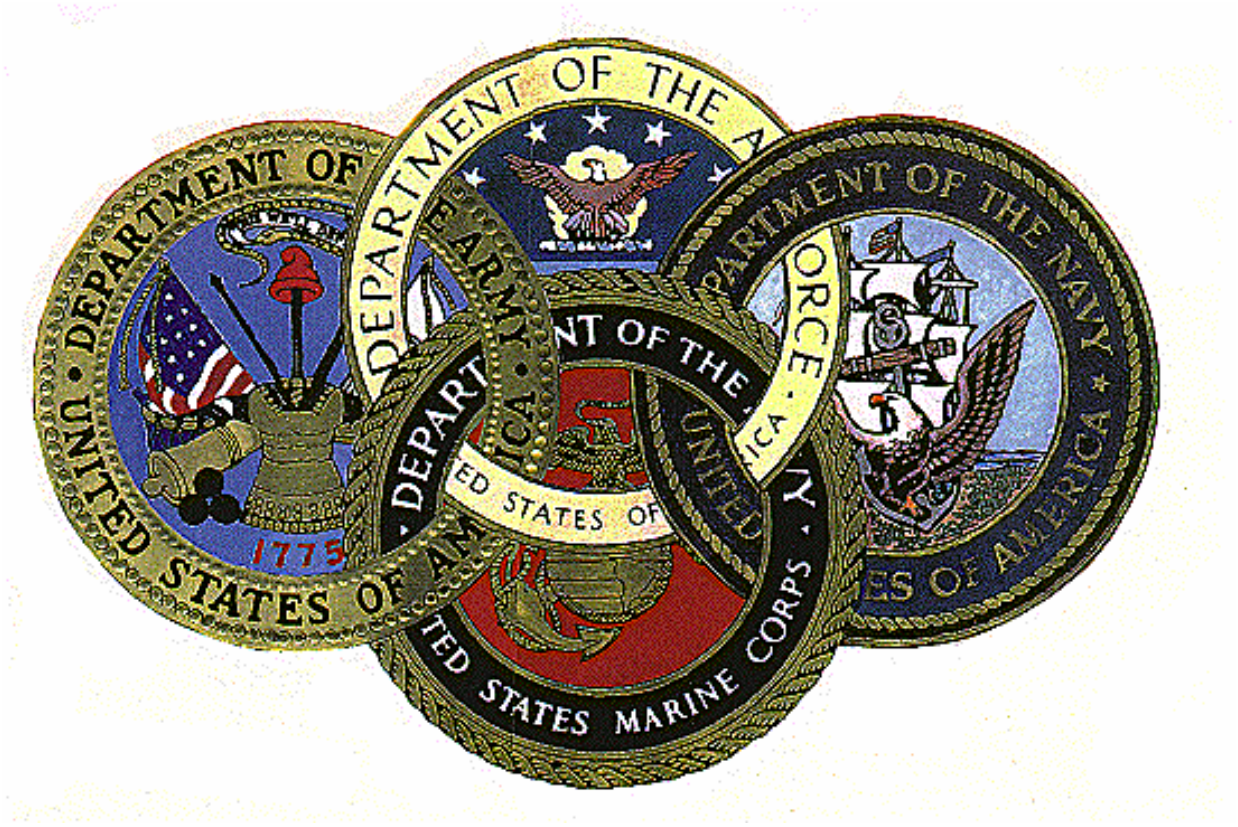
Department of Military Strategy, Planning, and Operations

U.S. Army War College



CAMPAIGN PLANNING HANDBOOK

AY 08
Final Working Draft

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Preface

In the art of war, lesser men are schemers who avoid risk with mediocre results. The great captains of history see many ways of waging war; they seek the path of genius and change the face of the world.

These words taken from Napoleon describe the essence of great commandership in war – the ability to formulate innovative military solutions and effectively put them into action through campaigning indeed changed the face of Europe during his time. Throughout history, campaign design and planning has been used by commanders to synchronize efforts and sequence related operations to achieve decisive strategic effect. The great captains of American military art that include George Washington , U. S. Grant, John J. Pershing, Dwight Eisenhower, and Douglas MacArthur were masters of envisioning the broad purpose and direction of military operations around which they designed and executed campaigns that accomplished their nation's strategic objectives through the use of sustained, focused military force.

This handbook has a single purpose: to enhance the understanding of the campaign design and planning processes at the Combatant Command level. Recognizing that practices differ greatly across the commands, it attempts to encapsulate a number of common and "best" practices and propose a practical, reasonable method for accomplishing campaign design and planning. It is also based on the Joint Operation Planning Process (JOPP), Joint Intelligence Preparation of the Operational Environment (JIPOE) Process, and adaptive planning concepts found in joint doctrine and emerging practices. It integrates effects-based thinking in proposing a method for campaign planning. In addition, this document includes the essentials of campaign design. Campaign design and planning are qualitatively different yet interrelated activities essential for solving complex theater problems. Design inquires into the nature of a problem to conceive a framework for solving that problem. Planning applies established procedures to solve a largely understood problem within an accepted framework. In general, design is "framing the problem" while planning is "problem solving".

In the wake of Operations ENDURING FREEDOM and IRAQI FREEDOM, campaign design and planning has been a high priority within the Department of Defense (DoD), and emerging concepts are being integrated into the process to enable an increased level of operational art throughout the U.S. military. The renewed priority on both campaign design and planning focuses on role of the commander. Through campaign design, the commander provides the staff a means to gain understanding of a complex problem and insights towards achieving a workable solution. With this foundation, the staff is then empowered to develop an effective plan. The relationship between commander and staff is highly interactive throughout, as each leverages the knowledge of the other. This process melds the art and science of developing campaign plans.

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Chapter 1:
The Joint Planning Process

For the past two decades, the campaign planning process has been the aggregate of two distinct processes: Contingency (deliberate) and Crisis Action planning. As technologies improved to enable collaboration, and our level of operational art increased, these two planning processes began to merge. The Department of Defense's (DoD's) initiative to adopt a more adaptive planning process, does exactly that; it further consolidates the two campaign planning processes into a single process that links the Combatant Commander (CCDR) with national leadership in developing, reviewing, and approving US options for execution.

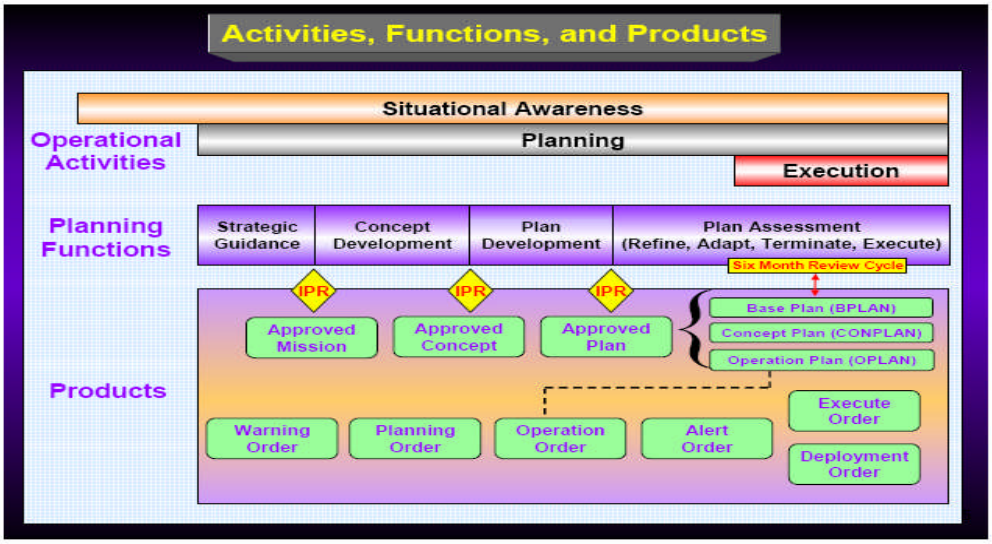

Figure 1 Joint Operation Planning Activities, Functions and Products

With adaptive planning most procedures for developing a campaign plan remain the same. Commanders must know their operational environment (OE), interpret direction, and provide vision and guidance to staffs and subordinates to drive planning and execution. Staffs must still conduct mission analysis, develop estimates, develop a strategic concept, and construct supporting plans – these processes may not be overlooked. However, there are three major changes that impact how a plan is developed. First, adaptive planning mandates a slate of three In-Progress Reviews (IPRs) to provide the Secretary of Defense (SecDef) visibility of the plan while being developed. This allows greater civilian oversight of the process and ensures the CCDR's and SecDef's understanding of and agreement on strategic objectives. Second, new software technologies now allow for further blending of the two planning processes (contingency and crisis action) into one. Third, timelines for developing and completing a plan have been compressed from 18-24 months, to only 12 months (with

an eventual goal of 6 months). The adaptive planning concept continues to evolve, but technological improvements, especially to support analysis, are required to fully realize the concept's potential.

Peacetime planning produces joint operation plans (OPLANs) for a variety of contingencies as directed by joint strategic planning documents, or the CCDR. At the national level, these planning directives include the SecDef's annual Contingency Planning Guidance (CPG), and the Joint Strategic Capabilities Plan (JSCP). The JSCP provides guidance to all CCDRs and Service chiefs for accomplishing military tasks and missions based on current military capabilities. JSCP-directed planning is a highly structured process that is designed to develop well-coordinated theater level plans against the most dangerous or likely global threats to the nation. Similarly, the CCDRs may direct theater level plans beyond what is specified in the JSCP, based solely on analysis of their theater strategies. Peacetime planning is proactive; therefore planners rely heavily on assumptions regarding the political, economic and military environments in which the plan may be executed. These plans undergo extensive coordination within the DoD and interagency communities, and in some cases, with multinational partners. As such, they normally take up to a year to complete and are published in one of three forms: as Base Plans, Contingency Plans (CONPLANs) or Operation Plans (OPLANs) that vary in detail, depending upon JSCP or CCDR instructions. They may therefore require significant refinement before they can be executed.

Planning During Crisis

Crisis planning is based on actual events. As the crisis unfolds, assumptions and projections are replaced by facts and actual conditions. Peacetime planning supports crisis planning by anticipating potential crises and developing joint OPLANs that facilitate rapid refinement and selection of a course of action (COA). If the actual crisis conditions closely match the assumptions in a previously developed plan, then the decision-making cycle resulting in selecting a COA may be greatly accelerated. If the crisis conditions partially match what's stated in an existing plan, then the existing plan may be modified to meet the current political and military environment. If the crisis develops in a location or between adversaries not previously contemplated, or the assumptions on which the existing plan is based are generally invalid, then an entirely new plan must be developed.

Planning during crisis is often conducted in a time-sensitive environment, so the process is intentionally flexible and is normally focused on immediate operational requirements. The procedures provide for timely flow of information and intelligence, and facilitate the rapid communication of decisions from the President and SecDef to CCDRs, subordinate Joint Task Forces (JTFs), component commanders and supporting commanders to better enable expeditious execution planning. Planning during crises may contain both proactive and reactive characteristics, as well as be assumptive and factual. Plans developed during crises normally take much less time to complete (days/weeks) than those planned during peacetime; therefore it will be less coordinated

throughout the DoD and interagency communities. An executable Operations Order (OPORD) normally results from planning during crisis.

Planning During Conflict

Campaign planning doesn't end when the conflict begins. A campaign plan is a living document built on many assumptions that may or may not remain valid. As the campaign progresses, planners must always evaluate the plan against the current situation and update its facts and assumptions appropriately. If a plan is to be of any help to the CCDR, it must be continually adjusted, and branches and sequels created to accommodate future options, uncertainties, and opportunities. Furthermore, the plan must provide a basis for OPORD development to synchronize component activities at the operational level of war. Unlike during peacetime and crisis, planning during conflict is primarily reactive, has an operational vice strategic focus, and is completed in very compressed (hours/days) timelines.

Campaign Design and Supporting Planning Processes

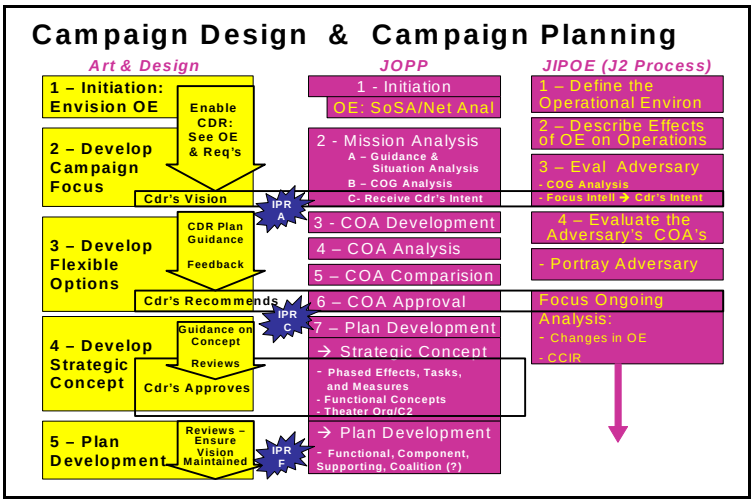

Figure 2 Joint Operation Planning Process (Steps 1-7) in Campaign Design and Planning

Theater commanders and staffs work as team to perform the design and planning actions shown in the figure above. At the strategic and operational levels, the commander uses all available staff analysis to develop a full understanding of the OE and requirements for future action based on the strategic direction given. In turn, he will develop a "vision" for using military force and its interrelationship with the other elements of national power that will then provide a "design" for the campaign. In turn the staff, normally a Joint Planning Group (JPG; see Appendix A), will support the commander in achieving this vision and transforming it into a plan for effective execution. These supporting processes and actions comprise the orderly series of activities that occur within the *Joint Operation Planning Process* (JOPP) and Joint Intelligence Preparation of the Operational Environment (JIPOE).

