimum, don't have habitual relationships may not share a common TSOP and may require a more lengthy concept of support. Conversely, the more comprehensive the TSOP, the more brief the concept of support.

f. The more complex the operation (a multi-phased operation or operations conducted by larger formations), the more critical the synchronization of CSS.

g. Routine, doctrinal, or constant information is not included in the concept of support. It is incorporated into the unit TSOP.

h. Detailed and numerical data relevant to the operation, and of primary interest to unit logistic personnel may be in another subparagraph of 4 or in the service support order.

2. CSS planners need to review the concept of support and ensure it meets the commander's needs. There are several basic questions the CSS planner should ask.

a. Is the concept of support easily understood, and is it comprehensive and concise?

b. Does it provide a visualization (word picture) of the overall concept of support?

c. Is the concept of support synchronized with and does it support the concept of the operation (paragraph 3)?

- d. Does it consider, and address as required, the logistic functions in the context of before, during, and after (or by phase for phased operations)'?
- e. Does it establish priorities of support for before, during, and after the operation, and do these priorities correlate with the priorities established in the commander's intent, paragraph 3, and other directives from higher?
- f. It is written for the non-CSS commanders and their primary staffs and focused for supported units?
- g. Does it address all critical, non-SOP, or unusual aspects of support?
- h. Does it apply to FM 100-5 logistic characteristics?

### **Sources of Information for Developing the Concept of Support**

The logistician actively participating in the military decision making process facilitates the development of the concept of support. Specifically, during mission analysis, the CSS planner determines the units' current materiel and personnel posture before the operation begins. This, with the commander's priorities, determines which units and items of equipment should receive priority before the operation.

The war gaming and quantitative analysis portions of COA analysis highlight critical and/or unusual logistic requirements and determine support priorities for during and after the operation. By its very nature, war gaming facilitates logistic synchronization with the concept of the operation.

There are numerous other information sources for the concept of support. These include:

- Commander's guidance and intent.
- Concept of the operation.
- Higher headquarters concept of support, service support order or plan (if applicable), and CSS overlay.
- Maneuver System (MCS) screens and/or other locally generated status charts.
- Lessons learned data and historical perspectives to see how others successfully, or unsuccessfully, supported other similar operations.
- The unit's battle book.
- Logistics Estimates.

### **Areas or Items To Consider Under Each CSS Function**

The areas of consideration listed below are not intended as an all-encompassing checklist and may not always be applicable. They are intended, rather, as a point of departure for CSS planners developing a concept of support. Although the items are considered, they are not necessarily addressed in the concept of support unless they are critical, non-SOP, or unusual.

1. Items for overall consideration

- a. Support boundaries, support areas, and support relationships.
- b. Priorities of routes/events (timing).
- c. Support of attached or detached forces [cavalry, light infantry, covering force units, out of sector support, heavy/light force mixes, etc. (if required)].
- d. CSS actions in assembly areas, staging areas, and attack positions (if any).
- e. Programmed locations and projected displacements of logistic support units and areas.
- f. Support provided by/to higher or adjacent units or other unusual support arrangements; e.g., refuel on the move (ROM), caches, Army Special Operations Forces (ARSOF) unique requirements, etc.
- g. CSS actions in support of security and/or deception plans and/or operations.
- h. Foreign nation support (FNS) and/or host nation support (HNS) arrangements.
- i. CSS task organization (CSS units' capability versus supported units' requirements).
- j. Unusual and/or critical impact of weather, terrain, and security on CSS operations.
- k. Special considerations for joint (sister service) or combined (allied) CSS operations.

2. Some items to consider before, during, and after:

**Supply:**

Rations: Issue cycle. Ration cycle (meal mix). Bulk or bottled water.

General Supplies: Distribution methods (supply point or unit). Support from other sources. Support to refugees. Soldier quality of life (soldier and family). Significant risks. Others.