The design and planning process outlines an interactive process between commander, staff and subordinate/supporting commands. This process begins after receiving strategic guidance. The CCDR uses his understanding of the OE as the staff systematically conducts detailed situation analysis of the strategic guidance. Based on this, he derives the mission and formulates a Commander's Intent which the staff then uses to develop COAs, all of which are part of the Commander's Estimate. The CCDR then develops the strategic concept of phased operations that includes objectives and supporting effects; determines subordinate tasks, command relationships and organizations; and identifies requirements for sustainment and supporting plans. This sequence is a simplified outline of a process that's dynamic and non-linear, and absolutely critical to successful planning. Actions, such as revising intent and estimates, are continuous and concurrent.

Integrating Effects-Based Thinking in Planning

An EBA to planning complements current design and planning processes such as the JOPP. EBA seeks to fully integrate military actions with other elements of national power by coupling objectives to tasks within an assessment framework that supports the CCDR's guidance. Using the JOPP, theater-strategic and operational planning translates strategic and theater-strategic (military) objectives into action by integrating endstates, objectives, effects and tasks among all components of the command.

Joint command and staff processes should begin, proceed, and end with substantial understanding of the OE. This is not limited to feedback to commanders during execution after operations have commenced. Awareness begins before the onset of an operation with the assessment of the current situation in the operational area (OA)—not only what is happening, but to the extent possible, why it is happening. **Without an accurate understanding of the OE, a CCDR or Joint Force Commander (JFC) cannot envision and articulate the purpose and scope of the operation clearly enough to ensure subordinate commanders know what constitutes success**.

Using effects-based thinking in planning is not a replacement for existing processes such as the JOPP. It emphasizes (1) understanding the behavior of systems in an OA and (2) the importance of setting the right conditions for success. During contingency planning, CCDRs focus on specific areas in the theater based on assigned planning requirements (from the *Contingency Planning Guidance* or another source) and anticipated or potential "trouble spots." To assist understanding the complex interconnected nature of today's OE, the battlespace is described as a system of interconnected systems—military and non-military (see figure below). This systems perspective provides a comprehensive, holistic view of the fundamental elements (nodes) and their relationships (links) to each relevant system. The staff concentrates on those relevant systems, nodes, and links while applying operational design to the anticipated or assigned mission.

Conducting a **system-of-systems analysis** (SoSA) considers more than just an adversary's military capabilities, order of battle, and tactics. A systems approach to understanding the designated OE allows the staff to gain a baseline appreciation of the environment and to organize information in a form useful to the commander. The SoSA process typically categorizes systems—Blue (friendly), Red (adversary), and Green (neutral or unaligned) — as **political, military, economic, social, infrastructure, informational** and others as appropriate. This systems approach includes understanding the interconnectivity of nodes (tangible elements such as people, material, etc) and links (the behaviors or functional relationships) that make up individual systems, and then comprise the interrelationship of distinct systems (key linkages). Thus, the purpose in taking action against specific nodes is often to destroy, interrupt, or otherwise affect the relationship between them and other nodes, which ultimately influences the system as a whole.

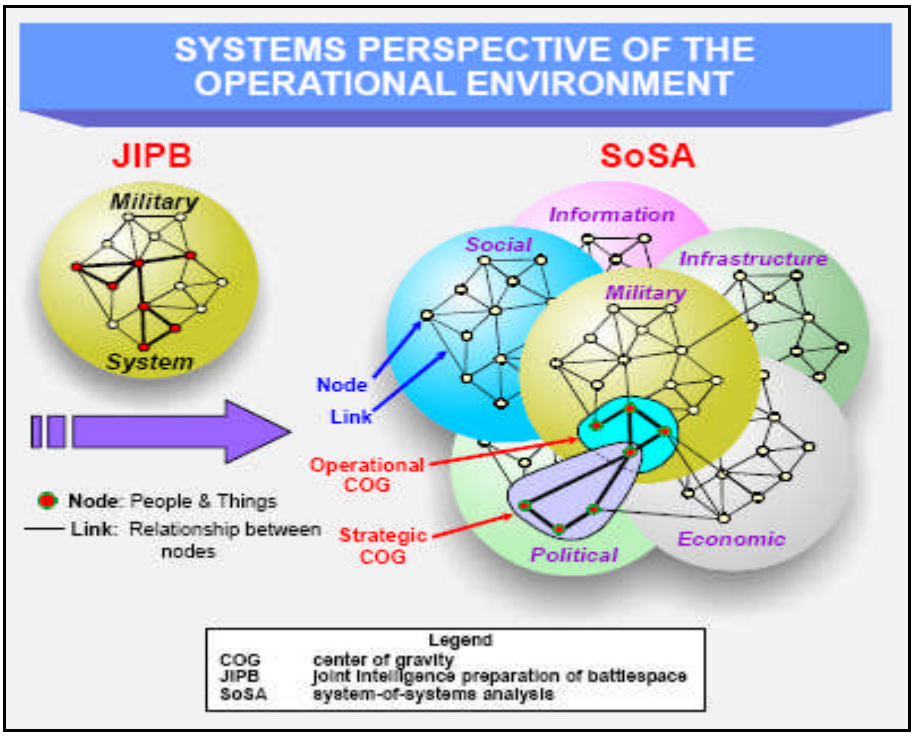

Figure 3 Systems Perspective of the Operational Environment

Through analysis, the staff develops an in-depth view of the linkages and relationships as a net assessment (also called an operational net assessment or "ONA") that assists the commander in developing his focus for campaign design by analyzing how these key nodes/links are related to a strategic or operational effect or a center of gravity (COG). **Some nodes and links may become decisive points for military operations,** since when acted on, they could allow the CCDR to gain a marked advantage over the adversary or contribute materially to attaining a desired effect. **Key nodes are likely to be linked to, or resident in, multiple systems, and are the focus**

of applying US instruments of national power to attain strategic and operational effects.

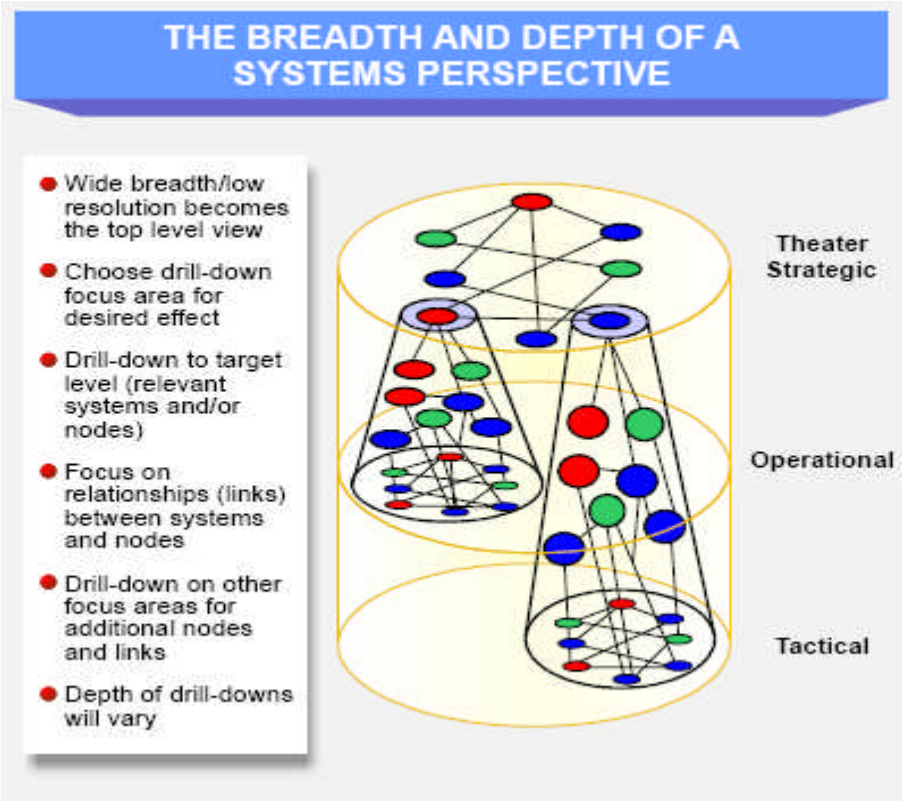

Figure 4 The Breadth and Depth of a Systems Perspective

The scale (breadth and depth) of the analysis depends on the commander's needs and the level at which the commander operates. For example, from the CCDR's perspective the OE for a specific mission may encompass an entire geographic region composed of many nation states. **Thus, systems analysis would focus on upper-level aspects of the specific systems relevant to the CCDR's strategic objectives, mission, and desired effects and "drill down" to more detailed aspects of these systems as required**.

Through the campaign design and planning process, the commander and staff interact to develop and use effects during COA development to promote unified action. Given the national objectives and a more comprehensive systems-based understanding of the OE, the CCDR and staff decide how, when, and where the other instruments of national power and our multinational partners will (or could) be employed. **This understanding provides the basis for the CCDR's collaboration with various agency and multinational leaders, and determines how the CCDR will address the actions of other participants during joint operation planning.** Well-crafted effects statements can provide a common language that will help these leaders see their role and potential actions in the pending operation. **In this way, the CCDR**

may achieve unity of effort whether the military instrument is in the lead or in a supporting role during various phases.

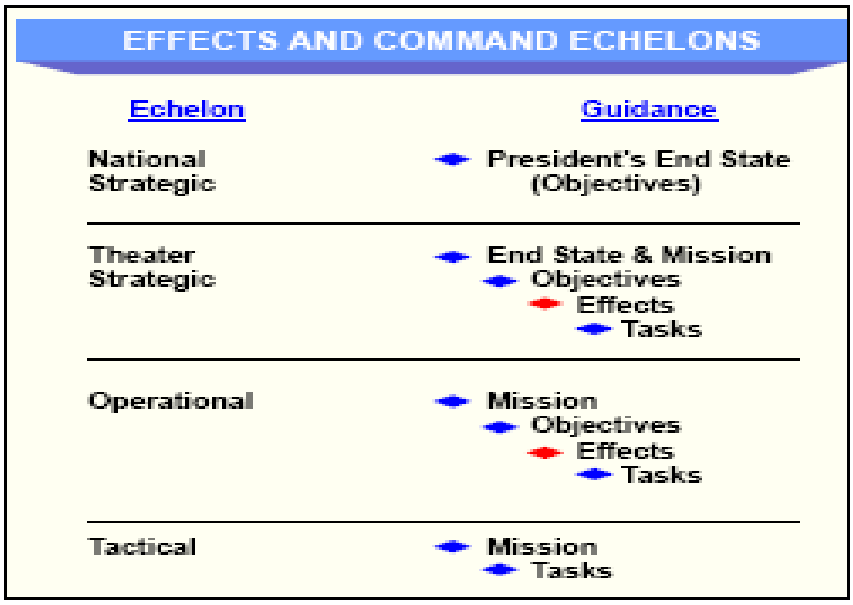

Figure 5 Effects and Command Echelons

The President and Cabinet Secretaries typically establish a set of **national strategic objectives** for employing US capabilities (particularly, for military operations). These objectives may be expressed in terms of diplomatic, military, economic, and other end states: the required set of goals for the successful conclusion of an operation. The CCDR is often responsible for more than one objective and has a supporting role in other objectives. Because today's operations take place in a joint, interagency, multinational context, the CCDR works (even in a unilateral US response to a crisis) with civilian leaders in DoD and other agencies to identify the major stakeholders who will or are operating in the OA. Once identified, these stakeholders become "players" in the activities and operations undertaken; therefore, it is essential to frame the relationship of end, ways and means in terms that are understood and accepted among all elements of the joint, interagency and multinational team.

Once strategic and theater/military endstates are established, the CCDR envisions and defines the interrelationship objectives, effects, and tasks for unified action. As part of his campaign design, the CCDR establishes campaign objectives and identifies the effects that support the campaign end state. At the same time he also identifies a list of undesired effects that help identify those conditions that friendly actions should not produce. **Objectives** developed at the national and theater-strategic levels are the defined, decisive, and attainable goals towards which all operations—not just military operations—and activities are directed within the campaign. They state ends, but do not suggest or infer ways and means. **Effects are derived from objectives, and help bridge the gap between objectives and tasks by describing the conditions that need to be established or avoided within the OE to**

achieve the desired end state. They provide an agreed-upon set of **desired and undesired system behaviors** within an OA, which helps focus all instruments of national/ international power to achieve national/coalition and theater strategic objectives. Effects reflect the outcome of extensive collaboration with supporting and supported commands and agencies—DoD, non-DoD, US, non-US organizations and agencies operating within the area of responsibility (AOR).

Objectives prescribe friendly goals.

Effects describe system behavior in the operational environment

Tasks direct friendly action.

Figure 6 Objectives, Effects and Tasks

Once the CCDR and staff understand the objectives and effects that define the campaign, they then match appropriate tasks to desired effects. Task determination begins during mission analysis, extends through COA development and selection, and provides the basis for the tasks eventually assigned to subordinate and supporting commands in the OPLAN or OPORD. Not all tasks are connected to effects. Support tasks such as those related to logistics and communications are also identified during mission analysis. However, the commander emphasizes the development of effects-related tasks early in the planning process because of the obvious importance of tasks to objective accomplishment. Each of these tasks aligns to one or more effects and reflects action on a specific system or node.

Key also in effects-based thinking is ensuring that there is a method to measure whether the tasks undertaken are truly accomplishing the desired effects, and in turn whether the effects obtained throughout the campaign are attaining the desired military and strategic endstates. **Assessment measures the effectiveness of employing friendly capabilities** during joint operations. More specifically, assessment helps the combatant command and subordinates decide what to measure and how to measure it to determine progress toward accomplishing a task, creating an effect, and achieving an objective. **This process is not done as an afterthought** – developing a plan for assessing the effectiveness and efficiency of actions during the campaign **begins during planning and continues throughout execution**. It involves developing relevant assessment measures, continuously monitoring joint force actions, and adjusting plans and operations accordingly.

In summary, utilizing effects based thinking in design and planning offers more options to envision and employ military and civilian capabilities on the OE. In planning, the Commander's Intent and early identification of desired and undesired effects steer both the mission analysis and COA determination processes. The premise is that if these joint command and staff processes are done with effects in mind, then adaptation

during execution is made far easier and more rapidly. But more importantly, focusing on effects during planning enhances the probability that objectives may be translated more accurately by the CCDR into actionable direction which is more easily understood and accepted by interagency partners.

The key results is for the CCDR and his subordinate commanders to have a shared common understanding of the effects required to achieve campaign objectives before tasks are identified and supporting/supported relations developed with nonmilitary agencies and organizations that will be operating as part of the campaign. This understanding recognizes that the military commander may be, at best, one of several "equals" operating within the designated OA. The better the collaborative climate, the more likely the various interagency capabilities may be integrated and brought to bear for effective, long term crisis resolution. Over time, using EBA is designed to institutionalize some of the thought processes, procedures, and techniques of the most successful leaders of the past and present. It represents a more inclusive effort that will bring greater robustness and precision to campaign design and planning while enhancing the opportunities to promote unified action.

Chapter 2:
Campaign Design and Planning

"Design is envisioning and deriving options among a very uncertain environment,
Planning is the search for how best to impose certainty on that environment."

The overarching vision for the long-term conduct of military operations in an AOR is the CCDR's Theater Strategy. This strategy is based on the commander's synthesis of the strategic direction provided by the SecDef and Chairman of the Joint Chiefs of Staff (CJCS) on US policy goals and objectives, combined with specific guidance supplied on the major military objectives that must be accomplished to ensure regional stability. As an extension of this strategy, the commander operationalizes this vision during peacetime through a number of different venues such as the Theater Security Cooperation Plan.

Just as the CCDR must envision the conditions for long-term success, the commander must also envision and guide the development of subordinate contingency plans for future campaigns that will counter a variety of specific challenges across the AOR. Based upon a vision of the OE, the CCDR identifies potential crises and challenges that may arise which threaten regional stability, and ensures that a variety of CONPLANs are formulated to deal with these potential/real challenges. In each case the commander, supported by the staff, must envision how specific, discrete military operations will not only defeat potential adversaries, but also how these efforts will contribute to continued progress and long-term success across the AOR. Each of these contingencies requires the combatant command to develop plans that focus the deployment, employment and return of US military forces from the region. In action, these CONPLANs become the basis for major campaigns which support accomplishing US policy objectives through the threat of or use of military force.

The Relationship of Campaign Design and Planning:

By definition, campaigns are not short term, military-only operations. They are composed of a series of major operations and efforts across the joint, interagency and multinational spectrums that are aimed at achieving strategic and operational objectives in a defined time and space. As such, identifying, conceptualizing and preparing for complex problem areas usually occurs well in advance of a major crisis, and requires interpreting vague, general guidance and situations based only on partial information about current and future conditions. Future options are based heavily upon assumptions and intuition on future conditions and adversary actions. **The CCDR's experiences and intuition will play a major part in envisioning these conditions and framing options for future success upon which subordinate commands can conduct in-depth, detailed planning and analysis**.

Campaign design and planning are qualitatively different yet interrelated activities essential for solving complex theater problems. While planning activities receive consistent emphasis in both doctrine and practice, discussion of design remains largely abstract and is rarely practiced. Presented a problem, staffs often rush directly into planning without clearly understanding the complex OE, the purpose of military involvement, and the range of approaches available to address the core issues. **Campaign design informs and is informed by planning and operations.** It has an intellectual and cognitive foundation that aids continuous assessment of operations and the OE. The CCDR should lead the design process and communicate the resulting framework to other subordinate and supporting commanders for planning, preparation, and execution.

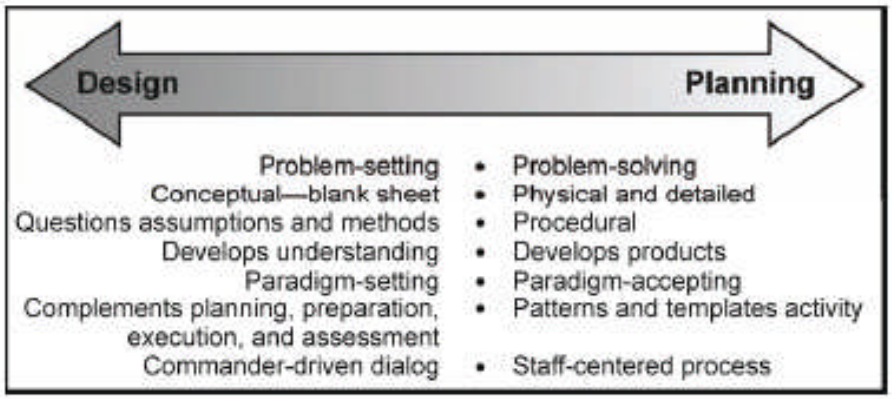

Figure 7 Design-Planning Continuum

It is important to understand the distinction between design and planning (see figure below). While both activities seek to formulate ways to bring about preferable futures, they are cognitively different. **Planning** applies established procedures to solve a largely understood problem within an accepted framework. **Design** inquires into the nature of a problem to conceive a framework for solving that problem. **In general, design is "framing the problem" – envisioning the challenges and potential solutions in and uncertain environment – while planning is "problem solving" -- developing a series of executable actions which seek to impose certainty on this environment.**

Because the theater-strategic environment is complex and strategic guidance often vague, the commander must tackle the hardest part of the process – figuring out what the problem is, in order to establish workable frames of reference. Planning alone is inadequate and design becomes essential. Absent a design process to engage the problem's essential nature, planners default to doctrinal norms and procedures -- they develop plans based on the familiar rather than an understanding of the real situation. Design provides a means to conceptualize and hypothesize about the underlying causes and dynamics that explain an unfamiliar problem, and provides a means to gain

understanding of a complex problem and insights towards achieving a workable solution.

While design precedes and forms the foundation for staff planning, it is continuous throughout the planning and execution of the campaign. As part of the vision and assessment, the commander continuously tests and refines campaign design to ensure the relevance of military action to the situation and effective synchronization with other elements of national power. In this sense, design guides and informs planning, preparation, execution, and assessment. However, vision is not enough. An effective plan is necessary to translate a design into execution.

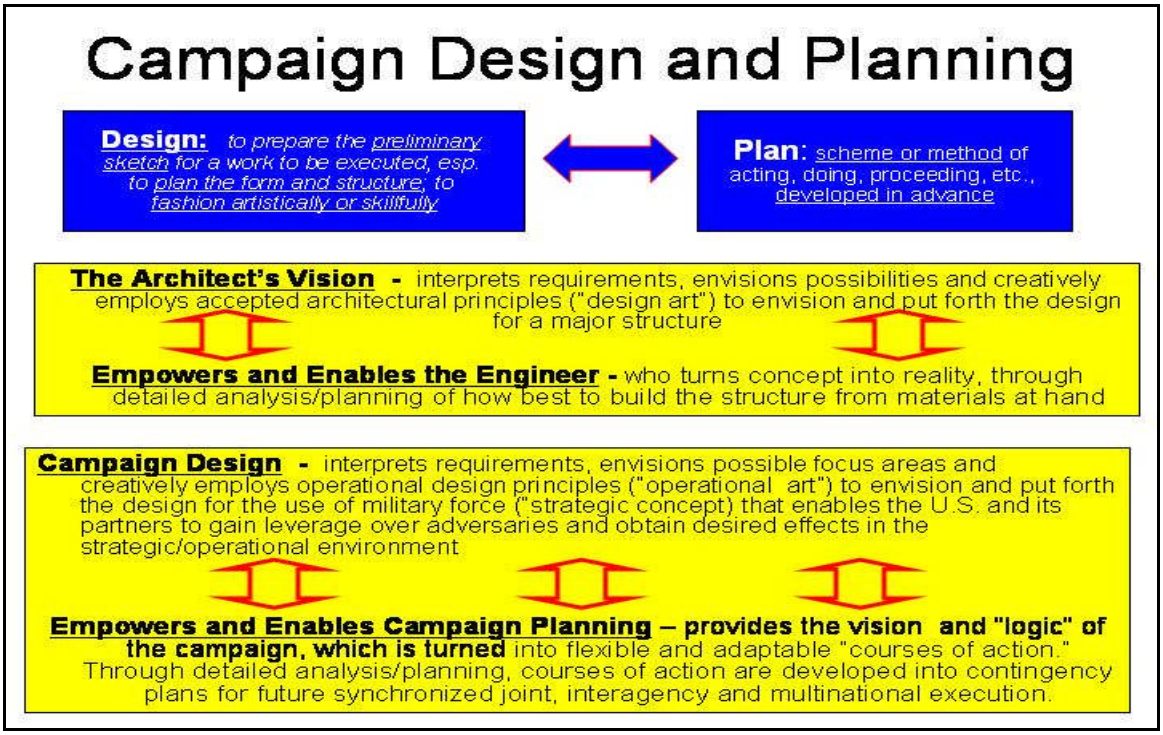

Figure 8 Campaign Design and Planning

The relationship between campaign design and campaign planning is analogous to the relationship between the architect and the engineer during a major construction project that encompasses many years and consumes large amounts of resources. The "architect," using his creative vision, will interpret overall requirements, envision possibilities based on his knowledge and experience, and creatively employ accepted architectural principles (or "design art") to envision and put forth the design for a required project or structure. With this design in hand, the "engineer" is now prepared and empowered to turn concept into reality through detailed analysis and planning of how best to build the structure. **However, design is not a discrete, one step process that is then handed off** entirely from architect to engineer. Throughout this relationship the estimates of the engineer continue to inform the architect on the potential/actual conditions at hand, the challenges anticipated, and the resources

available, thus causing the architect to re-evaluate his design based upon better analysis and situational awareness in order to provide a better, more effective design. This interactive process continues throughout the planning and eventual execution phases until the project is accomplished to the satisfaction of those who requested and directed the project be commenced.

As such, **"campaign design"** is the cornerstone for developing the campaign. It originates with the commander's developed vision of the environment, requirements and options available for future action. In the early stages of campaign design the commander not only receives strategic guidance, but is heavily involved in the discussion among senior leaders on the details and meaning of this guidance. He plays a critical role in "framing the problem" by analyzing the complexities of the OE, determining where and how strategic guidance must be applied, and directing the analysis process that identifies the termination criteria (endstates) which the campaign must achieve for military and strategic "success." Starting with this "end in mind," the commander will use the mission analysis provided by the staff, along with advice from subordinate commanders, to envision how military efforts should be focused to achieve unified action for maximum effectiveness against the adversary. This vision is supplied during the joint planning process through the "Commander's Intent," which then drives the staff to develop a strategic concept for employing military operations as a part of US national power to achieve overall policy success. A practical definition for this process is:

> ***Campaign Design****: a creative, cognitive commander-based process directed at interpreting strategic guidance and employing operational art in order to envision the requirements and framework for the sustained employment of military force that will enable the US and its allies to gain leverage over adversaries and achieve desired effects in the strategic/operational environment.*

However the size, scope and complexity of the environment and requirements in this process far exceed the ability of the commander alone to achieve a thorough understanding. The staff and supporting commands play a critical role in providing timely and accurate information and analysis in a useable, tailored fashion to support the commander's envisioning process. The staff supports the commander through supplying information and assessments that improve his knowledge of the key challenges and impediments to success, and provide options for employment and action. Unlike more traditional tactical approaches, the staff does not develop detailed concepts that are then offered to the commander to simply approve or disapprove. **Instead, the relationship between commander and staff is highly interactive throughout, as each leverages the knowledge of the other.** The commander draws upon the staff's in-depth knowledge and analysis to supplement and expand his own understanding. The staff leverages the insights, guidance and perspectives gained by the commander in discussions with senior US and regional officials to tailor and focus their analysis.

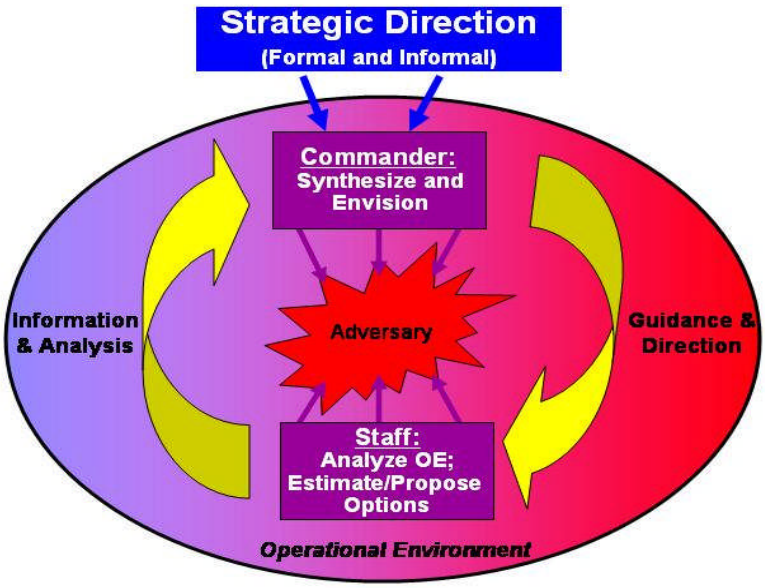

Figure 9 Campaign Design Cycle

With this vision of a "campaign design" in hand, the staff and supporting commands may effectively approach developing the "how to" of transforming this vision into detailed, synchronized action through **"campaign planning**." Joint doctrine provides an excellent definition of this process:

> ***Campaign Planning:*** *"The process whereby Combatant Commanders and subordinate Joint Force Commanders translate national or theater strategy into operational concepts through the development of an operation plan for a campaign." (JP 5-0)*

Whereas design focuses on envisioning, **planning focuses on transforming vision into a workable reality.** As campaign planning progresses, the staff employs the commander's vision to develop and evaluate a range of options for gaining leverage and resolving identified challenges in ways that support not only success in the campaign but long-term success across the AOR. Just as the engineer's analysis on the ground feeds the architect's thoughts for a improving his design, the staff supports the commander in continuing the process of refining his design for the campaign. As the staff proposes, analyzes and recommends COAs, their analysis enables the commander to envision and identify further challenges and options. This support enables the commander to "pick and choose" from the best range of actions, and develop guidance for his "strategic concept" that (once approved by the SecDef or President) will facilitate detailed planning, resourcing, and support across subordinate and supporting commands.