**Fuel:** Current status (in vehicles and bulk carriers/storage). Anticipated requirements. En-route requirements/operations. Bulk refueling procedures. ROM and Forward Area Rearm/Refuel Point (FARP) operations. Refuel assets. Systems capabilities. Distribution plan and methods. Fuel allocations. Displacement of refueling assets. Significant risks. Others.

**Ammunition:** Basic load status. Operational loads. Required supply rate (RSR) versus controlled supply rate (CSR). Ammunition prestocking arrangements. Forecasted requirements. CSR sub allocation. Ammunition transfer point (ATP), ammunition supply point (ASP), and corps storage area (CSA) locations (only general locations, grids on the CSS overlay). Distribution methods. Mission-configured loads (MCLs). Emergency resupply procedures. Expenditure restrictions (e.g., no more than what percent of the CSR may be expended to support the covering force?). Monitoring and reporting requirements. Field storage requirements, and missile maintenance. Significant risks. Others.

**Maintenance:** Maintenance priorities (air, ground). Anticipated workload (battle damage and maintenance failure rates/projections). Battle damage assessment and repair (BDAR) procedures. Establish or adjust priorities. Maintenance repair time lines. Controlled substitution or cannibalization procedures. Maintenance support team (MST) employment. Locations/displacements of maintenance/repair part supply units. Support from other sources. WSRO procedures. Distribution methods for classes VII and IX. Evacuation procedures (could, in some cases, also include recovery procedures). Significant risks. Others.

**Transportation:** Transportation requirements (logistic versus tactical). Movement and route use priorities (units and CSS). Traffic control requirements. Transportation unit/asset displacements. Support from other sources. Throughput operations. Trailer transfer arrangements. Flatrack management. Personnel movement. Alternate modes of transportation; e.g., rail, FNS. Cargo transfer/terminal operations. Security of lines of communication (LOC). Supply routes. Route maintenance requirements. Mode selection, heavy-equipment transporter (HET) priorities, and back haul priorities. Others.

**Field services:** Requirements for mortuary affairs operations and support. Evacuation procedures for killed in action (KIA). Aerial delivery requirements and procedures. Water production site selection and water point locations. Food preparation requirements. Shower, laundry, and clothing repair (SLCR) support requirements and locations. Significant risks. Others.

**Combat Health Support:** Casualty estimates. Medical regulating -- casualty reporting and accounting. Medical Logistics. Preventive Med. Establishing or adjusting personnel and medical support priorities. Locations of medical treatment facilities. Ambulance exchange point (AXP) locations. Routes (clean/dirty). Evacuation methods (ground/air). Emergency Class VIII resupply. CHS for enemy prisoner of war (EPW) and non-combatants. Treatment of wounded in action (WIA).

**Explosive ordnance disposal (EOD):** Coordination for support. EOD team locations.

**Human Resources:** Personnel status and replacement operations; e.g., weapon system replacement operations (WSRO). Projected casualties and their effect on combat readiness. Personnel services.

**Finance Management:** Forward area support relationships. Currency exchange requirements. Contracting payments.

**Religious Support:** Location of chaplains during combat operations.

**Legal Support:** Rules of engagement (ROE). Contracting. Criminal offenses by soldiers.

**Band:** Use of the band during rear area security operations or EPW handling.

**Reconstitution.** Level II assessment requirements. RTF site locations and staffing. Accessibility/road network. Training area requirements. CSS requirements.

### **Concept of Support Format**

The intent of the concept of support is not to "boilerplate" unnecessary information. It is to think through the specific application of logistic to the concept of the operation and craft a word picture that non-CSS commanders and their primary staffs can easily understand.

While each of the logistic functions are listed under before, during, and after the operation, each should be considered and then addressed only if the support arrangement is critical, non-SOP, or unusual. Additional CSS information manning (personnel service support), sustaining the soldier (personnel services, combat health support, quality of life, general supply support, and field services), arming, fueling, fixing, and moving may be in subparagraphs or in a separate service support order.