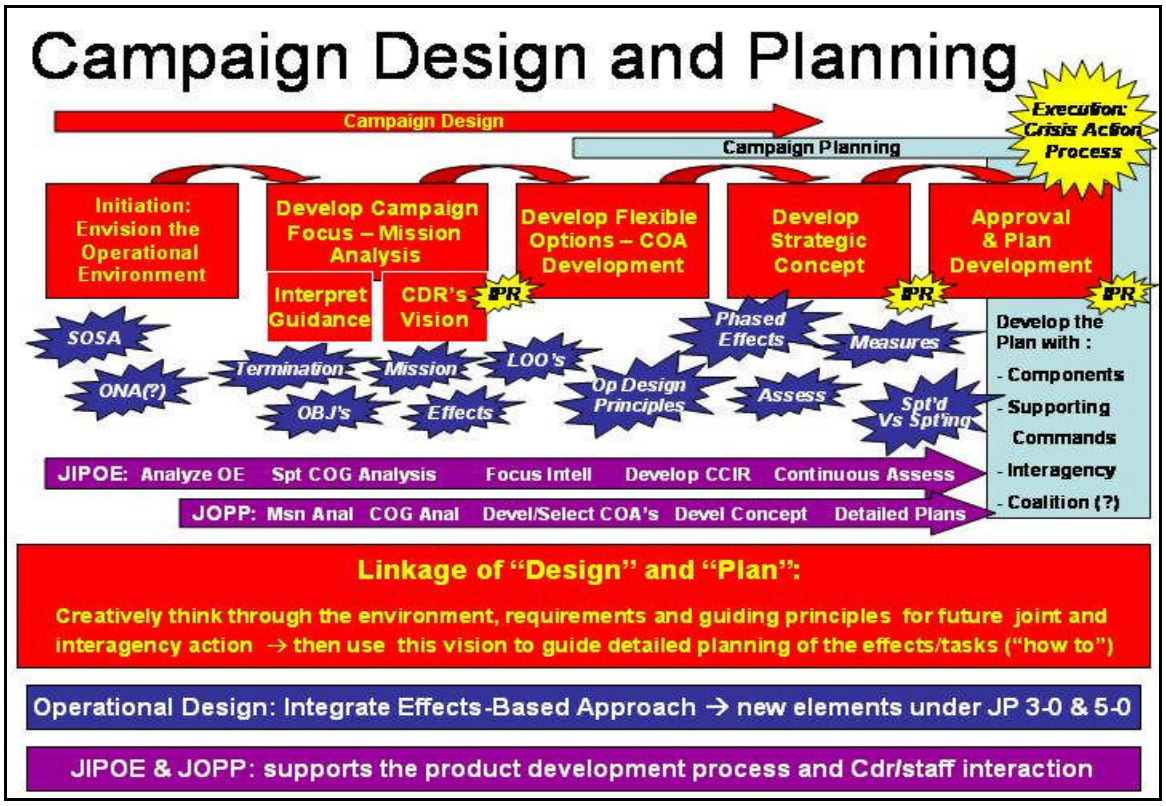

Figure 10 "Design" and "Plan" Linkage

This interrelationship of campaign design and planning is intended to produce a fully executable concept for US military action and influence the implementation of unified action across the broader Joint Planning and Execution Community (JPEC) that also encompasses the interagency. While contingency planning may begin before a crisis, it is not complete until after the President or SecDef selects and directs a COA based on their views of how the US will prevail. In the end, the campaign plan once approved and moved into execution will provide the core framework of how the US and its allies will act to resolve conflict and ensure policy success.

Campaign Design and Planning Process:

As already discussed, developing a campaign involves both design and planning functions. Throughout the early stages the process focuses heavily upon design - on developing an appreciation for the OE and how it will impact US options for action, and on assisting the commander in developing an overarching vision of military actions to accomplish US policy objectives. Using this vision, the commander and staff continue the process through developing a range of flexible options to accomplish the mission and achieve success in terminating the conflict. After careful analysis, the commander defines the best COA which is fully developed into a strategic concept for SecDef approval. Once approved, in-depth planning across the combatant command staff,

subordinate commands, and supporting combatant commands focuses on creating a fully developed and resourced CONPLAN that will be the basis for a future campaign.

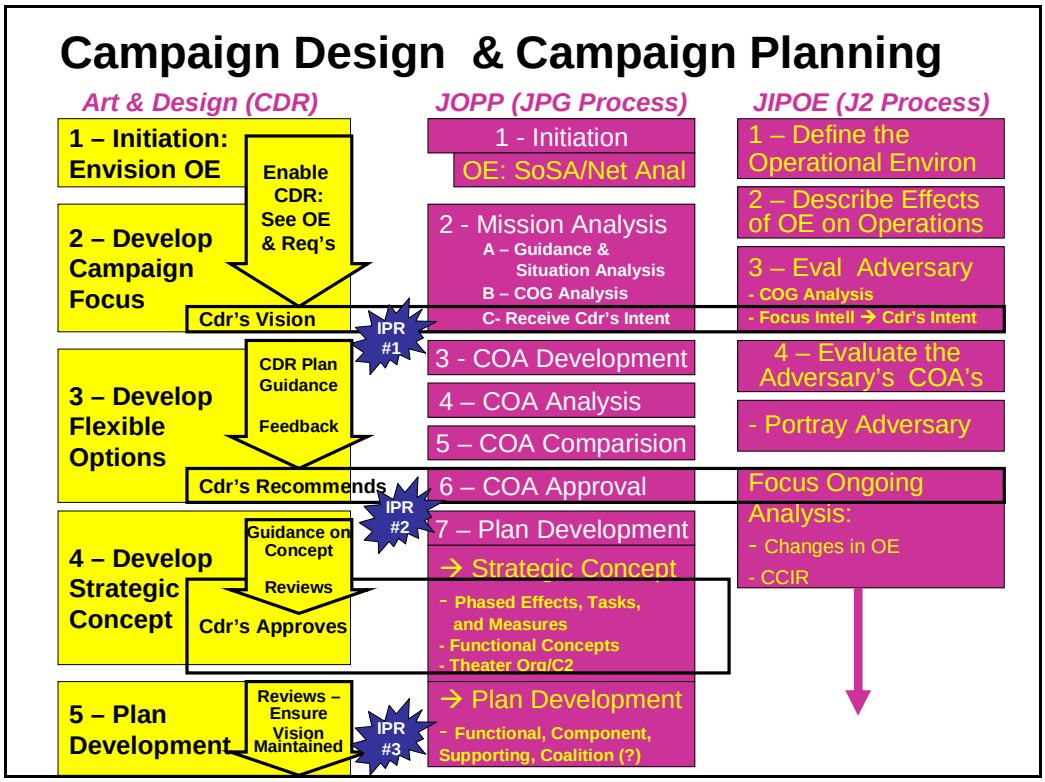

Figure 11 Campaign Design and Planning Comparison

Role of Supporting Processes (JOPP and JIPOE):

In all cases, the staff's focus is on supporting the commander in developing and refining a vision for the campaign. The JOPP provides a logical set of planning steps that are valuable in organizing the staff's efforts and providing a common process across the joint community to synchronize and coordinate common lines of effort. JOPP is a continuing process that orchestrates and organizes staff analysis and estimates in a logical sequence to facilitate mutual understanding. In addition the JIPOE process complements the JOPP by analyzing the OE and provides insights on how the adversary will act to achieve their objectives. **As such, both JOPP and JIPOE are critical processes that support both campaign design and planning** by providing logical, common practices across the joint community for gathering, analyzing and providing critical information, assessments and options for the commander to consider and use. In each step of campaign design, both JOPP and JIPOE provide the essential framework for how the staff and supporting commands will analyze requirements and develop options based upon commander's guidance,

However, these are only supporting processes that enable and leverage the creative process of campaign design. Both JOPP and JIPOE focus on developing COAs that will have a direct effect on the adversary or environment based on an

assigned mission and set of resources. Thus, joint planning on how best to use these resources must be based on an effective design which envisions and articulates what these actions are designed to achieve. As planning efforts analyze and explore information and options over time, these processes establish a baseline for commander understanding that continuously adds to the commander's capability to fuse guidance, experience and wisdom into an overarching strategic concept for the campaign.

Step 1: Initiation – Envisioning the OE

The first step in the design process originates from one of two sources. As strategic challenges arise, senior civilian and military leadership identify areas that require the developing CONPLANs and providing strategic guidance. Additionally, the CCDR may also identify required areas for CONPLANs based on an overall assessment of the AOR and emerging challenges to accomplishing his theater strategy.

In this first step, the commander and staff will frame the operational area (OA) and environment in which future operations will occur, to include an area for potential operations and a surrounding area of influence where events may impact success. Focusing on the potential adversary and supporting regional actors, the staff will begin a "systems analysis" with the goal of providing a detailed assessment of how their various sources of strength are linked together. **This "Systems of Systems Analysis (SoSA) Baseline" will be developed through intensive analysis** by a core element of subject matter experts and analysts (potentially from the Standing Joint Force Headquarters in the command or as provided by USJFCOM) **into a comprehensive net assessment.** This "systems view" will provide the commander with and initial appreciation of the complexities and linkages in the adversary's essential systems against which he will focus future action. Key elements that the commander must derive and the staff must provide are:

- A framework for understanding the key elements of the adversary's political, military, economic, social, infrastructure, and informational (PMESII) systems (see Chapter 3).
- An understanding of the key nodes and linkages in the systems, in order to develop a vision of how to generate effects on these systems.
- An appreciation of the key strategic and operational linkages between these PMESII systems.
- An initial assessment of the relative advantages and disadvantages of the adversary in the OE (as potential points of leverage for future analysis)
- Identity of further points for analysis.

If an existing SoSA/ONA is not available, the commander then directs the development of the scope and depth of the analysis desired based upon the time and resources available. Concurrently, the J-2 will initiate the JIPOE process to develop an initial "systems analysis" of the adversary(s) upon which to develop perspectives on enemy COGs and COAs. This initial JIPOE analysis will also be critical to initiating the JOPP process during Mission Analysis.

If at all possible (within Operations Security (OPSEC) constraints and other security concerns), **discussions and coordination with the interagency and key multinational partners should begin during this phase.** It is essential from the very start of the design process to develop a shared systems view of the OE and the challenges that may be identified during both the planning and design processes. Opening these discussions early also allows the command to see the OE through a number of different eyes during the SoSA development process – the same eyes the command will depend on for future success during execution. Without a shared and agreed to vision of the OE, the chances of unified action are slim. **In other words, without first developing a "unified view of the OE" upon which to base future discussions, achieving "unified purpose" and "unified action" will be difficult at best.** As design and planning continue, coordination and synchronization with these key partners will be essential to apply all elements of national and international influence against the adversary to achieve overwhelming effects.

Step 2: Develop Campaign Focus – Mission Analysis

As the commander leverages the network analysis to understand the complexities and possibilities presented by the OE, efforts begin to understand the strategic purpose for future military operations. The commander and the staff focus their efforts on fusing strategic guidance with their understanding of the OE to develop the focus of the campaign. As the staff presents analysis of both the requirements for and potential points of focus for the campaign, they enable the commander to develop a vision for the synchronized, integrated use of military operations as a part of unified action.

- **Step 2a: Guidance and Mission Analysis** → Efforts here focus on developing a clear picture of the strategic guidance provided for future military action. This guidance is essential to design, as it lays out the general expectations for long- and short-term success that are critical to effective campaign design. The commander uses staff analysis to understand the strategic (national) purpose and endstate and to synthesize requirements against the OE. Using this understanding, the commander must derive, envision and articulate for further staff efforts the key elements of campaign design, to include:

  - **Termination Criteria**: an interpretation of the specified standards approved for the joint operation.

  - **Military Endstate**: the point in operations at which military power is no longer the primary means of national power required to achieve remaining national objectives.

  - **Objectives**: the strategic and theater/military goals for the operation.

  - **Effects:** the physical or behavioral state of the adversary's systems (as outlined during SoSA/ONA) that will be in place when endstates and

objectives are accomplished. In other words, if the goal of military operations is to "bend the enemy to our will," effects should describe how he will act when we have been successful in these efforts.

The final product of this step is the mission statement for the future campaign. This statement should be a direct, compact and effective articulation of the essential tasks and purpose for military operations. The mission statement is also critical in that the President and SecDef will most likely adopt it (or its key elements) as they orchestrate unified action and articulate the reason/rationale for military operations to potential coalition partners.

- **Step 2b: COG Analysis to Develop Decisive Points (DPs) and Logical Lines of Operations (LOOs)→** Using the criteria listed above, the staff supports the commander by analyzing the US/coalition and adversary sources of power and strength. Throughout the COG analysis process, the staff uses the commander's termination criteria and mission to focus their **analysis of the critical factors that contribute to or detract from both friendly and enemy strength at the strategic and operational (military) levels.** Leveraging the analysis of nodes and linkages accomplished during SoSA/ONA, the staff weighs and evaluates factors to determine the critical centers where both friendly and adversary strengths come together synergistically to form the decisive "source of moral or physical strength, power and resistance." (JP 5-0, p IV-8)

  COG analysis is the means towards the end of determining the best focus for future actions against the adversary in the OE. **While it is important to analyze and identify critical factors, they are not an end themselves. The value of this staff analysis lies in determining the DPs, for the campaign, (**i.e., the key geographic places, factors or functions in friendly/enemy systems, and/or major events that, when acted upon and dominated, will provide a marked advantage over the adversary, or a marked step forward toward success). These DPs, which may also be viewed as "decisive actions or events," are then used to **develop LOOs that provide a vision of how to organize and employ US and coalition military efforts concurrently across several major areas** to dominate the adversary at key geographical and moral points of the campaign. These logical LOOs help explain the "logic" of the campaign by indicating what the major campaign efforts will be and where/when (DPs) they must dominate the adversary for decisive advantage.

  COG analysis makes two other major contributions to campaign design. Once approved by the commander, the COG analysis and logical LOOs provide the focal points and guiding principles along which future options (COAs) are developed. Second, the JPG as a whole – not just the J2 – are involved in the process of analyzing friendly and enemy COGs in order to develop a shared view of the critical factors that will influence developing future options for action. As the commander develops a vision for the campaign, the staff and commander

share a common view of the potential points of focus and major unifying efforts that will enable effective COA development.

- **Step 2c: Develop Commander's Vision for the Campaign → Commander's Intent** With the assistance of his staff, the commander has a fully developed perspective of the OE, strategic requirements and potential points against which to focus military efforts. With these as a foundation, the commander now expresses his vision for the campaign in order to facilitate developing military COAs, as well as proposed actions among the interagency that he feels will accomplish the desired endstates and objectives.

  In general terms, the commander must envision and articulate how military power and joint operations will dominate the adversary and support or reinforce our allies in accomplishing strategic success. Through his intent, the commander identifies the major unifying efforts during the campaign, the focal points where operations must dominate the enemy and control conditions in the OE, and where other elements of national power will play a central role.

  The format and content of Commander's Intent is based on the commander's preferences, situation, etc. By providing his vision for the campaign through commander's intent, he ensures the following are expressed as clearly and succinctly as possible:

  - **Mission** – revalidates or updates based upon increased information gained through COG analysis.

  - **Purpose –** why we will conduct the campaign, and what it must accomplish to advance/achieve strategic objectives

  - **Military Endstate –** conditions in place when military force will no longer be the lead element for policy accomplishment, along with a view of how it might continue to support other elements of national power (if directed)

  - **Effects –** a vision of how the OE should look, with respect to the adversary (as a minimum)

  Other optional elements might include a more detailed explanation of where and how critical operations/functions in the campaign should be conducted, essential tasks for the joint force as a whole, the acceptable level of operational risk, and logical LOOs used to unify actions throughout the campaign.

  The bottom line is that whatever format used, the commander is responsible for providing enough information, with sufficient clarity, to effectively drive creating a range of flexible options by the staff and subordinate commands. In execution, this intent is critical to ensuring focused, flexible, and adaptive execution among

subordinate and supporting commands (See Chapter 6 for additional items and considerations).

Step 3: Develop Flexible Options – Developing COAs

- **COA Development:** Using intent and specific planning guidance, the staff now begins to develop concepts for action that accomplish the Commander's vision. Using the JOPP process for COA Development, the staff employs operational design to develop a range of COAs for employing joint force capabilities in a variety of combinations. During COA development, the staff must:

  - **Develop a variety of diverse and distinguishable options** to accomplish the commander's vision in order to provide a broad range of options for his consideration and selection.

  - **Employ the elements of operational design as a framework** for developing and analyzing how joint operations should be sequenced, synchronized and integrated.

  - **Sequence and focus joint functions** to accomplish the tasks required to dominate and control DPs.

  - **Ensure objectives and effects are clearly articulated and used as the guidelines for action** for each portion of the campaign (i.e., that all tasks are consistently focused toward accomplishing these across the duration of the campaign).

  - **Provide only options that are suitable, feasible, and acceptable** based on the levels of time, forces/capabilities, and resources available, and that fall within acceptable levels of operational risk.

  As the JPG develops COAs, the commander remains engaged to ensure that his priorities remain clear and that the options being developed truly meet his vision for campaign success. As an involved coach in this process, the commander receives updates from the JPG which may cause him to reconsider and alter planning guidance. Additionally, the commander may also lend insights and updates on how strategic guidance and operational conditions are changing (particularly during crisis action). By being involved in development rather than just the final decision, the commander ensures an enhanced quality of the COAs from which he will eventually choose a strategic concept.

- **COA Analysis to develop details/identify need for flexibility (Wargaming):** Once the JPG has developed complete COAs, it analyzes each in detail using the "Wargaming" process. This process subjects each COA to a rigorous examination against reasonable and likely adversary actions through the "action

– reaction – counteraction" process. Key also is that the COAs are evaluated through the adversary's eyes (i.e., given his political and cultural perspectives, biases, etc, in order to determine if the actions being taken will be seen and evaluated in the manner that we intend – a key element of achieving desired rather than undesired effects).

Using the JOPP process, the JPG conducts a thorough analysis and captures the results (See Chapter 7). At the end wargaming, the staff must have developed:

- **A critical evaluation of whether the tasks identified will gain the desired effects** and avoid generating unintended effects (based on the commander's intent/vision of success).

- **A view of how military operations will change the adversary and the OE** over the course of the campaign.

- **Points where COAs do not offer enough flexibility** to meet adversary actions where branches and sequels are required.

- **A relative appreciation of the strengths and weaknesses of each COA** and details on how well they meet the commander's vision for success.

- **Potential decision points** where key decisions must be made and the **critical information requirements** needed by the commander (Commander's Critical Information Requirement (CCIR)) to make such decisions.

COA Comparison and Recommendation to the Commander

After rigorous evaluation, the JPG organizes and presents its analysis to the commander. During the comparison process the JPG focuses on evaluating the value of each COA through the commander's eye's -- against his standards in order to determine which is the best fit for his intent, with least cost/risk, and greatest chance of success. Using "governing factors" derived from his intent and guidance, the staff analyzes and rank-orders these against the commander's standards (not against one another).

Commander's COA Decision and Concept Development Guidance

The commander will evaluate all analysis and options provided by the JPG, applying his own imagination, knowledge, experience and character to critically evaluate how each of the COAs would accomplish strategic and military success. The commander may select a single COA as presented, but most likely will leverage the staff's analysis to expand his vision of success by incorporating the best portions of several options.

The product will be the commander's guidance on a COA that will be fully developed into a "Strategic Concept" for the campaign. In some cases, he will develop a "Commander's Estimate" where multiple COAs are presented for SecDef and President decision. In this case, strategic concept final development would not occur until a crisis occurs and specific circumstances become clear.

Step 4: Develop the Strategic Concept for the Campaign

With a clear commander's vision for the campaign, the staff, in collaboration with subordinate and supporting commands, will conduct in-depth planning to expand the COA into a detailed joint strategic concept – the eventual centerpiece of the final campaign plan. Again, using operational design elements as a framework, the staff will develop a concept of how the commander's vision will be transformed into joint, interagency and multinational action when required. **The staff plans in detail the actions of the joint force components and supporting organizations**, developing the full concept of how actions will be integrated, synchronized and phased to accomplish the mission, to include:

- **The central concept** of how the CCDR intends to support and accomplish strategic ends through military operations.

- **A discussion of how the CCDR will accomplish objectives and effects over time** and how he will measure effectiveness and performance toward campaign success.

- **A phased concept** of how the CCDR will apply, sequence and synchronize and integrate in time, space and purpose (to include interagency and multinational forces as well) forces and capabilities,.

- **Supporting and Functional Concepts** for how joint functions (sustainment, intelligence, etc) will enable operations throughout the campaign.

- **Direction on theater organization and command and control** relationships throughout phase.

Throughout concept development, both the commander and staff continue to assess anticipated changes in the OE and identify opportunities and challenges that may arise. **The design process continues even during planning**, with analysis and concepts for action informing the commander on how well his design can be accomplished in future execution. In turn, the commander will continue to develop his view of strategic guidance and conditions and make changes as necessary to his campaign design.

The Strategic Concept is then briefed for senior leaders approval IAW the initial strategic direction provided by the SecDef or CJCS. The SecDef or CJCS will

provide specific guidance on the level of detail required, major points to be addressed, IPRs, etc.

Step 5: Develop the Plan

Once approved, the Strategic Concept is expanded into a detailed OPLAN or OPORD. Once approved, the CCDR (as the supported commander) will issue a directive to coordinate the activities of commands and agencies involved, many of which will be parallel and collaborative in nature. Plan development will encompass a range of activities that evaluate how best to integrate a range of joint and national capabilities into the campaign plan. (For more detailed discussion, see Chapter 9 and JP 5-0, Chapter III)

- **Support Planning –** focus is to determine the sequence of forces, sustainment, engineering, etc to accomplish the required functions and tasks over the entire period of the campaign. This is accomplished with service components and a variety of supporting agencies, such as the Defense Intelligence Agency, the Defense Logistics Agency, USTRANSCOM, etc.

- **Deployment Planning –** conducted on a continuous basis for all approved plans. It includes planning for deployment preparation and mobilization, movement, reception and staging (Joint Reception, Staging, Onward Movement, and Integration) planning, and feasibility analysis.

- **Component Planning –** detailed plans for how each service or functional component will execute their portion of the campaign, along with the required resources/forces.

- **Coordination/Planning with Other Key Partners:** If OPSEC and security concerns permit, design and planning should include both interagency and multinational partners as well. As the concept is approved, coordination and synchronization with these key partners will be essential to apply all elements of national and international influence against the adversary to achieve overwhelming effects.

Summary:

Campaign design and planning are different yet interrelated activities essential for solving complex theater-strategic problems. They have an intellectual and cognitive foundation that aids continuous assessment of operations and the OE. Campaign design informs and is informed by planning and operations. The CCDR leads the design process and communicates the resulting framework to subordinate and supporting commanders for planning, preparation, and execution. Key here is that campaign design is not a discrete step that the commander then hands off to the staff to conduct campaign planning. It is an ongoing commander-led process that leverages staff and subordinate inputs to analyze, evaluate, and develop options for success.

Although much of the up-front work between commander and staff is focused on developing the framework for the campaign, design continues throughout the planning and refinement processes. The commander remains fully engaged in order to ensure that his vision remains accurate and feasible, and that JPG-developed options will fully accomplish this vision. As planning moves into the final detailed stages, the commander remains involved in the review process to ensure that details and execution continue to achieve the desired endstates, objectives, and effects that he has envisioned. Likewise, the commander remains involved throughout design and planning to ensure that options and plans developed for future action also avoid the unintended ends and effects that design seeks to avoid.

Chapter 3:
Initiation: Understanding the Operational Environment

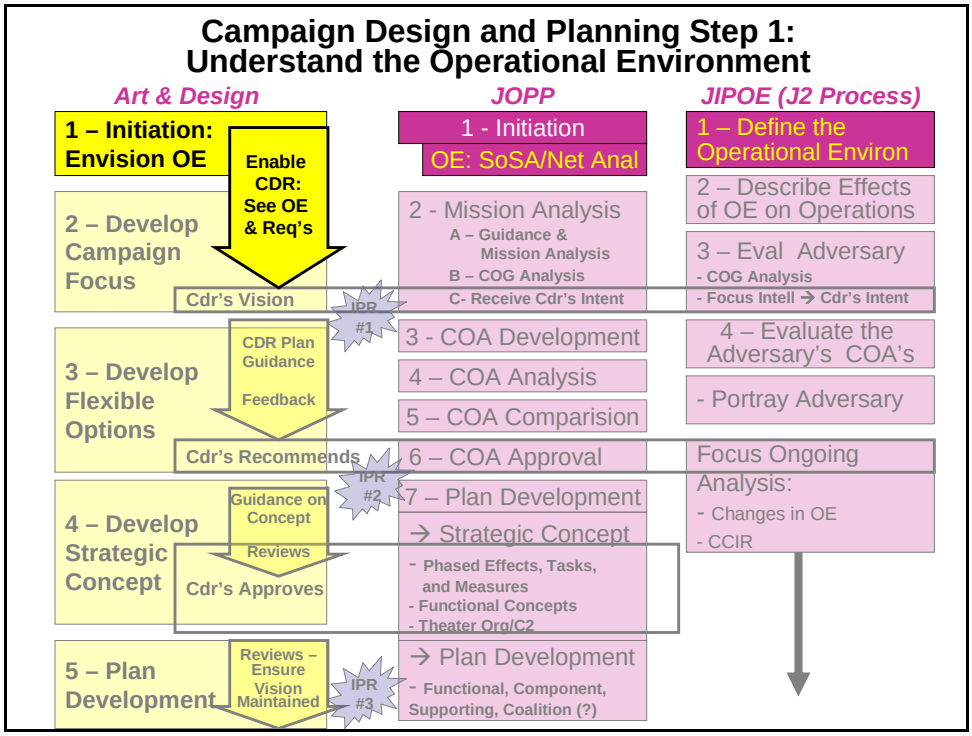

Figure 12 Campaign Design and Planning Step 1

Campaign Design and Planning Initiation (JOPP Step 1):

The campaign design and planning process begins when an appropriate authority recognizes that military capabilities may be required to resolve a potential or actual crisis. Campaign planning may be initiated by a combatant commander based upon specific Presidential/SecDef/CJCS guidance; national documents such as the JSCP and the Unified Command Plan (UCP); or from combatant commander initiatives. If the combatant commander determines that the situation may require some military response, he will direct a Joint Planning Group (JPG) to form and begin exploring possible courses of action. JPG membership (may also be known as a Crisis Action Team, Operations Planning Team or another similar term) is based on campaign requirements (sample team's membership is shown at Appendix A). Considerations for this step of the process include:

- Review strategic direction received

- Review current staff estimates.
- Review other related and applicable plans for the area or the situation.
- Define the potential area for analysis of the Operational Environment

Analyzing the OE:

Factors that influence CCDR strategy and operations extend beyond purely military areas. The OE at the theater-strategic level is the composite of conditions, circumstances and influences among the adversaries, allies and neutral actors across the AOR that impact employing joint capabilities. In order to envision developing and employing theater-strategic options for joint, interagency and multinational action, the CCDR must understand the series of complex, interconnected relationships among the various portions of the OE. Key to developing solutions is to view these interrelated challenges from a "systems of systems" perspective.