### **Concept of Support.**

This paragraph will provide an overall visualization of the concept of support. Its intent is to provide the non-CSS commanders and their primary staffs a visualization, or word picture, of how the operation will be logistically supported. If the information pertains to the entire operation, include it in this subparagraph. If it pertains to more than one unit, address it here and change it in the ensuing subparagraphs when needed. This could include:

A brief synopsis of the support command mission. Support command headquarters/support area locations, including locations of next higher logistic base(s), if not clearly conveyed in the CSS overlay. The next higher's support priorities and where our unit fits into those priorities. Priorities, if they remain the same throughout the operation. Unit(s) in the next higher CSS organization supporting our unit.

Significant/unusual CSS issues that impact on the overall operation phases. Any significant risks.

1. Before -- Priorities: By unit. For personnel replacements. Maintenance/recovery and evacuation priorities (by unit and equipment type). Route use. Manning. Arming. Fueling. Fixing (for both for ground and rotary systems). Moving (priorities should be by unit and commodity, both forward and rearward). Sustaining soldiers and their systems.

2. During.

a. Address it if it is different or changes from the before. (The during portion of the concept of support would also be phased if the concept of the operation is phased.)

b. Priorities: By unit. For personnel replacements. Maintenance/recovery and evacuation priorities (by unit and equipment type). Route use. Timing. Manning. Arming. Fueling. Fixing (for both ground and rotary systems). Moving (priorities should be by unit and commodity, both forward and rearward). Sustaining the soldier. Critical decision points. Identify any support operations that will not be provided in this time frame, i.e., mail distribution, showers to forward troops, etc).

3. After.

a. Address it if it is different or changes from the *before* and the *during*.

b. Priorities: By unit. For personnel replacements. Maintenance/recovery and evacuation priorities (by unit and equipment type). Route use. Manning. Arming. Fueling. Fixing (for both ground and rotary systems). Moving (priorities should be by unit and commodity, both forward and rearward). Sustaining the soldier. Reconstitution. WSRO. Preparing for future operations/post conflict termination support.

## Service Support Annexes

**If written correctly, a CSS Annex to an OPORD/OPLAN can be used as a CSS order for subordinate CSS commanders.** Annexes provide details not readily incorporated into the basic order and help to keep the order's basic text short. They should increase the clarity and usefulness of the basic order by providing combat support, combat service support, and administrative details and instructions that amplify the basic order. They are a component to an order but not required if deemed unnecessary; each annex relates to a specific aspect of the operations. The number and type of annexes depend on the commander, level of command, and needs of the particular operation. This is not written for the CSS commanders, staffs, and units because it provides more details on how the concept of support will occur.

## BRIEFING THE CONCEPT OF SUPPORT

The logistician's role in the overall OPLAN/OPORD briefing is to brief the concept of support, but he must first understand the general concept of the operation and the

commander's intent. This briefing facilitates the communication of the concept of support to the commander and the subordinate commanders. The concept of support briefing is most closely defined as a "**Staff Briefing**" in FM 101-5 and should address the critical, non-SOP, or unusual aspects of logistic support in the context of before, during, and after and the critical aspects of the logistic functions. Doctrinal, usual, or SOP matters should not be addressed unless there is a deviation in support relationships or normal methods. The CSS planner briefs the concept of support, working through the operation from before to after. This briefing should go into greater detail than is laid out in the written concept of support.

1. Some rules of thumb for the concept of support briefing are:

a. Tell commanders what they can expect from CSS and how many days or hours they can operate based on materiel readiness, quantities of supplies on hand, etc. Use common terms such as days of supply or other terms that are meaningful to the commander. Avoid using technical terminology/SOP information.

b. Address the "**culminating point**" from a logistic perspective.

c. Avoid briefing the results of extensive number-crunching that is associated with the logistic estimate process.

d. The briefer should not read some written product. Rather, using the CSS overlay appropriate visual aids, such as a concept of support overview matrix, he should show the commander how the concept of support is synchronized with and supports the concept of the operation.

e. The briefing should include locations of critical logistic assets, headquarters, and events.

f. Address priorities, shifts in priorities, problem areas and solutions, and critical events.

g. Bottom line: The logistician must tell the commander what he needs to know.

NOTE: Instructions for using the concept of support overview matrix and developing the CSS overlay are included in the following paragraphs.

2. Concept of support briefing.

a. Introduction (overview of the concept of support and orientation to the map, if required). Orientation to the map is not required if done previously by another briefer. Do not assume the commander totally knows the terrain. Focus on locating critical CSS nodes, MSRs, etc.

b. Brief the concept of support starting with critical actions that must be accomplished before the operation and concluding with critical actions to be accomplished after the operation/preparation for future operations for each of the logistic functions (manning, arming, fueling, fixing, moving, and sustaining the soldier).



- c. Identify which units have priorities for each function (this should correlate with the commander's priorities; e.g., main effort).
- d. Identify the next higher echelon unit providing support and/or backup support.
- e. Identify any critical shortages/problem areas for each function and solution. For example, this can be supported, but ..., or it can be done but not without risk in....
- f. Identify any other CSS problem areas, arrangements, special requirements, or any other critical aspects addressed elsewhere in the briefing.

## **The CSS Overlay**

The CSS overlay is a graphic representation of the array of logistic support areas (LSAs) and units. Ideally, it accompanies copies of the OPLAN/OPORD distributed to subordinate headquarters and is used as a graphic backdrop to the concept of support briefing. It does not show the location of tactical units, that is done on the operations overlay.

The CSS overlay should include (as a minimum):

- Locations of current and proposed support areas.
- Boundaries for CSS responsibilities.
- Main supply routes (MSRs) (division level and above) and supply routes (SRs) (brigade level and below).
- Locations of major headquarters.
- Locations of CSS installations and units.
- Locations of critical resources (potable water, etc.).

The CSS overlay will not only depict the array of CSS units/nodes, but it is also an integral part of the overall OPLAN/OPORD graphics and must be synchronized with the operations overlays.

1. A division CSS overlay would include (as a minimum):

- The DSA location and, using type utility symbols, the CSS units and headquarters contained therein, whether they are divisional or non divisional.
- Locations of alternate and/or proposed DSAs.
- MSRs from the corps rear area to the DSA and from the DSA to each BSA.

2. A corps CSS overlay may have to encompass the entire corps area of operations as well as a part of the communications zone (COMMZ) and, as a minimum, would depict:

- LSAs and, using type unit symbols, CSS units and headquarters located therein, and locations of any other critical CSS nodes not located in an LSA.

- MSRs leading into the corps rear area from the COMMZ and the MSRs leading from the corps rear area to each DSA (or, as a minimum, to the division rear boundary) and to other critical logistic nodes.
- Locations of alternate and/or proposed LSAs.
- Locations of corps CSS units operating forward of the divisional rear boundaries.

### **Using and Completing the Concept of Support Overview Matrix**

The oral concept of support briefing will allow the commander and his subordinates to visualize how the operation will be logistically sustained. The CSS planners' oral briefing, using the CSS overlay, is useful in communicating the concept of support to the commander. In addition, a concept of support matrix can be used to make complex logistic concepts more easily understood. The matrix can complement the briefing.

The design of the matrix is aligned with the format of the concept of support. The logistic functions are in the context of before, during, and after. For phased operations, the during portion of the matrix can be modified to reflect phases. The matrix will highlight those critical aspects of each logistic function. It can also depict other critical information such as priorities, shifts in priorities, problem areas, critical events, and other critical action. Again, the matrix is not intended to stand-alone or to replace the concept of support briefing. It should complement and supplement the concept of support briefing.

## NOTES