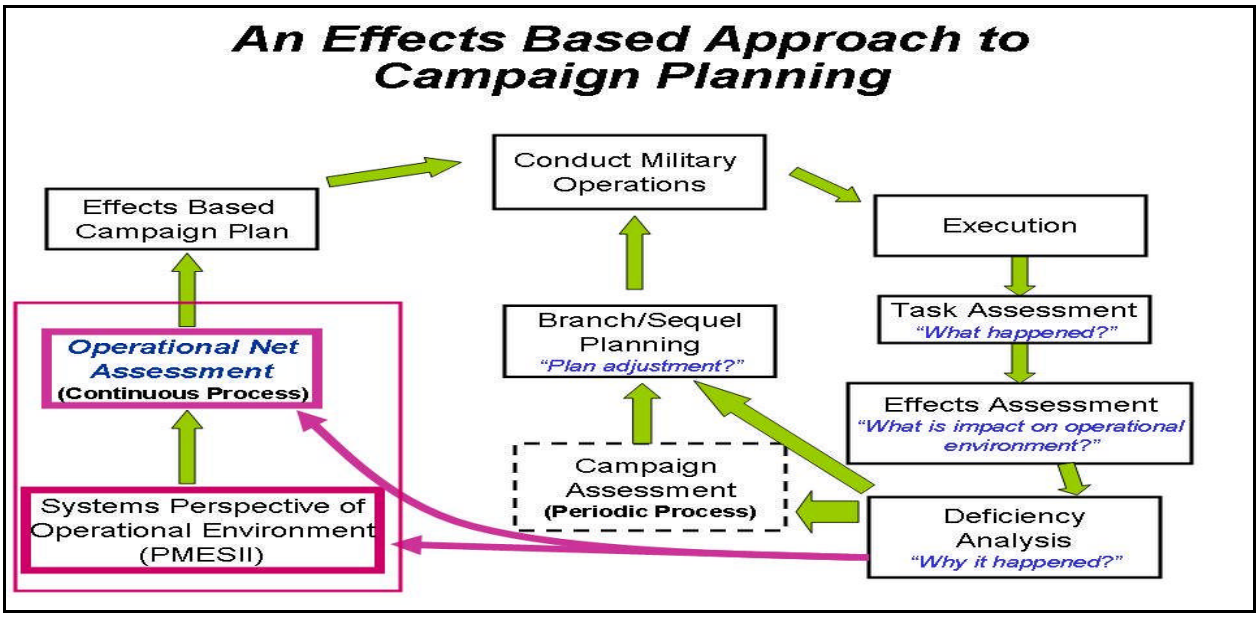

Figure 13 An Effects Based Approach to Campaign Planning

Developing this systems perspective establishes a baseline for understanding the OE among members of the joint, interagency and multinational team, and is an essential first step to achieving unified action. Conducting a thorough SoSA of the adversary, that may then be developed into an net assessment (also called "ONA"), is one way to create such a holistic perspective.

Developing the Net Assessment:

Building an operationally-focused net assessment is centered on developing a deep understanding of a potential or actual adversary. It is an integration of intelligence and operations that helps build common situational awareness, and supports strategic

and operational level planning. ONA is a product based on a "systems understanding" of the OE in the form of a common, shared, relevant database and a network of people who collaboratively develop this knowledge base. Developing the ONA fuses people, processes and tools that use multiple existing information sources and collaborative analysis to build shared knowledge of the adversary, the environment and ourselves.

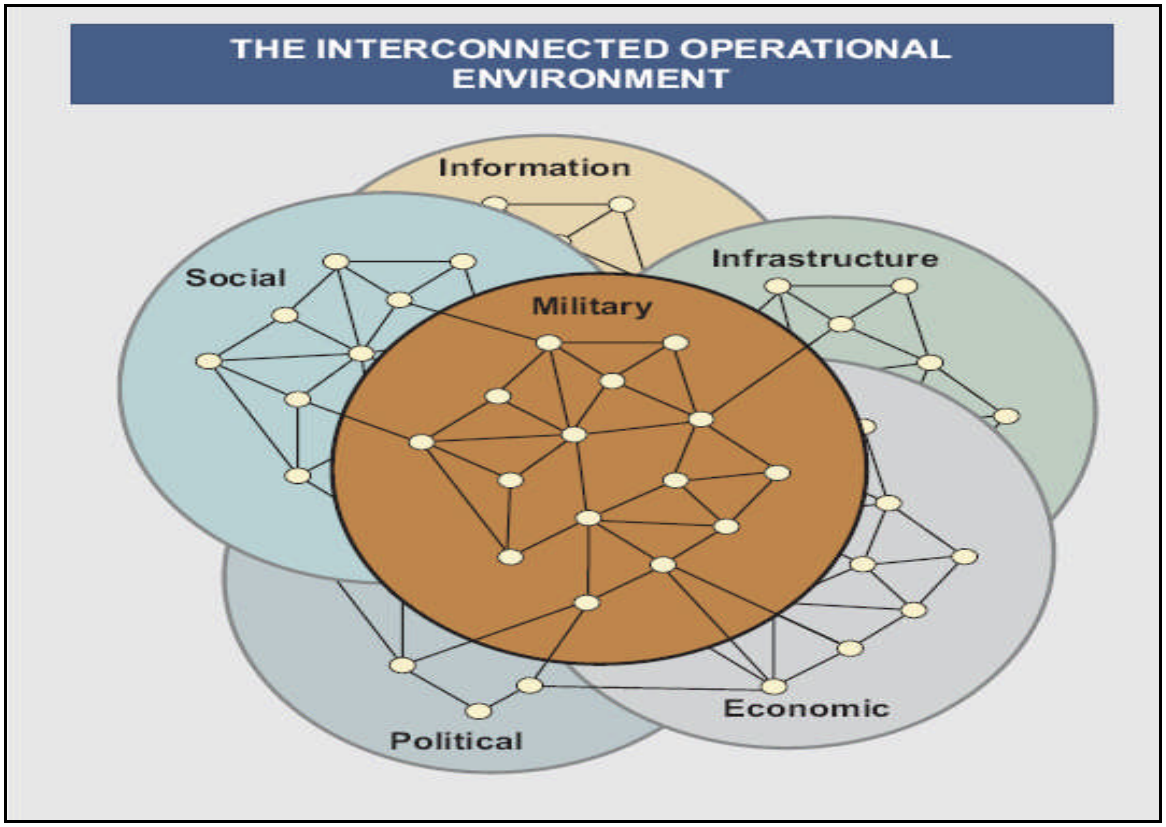

Figure 14 The Interconnected Operational Environment

The process begins by constructing a "baseline" SoSA of the PMESII systems that compose the adversary's source of power and influence. This understanding is a key enabler of effects-based thinking in planning and operations that optimizes the knowledge of systems linkages to formulate a variety of actions against the adversary's PMESII systems.

Once developed, the "SoSA baseline" (that provides a holistic view of the adversary's systems interrelationships) enables the command to develop a net assessment that is used to focus design and planning efforts toward developing a synchronized approach to placing US national power against the weaknesses of the adversary's systems, to include all available diplomatic, information, military and economic (DIME) actions. A comprehensive net assessment attempts to understand each of the PMESII systems, the relationships and interactions among those systems, and the effects that actions across the DIME domains will have on the adversary's systems and relationships.

The net assessment seeks to develop an understanding of the key relationships, dependencies, strengths and vulnerabilities within and between the adversary's PMESII elements. **These products identify leverage points, key nodes, and linkages that we may act on to decisively influence the adversary's behaviors, capabilities, perceptions and decision making.** This assessment, combined with knowledge of friendly capabilities allows the staff to develop a range of options from which decision makers can choose to achieve desired outcomes. The net assessment permits the staff to identify critical nodes/interactions and the resources needed to influence the adversary and shape a campaign. Finally, the net assessment attempts to understand not only the first order effects, but also higher-order effects and lagged effects

Clearly, the task of developing an NA is time consuming and daunting. The difficulty lies in the vast amount of data that is required to perform the assessment and the fact that much of the data is not owned by the analysts. An ONA requires access to many different databases that military analysts have rarely accessed. It is no longer possible to obtain all of the data needed by relying exclusively on military-owned databases. Instead, the databases we need to access are frequently owned by other federal government organizations (e.g., the State Department, Federal Bureau of Investigation, Central Intelligence Agency, Commerce Department, Federal Emergency Management Agency), by non-government organizations (e.g., Red Cross, Peace Corps, Doctors Without Borders), by our multinational partners, by our state and local governments, by private industry, or even open source databases. The challenge is to integrate the data from disparate sources to produce a coherent picture that informs the ONA analyst.

Net assessment is an operational process, not an intelligence process. NA complements, but does not replace intelligence preparation of the battlefield products. In addition, ONA is not a substitute for current intelligence, operations or logistical planning processes and activities. In fact, where both a SoSA and NA have been prepared, they form the basis for the initial portions of the JIPOE. If an NA is not available (such as in no-notice crisis action planning), the J2 will still employ a "systems approach" early in JIPOE to analyze the complexities of the OE to the best level of detail possible to support the commander's vision and decision making processes.

Developing a "SoSA Baseline" and Net Assessment:

Step 1 - Use strategic guidance to define OE and focus PMESII analysis: Based upon guidance for the desired national policy and military objectives, the CCDR will designate the area and elements of the OE for extensive analysis. With this guidance, the staff will work in conjunction with extensive subject matter expertise to frame the key elements they must analyze. As a minimum, this analysis will focus on the PMESII systems of the adversary and any supporting allies. As time and resources permit, the focus may expand to other regional actors which will be influenced by or who can have

an impact on the adversary.

Step 2 - Determination of essential elements: The initial task is to develop a baseline of information on the adversary nation or group by collecting and analyzing a wide array of data. The SoSA analysis team begins by developing a "research plan" for gathering all relevant sources of information and intelligence. While analysis should be as broad as possible, the team should give consideration to determining the information that is most critical to the analysis process, and making the essential linkages within the PMESII focus areas, particularly political, military and social.

Potential sources include classified and open-source material from a variety of US and international sources that include:

Data Inputs/Sources

Data	Sources

• Commander's Guidance
• OPLANs/CONPLANs
• Functional Plans
• TSCP
• Strategic Guidance (DoD & Joint Staff)
  • Defense Planning Guidance
  • Joint Strategic Capabilities Plan
• Intelligence Estimates, Studies & Reports
• POL-MIL Plan
• Mission Performance Plan
• Policy Notes
• Interagency Coordination Assessments
	• CCDR and Staff
	• Theater Intelligence Center
	• Components
	• Office Secretary of Defense
	• Joint Staff
	• Other Combatant Commands
	• Interagency Community
	• Allies/Coalition
	• Non-Governmental and Intergovernmental Organizations
	• Multinational Corporations
	• Academia
	• Centers of Excellence
	• Subject Matter Experts
	• Open Source/Internet

Figure 15 Potential Sources for Developing a SoSA Baseline

Additionally, the plan will designate team organization, areas of responsibility for research and analysis, and frame the initial issues/questions (based upon strategic guidance) that must be investigated.

Step 3 - Analysis of Systems to determine key relationships and dependencies among essential elements: Once data is collected, analysis begins with framing the way that the system is designed to operate, based on its leadership's vision, designated policies, and established (written/accepted) operating principles and procedures. **However, analysis must focus on evaluating how the system really operates, not just the way it is supposed to operate.** Analysis then focus on how practical factors influence the system, to include leadership, biases and influence by power/social groups, inefficiency, corruption, and other frictions. This analysis will produce insights into how elements are interrelated, and how effective and efficient the system is in providing capabilities and strengths for the adversary.

Analysis frames each "system" by identifying the related groups of elements that form the complex whole. Analysis includes identifying the roles and functions in each of the systems and mapping their interrelationships. This includes identifying the **"nodes"** - the people facilities, individual systems, forces, information, and other components of the system – as component parts of the system. Additionally, it includes identifying the **"linkages"** – the behavioral, physical or functional relationships – between these nodes. Included in this analysis is an assessment of the relative strength of each of these linkages between the nodes. This systems analysis must provide as complete a study as possible of each system that represent the elements that protect, sustain, integrate or enable effective adversary operations.

Analysis then shifts to defining how these systems are interrelated to one another, to produce a "System of Systems" view of the adversary as a complex whole. This view of the linkages (both overt and implied) between other PMESII elements within the OE provides a view of how complex and resilient the adversary will be to attack. Rarely will the adversary present a single, decisive weakness that if struck will lead to his catastrophic destruction. More often, the adversary's power and ability to resist is found in the synergistic interrelationship of several portions of the system. **Identifying the adversary's critical sources of power and their linkages to one another will be central to the commander's ability to focus overwhelming military force and to recommend how interagency actions may best compliment these efforts.**

Additionally, analysis focuses on how the external factors of the OE may impact adversary actions. The adversary must also deal with a variety of external influences from regional and global actors that may support, oppose or be neutral to their efforts within or across their systems. Political, cultural, economic and perceptual factors all expand or limit their options for action; identifying these factors and linkages will provide further opportunities for the Commander's action if properly shaped over time. This system analysis must be shared across the maximum audience possible to gain a diversity of opinions on its detail and accuracy. As critiques occur, they are incorporated into the analysis as appropriate. Unused portions are not discarded. They are recorded and linked as "differing perspectives" for potential future use or integration as situational awareness and understanding improve over time.

"Socializing" this analysis with interagency and coalition partners for review and comments early in the campaign design process also provides an invaluable ability to build initial awareness and facilitate "buy-in" by other effected agencies. Integrating Joint Interagency Coordination Groups (JIACG) and other liaison elements within the headquarters is crucial to sharing and coordinating analysis with other agencies of the US Government. Additionally, these other agencies will often have subject experts (or contacts to other experts/sources) whose insights and opinions will not only improve the quality of the SoSA analysis, but who other agencies will depended upon when required to critique and recommend concurrence/non-concurrence with the CCDR's plans at a later date. Those who do not initially support the combatant command's view of the

challenges and conditions in place will probably not enthusiastically support the options for action. Early discussion and consensus building lays the essential foundation for achieving unity of purpose and action at a later date. Security and OPSEC may preclude sharing all information, but working to collaborate as much as possible will pay dividends throughout campaign design and execution. Critical in the SoSA and NA process is to ask the right questions during analysis. See the attached tabs that provide a basic menu of points to consider during analysis.

Step 4 - Determine System Capabilities and Vulnerabilities: As analysis describes how systems operate internally and with one another, it will also identify the strengths and vulnerabilities in its functions. Focus now shifts to identifying vulnerable areas in systems and their links to other PMESII elements that we can exploit.

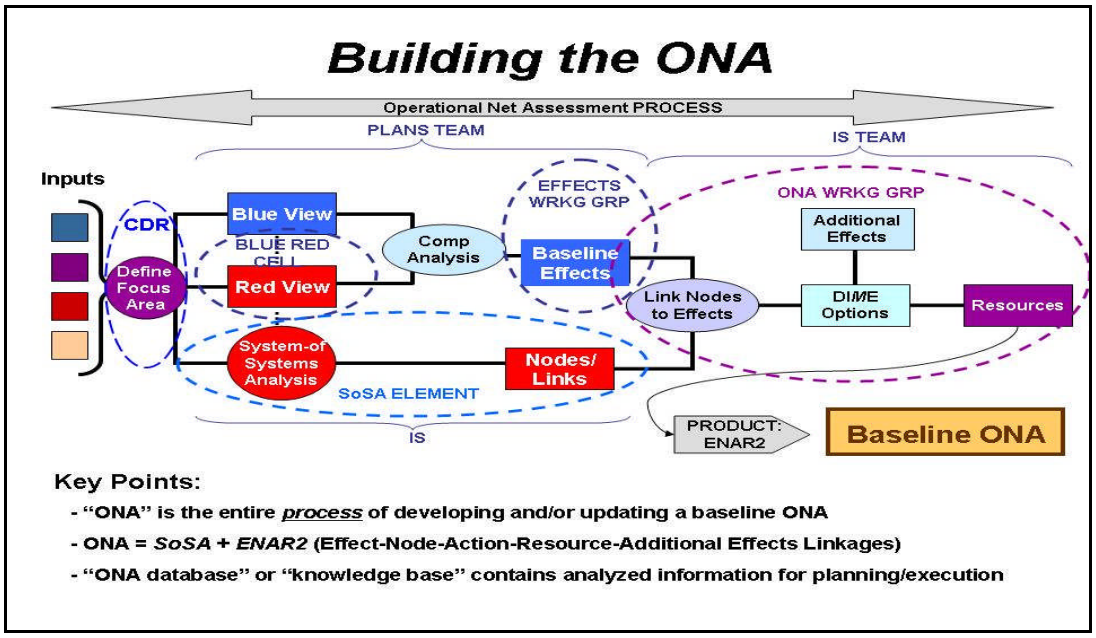

Figure 16 Building the Net Assessment

Analysis will derive **capabilities** that describe the **strengths of the system** (i.e., how these crucial enablers provide for the essential functioning of the system). Additionally, analysis focuses on determining how robust and redundant these capabilities may be in order to determine when and if their elements may be vulnerable to attack. As analysis continues, teams focus on identifying the conditions, resources and means required for the system to function effectively, and how these requirements may be exposed to potential attack. Analysis also produces **vulnerabilities** that are those portions of the system that are **deficient and present potential weaknesses.** They will be the focus later of either direct or indirect attack. This analysis is critical later on in campaign design to identifying potential COGs.

Step 5 - Determine the adversary's relative advantages and disadvantages:
As the SoSA baseline is completed, the staff assesses the overall enemy strengths and

weakness in the OE. This is the initial "so what" behind developing the SoSA, describing how the adversary has the abilities or is limited in accomplishing strategic and operational goals. This initial view provides the Commander and staff a baseline against which to interpret strategic direction and conduct mission analysis.

Step 6 - Develop the NA "Baseline" to determine the nodes or links that can produce desired effects: In support of the campaign design and planning process, SoSA continues to define the details of the OE and the adversary's capabilities and limitations into a more complete NA. Ideally, both SoSA and NA are completed before planning begins; however, resources and time may necessitate that the ONA be conducted as planning is ongoing.

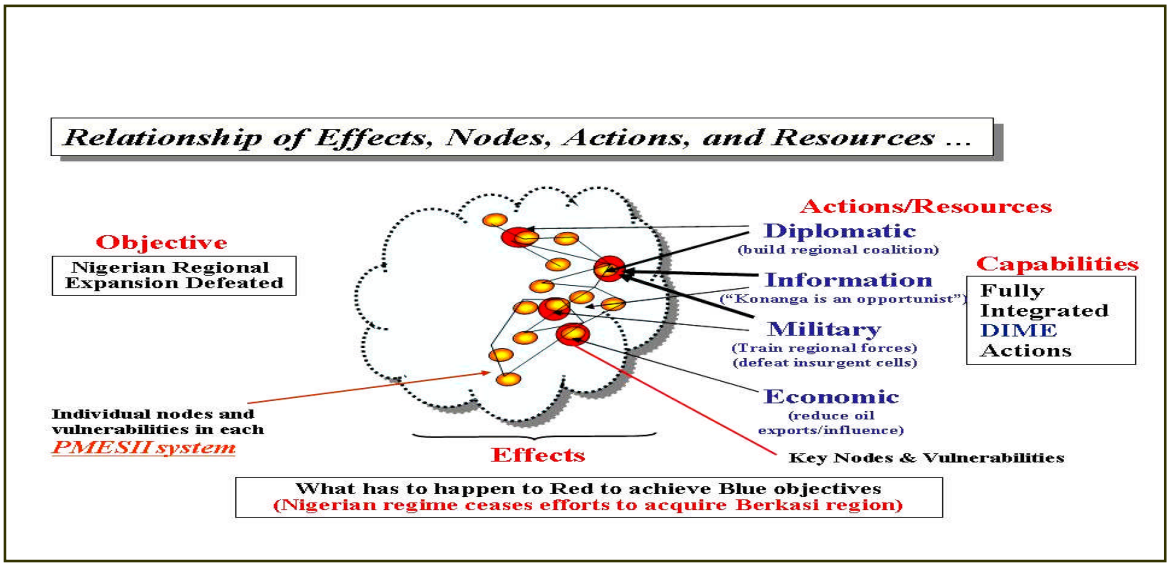

Figure 17 Example: Relationship of Effects, Nodes, Actions and Resources

The NA process builds upon the SoSA to determine how key portions of the adversary's systems may be influenced through not only military action, but by all elements of national power. It provides a range of "effect-node-action-resource linkages" from which planners may develop COAs to produce decisive effects within available timelines.

Although much of the NA is developed prior to the campaign, it is tailored to the specific parameters of the campaign. After the JPG has identified desired objectives and effects during mission analysis, systems analysis will further explore nodes and linkages to determine how these desired effects will influence the enemy systems. While the ONA process provides insights on first order effects, it also can provide some assessments of second order effects and undesired effects. Other second

order and undesired effects may be identified during the war-gaming sessions.

Analysis is continuous throughout the campaign design, planning and execution of the campaign as NA focuses on trying to determine the nodes and linkages among the various PMESII systems that have the most strategic or operational value if influenced effectively through DIME actions. This actionable information supports theater strategic and operational level planning, execution, and assessment. In particular, the assessment of task-effects relationships is a key part of developing future COAs during campaign planning.

Joint Intelligence Preparation of the Operational Environment (JIPOE):

JIPOE and SoSA/NA are separate and distinct processes. Where an NA exists, joint intelligence leverages this detailed analysis of the OE. Where an NA has not been conducted, JIPOE begins with a "systems approach" to develop an in-depth analysis of the PMESII conditions and factors in place that will influence the design, planning and execution. The goal of JIPOE is to provide the commander and staff with tailored, focused analysis of the OE that is essential to understanding, envisioning and developing a concept for future action.

JIPOE is the analytical process used by joint intelligence organizations to produce intelligence assessments, estimates, and other intelligence products in support of the JFC's decision-making process.[1] The primary purpose of the JIPOE is to support the CCDR's decision-making and planning by identifying, assessing, and estimating the enemy's COG, critical factors, capabilities, limitations, intentions, and enemy COAs (ECOA) that are most likely to be encountered based on the situation.

JIPOE produces staff estimates (developed under the direction of the J-2) and generally occurs parallel to the mission analysis. Although JIPOE support to decision-making is both dynamic and continuous, it must also be "front loaded" in the sense that the majority of analysis must be completed early enough to be factored into the commander's decision-making effort. JIPOE supports mission analysis by permitting the commander and staff to visualize the full extent of the OE, to distinguish the known from the unknown, and to establish working assumptions regarding how adversary and friendly forces will interact within the OE. JIPOE also assists commanders in formulating their planning guidance by identifying significant adversary capabilities and by pointing out critical OE factors, such as the locations of key geography, attitudes of indigenous populations, and potential land, air, and sea avenues of approach.

[1] While JP 2-0 "Joint Intelligence" articulates the concept of and need for JIPOE, detailed definition of the processes will be developed in JP 2-01.3, "Joint Intelligence Preparation of the Operational Environment." The process outlined in this handbook is currently in practice in the field, and is adapted from the Joint Advanced Warfighting "Campaign Planning Handbook."

JIPOE will focus on more than just military capabilities. It should include information and analysis of enemy information, diplomatic, and economic capabilities. As planning continues, analysts refine their assessment of the SoSA/ONA of the adversary to derive their COGs, potential COAs, and other factors.

(1) The JIPOE process is used to *analyze the air, land, sea, space, weather, electromagnetic, and information environments as well as other dimensions of OE and to determine an adversary's capabilities to operate in each*. Joint force and Service component command staffs use JIPOE products to prepare their estimates. JIPOE products are also applied during the analysis and selection of friendly COAs.

(2) The JIPOE process assists CCDRs and their staffs in achieving information superiority by focusing intelligence collection at the right time and place, and assessing how OE conditions impact military operations. However, main focus of JIPOE is on providing predictive intelligence designed to help the CCDR discern the adversary's probable intent, most dangerous COA, and most likely future COA. Simply stated, *JIPOE helps the CCDR to stay inside the adversary's decision loop* (i.e., to react faster and make better decisions than the adversary).

<u>The JIPOE Process:</u>

JIPOE is a staff process – not just a J-2 process – and should be driven by the Commander and the chief of staff. To ensure the most efficient and productive use of intelligence resources, the staff elements should take an active role in meeting with the J-2 and those analysts working on production requirements. Simultaneously, as staff planners better understand the context and conditions ongoing, they produce better estimates and products to support the commander's envisioning process.

JIPOE is a **continuous process** that involves four major steps (below):

(a) Defining the OE

(b) Describing the effects of the OE

(c) Evaluating the adversary

(d) Determining adversary COAs, particularly the most likely COA and the COA most dangerous to friendly forces and mission

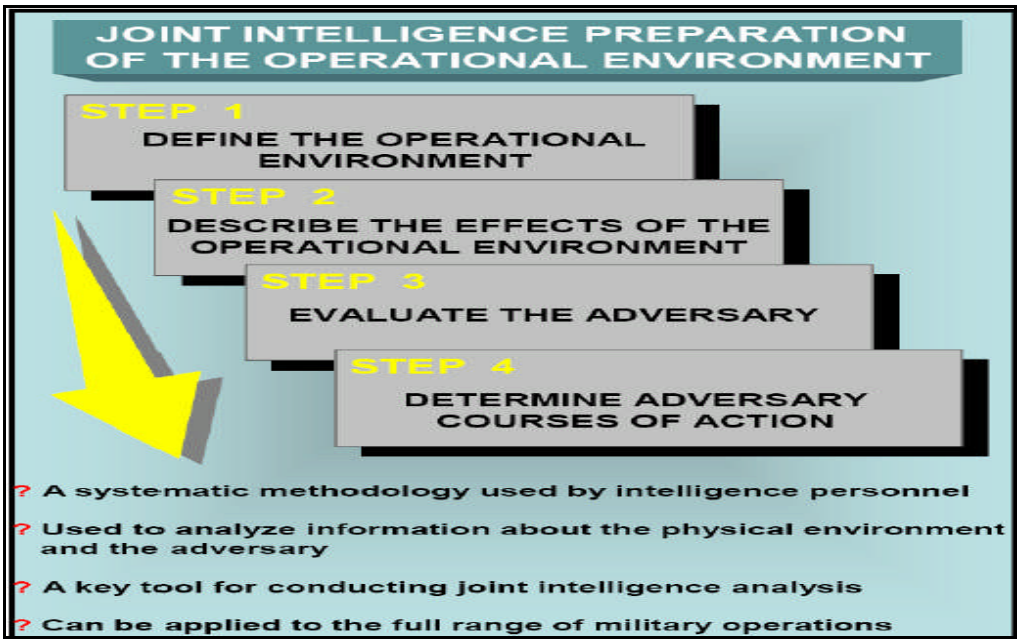

Figure 18 JIPOE Steps

Step 1 — Define the OE:

The staff assists the commander and component commanders in understanding the dimensions and challenges of the OE by identifying the key/significant characteristics and focusing information/intelligence gathering against elements identified early on during mission analysis. The J-2 staff leverages the products of SoSA/ONA and works with other agencies and commands to formulate an initial survey of adversary, environmental, and other characteristics that may impact the friendly joint mission.

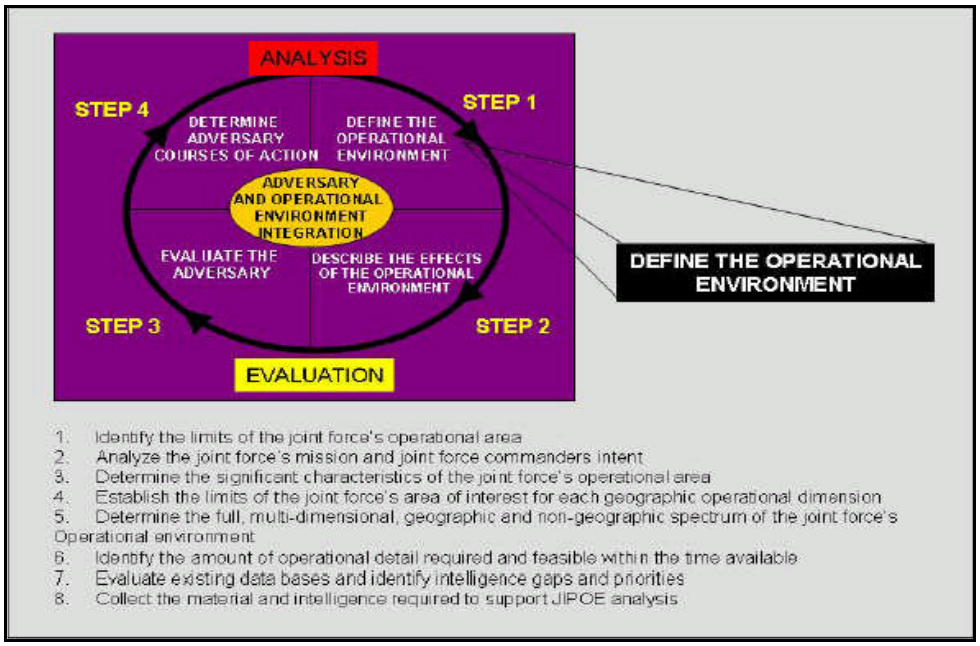

Figure 19 JIPOE Step 1

Additionally, the joint force staff must also recognize that **the OE extends beyond the geographic dimensions of land, air, sea, and space**. It also includes non-physical dimensions such as the electromagnetic spectrum, automated information systems, and public opinion. These non-physical dimensions may extend well beyond the joint force's designated OAs, which will also impact determining the **Area of Interest** (defined by Joint Pub 1-02 as *"that area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory to the objectives of current or planned operations. This area also includes areas occupied by enemy forces that could jeopardize the accomplishment of the mission*."). Understanding which characteristics are significant is done in context with the adversary, weather and terrain, neutral or benign population or elements, and most importantly with the JFC's intent and the mission, if specified. The significant characteristics, once identified, will provide focus and guide the remaining steps of JIPOE. Therefore, **it is essential to conduct effective analysis of the OE to ensure the "right" characteristics were identified as significant.** Identifying the wrong significant characteristics or simply not addressing them jeopardizes the integrity of the OPLAN.

The joint force J-2 staff evaluates the existing intelligence databases to determine if the necessary information is available to conduct the remainder of the JIPOE process. In nearly every situation, there will be gaps in the existing databases. The gaps must be identified early in order for the joint force staff to initiate the appropriate intelligence collection requirements. The joint force J-2 will use the JFC's stated intent and initial priority intelligence requirement to establish priorities for intelligence collection, processing, production, and dissemination. The joint force J-2 staff initiates collection operations and issues requests for information to fill intelligence

gaps to the level of detail required to conduct JIPOE. As the J-2 staff receives additional information and intelligence, it updates all JIPOE products. **If any assumptions are repudiated by new intelligence, the commander, the J-3, and other appropriate staff elements should reexamine any evaluations and decisions that were based on those assumptions.**

Products from step one may include assessments of each significant characteristic, overlays of each, if applicable, and an understanding and graphical depiction of the OA and possibly of the area of interests and entities that may affect our ability to accomplish the mission.

Step 2 — Describe the Effects of the OE:

The first action in describing OE effects is to analyze the military aspects of the terrain. **This analysis is followed by an evaluation of how these aspects of the OE will affect operations for both friendly and adversary forces.** Products developed during this step might include overlays and matrices that depict the military effects of geography, meteorological and oceanographic (METOC) factors, demographics, and the electromagnetic and cyberspace environments.

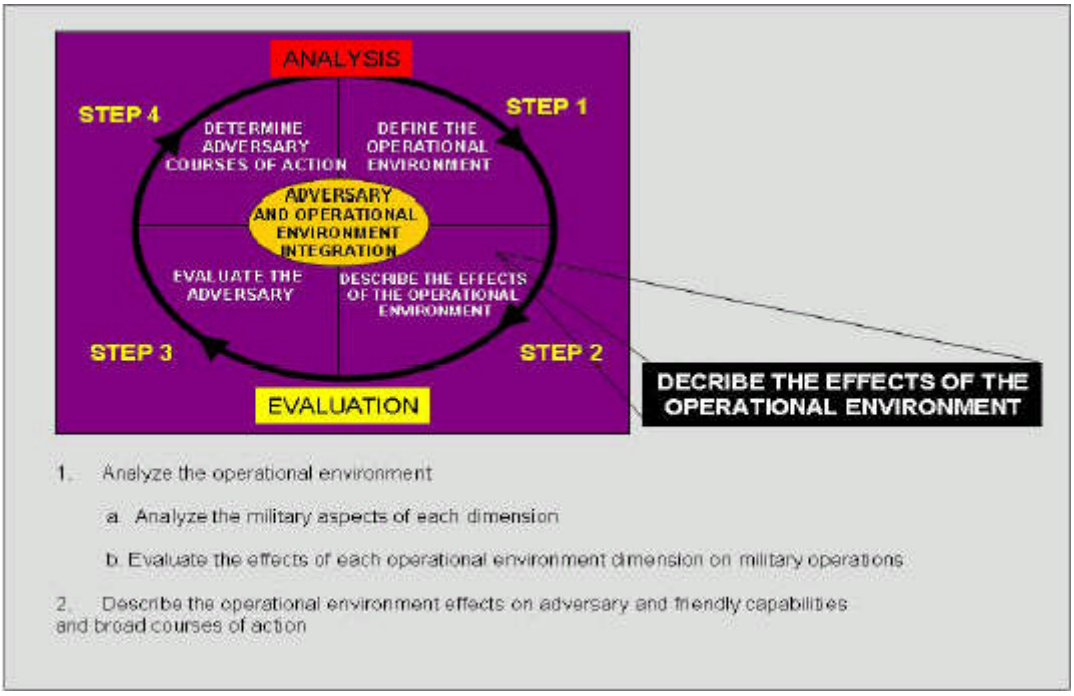

Figure 20 JIPOE Step 2

Products will vary based on the level of understanding developed through the ONA process, and on the commander and staff's requirements for understanding the OE.

(a) Physical Portions of the OE: The most effective graphic technique is to construct a **Modified Combined Obstacle Overlay (MCOO).** The MCOO is "*a JIPOE product used to portray the effects of each battlespace dimensions on military operations. It normally depicts militarily significant aspects of the battlespace environment, such as obstacles restricting military movement, key geography, and military objectives.*" Areas of the OE where the terrain predominantly favors one COA over others should be identified and graphically depicted. MCOO depicts (in addition to the restricted and severely restricted areas already shown) such items as **avenues of approach and mobility corridors, counter-mobility obstacle systems, defensible terrain, engagement areas, and key terrain**. (Refer to Joint Pub 2-01.3 JTTP for JIPOE for more information concerning the types of MCOOs generated during step 2 of JIPOE.)

While these products are most useful at the JTF and Component levels, they may be of use to the staff in visualizing the impacts of geography, distances and climate on developing COAs. These graphical depictions are standardized products with respect to what it should portray simply because a commander's requirements are based on his mission and intent and they differ with each operation. Therefore, the MCOO should portray the relevant information necessary to support the Commander's understanding of the OE and decision-making. OEs are broken down into dimensions, as follows:

(1) Land dimension

(2) Maritime dimension

(3) Air dimension

(4) Space dimension

(5) Electromagnetic dimension

Sample: Maritime Dimension. The maritime dimension of the OE is the sea and littoral environment in which all naval operations take place, including sea control, power projection, and amphibious operations.

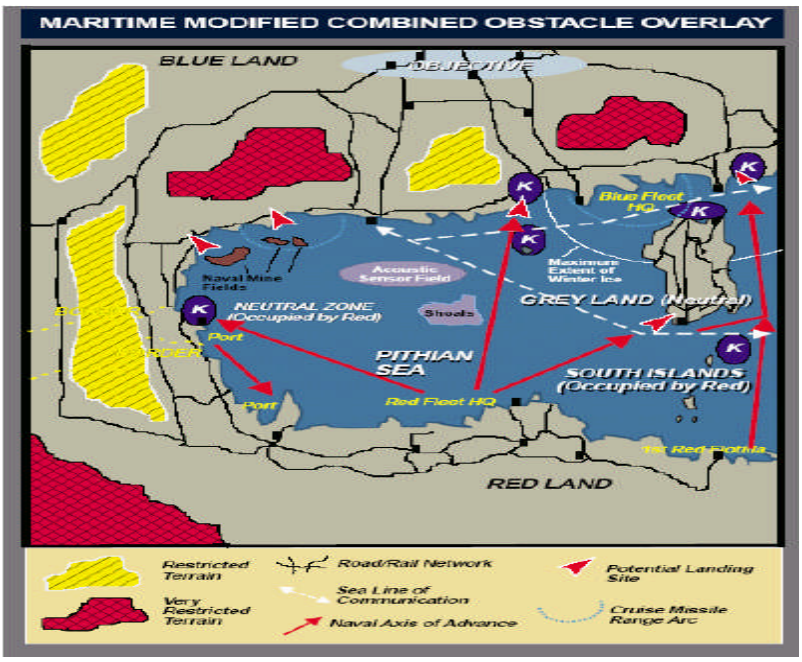

Figure 21 Sample OE Overlay

Key military aspects of the maritime environment may include maneuver space and chokepoints; natural harbors and anchorages; ports, airfields, and naval bases; sea lines of communications (LOCs), and the hydrographic and topographic characteristics of the ocean floor and littoral land masses.

(b) Non-Physical Portions of the OE: In addition to the physical dimensions, a number of other non-physical/non-military dimensions warrant analysis, as conditions in these areas heavily impact operations:

(1) Cyberspace dimension (Information management/protection): Using information systems to support military operations has significantly increased the importance of the cyberspace dimension of the OE. Cyberspace provides the environment in which information operations (IO), such as computer network attack (CNA) and computer network defense, are conducted. The ever-increasing complexity of information systems and networks places military and civilian databases at risk from this new type of warfare. The effects of the cyberspace environment should be evaluated by identifying and prioritizing those information systems and networks deemed most critical to the planning and conduct of military operations. The relative vulnerability of each critical system can be graphically portrayed in the form of a cyberspace vulnerability assessment matrix, which is another tool for environmental assessment

(2) Human dimension: The human dimension of the OE consists of various militarily significant sociological, cultural, demographic, and psychological characteristics of the friendly and adversary populace and leadership. It is the

environment in which IO, such as psychological operations and military deception are conducted. The analysis of the human dimension is a two step process that: (1) identifies and assesses all human characteristics that may have an impact on the behavior of the populace as a whole, the military rank and file, and senior military and civil leaders; and (2) evaluates the effects of these human characteristics on military operations. Psychological profiles of military and political leaders may facilitate understanding an adversary's behavior, evaluating an adversary's vulnerability to deception, and assessing the relative probability of an adversary adopting various COAs.

(3) Analysis of weather effects: Weather affects the OE in two ways: it can interact with, and thereby modify, the environmental characteristics of each battlespace dimension; or it can have a direct effect on military operations regardless of OE dimension. Analyzing weather effects is a two-step process in which: (1) each military aspect of weather is analyzed; and (2) the effects of weather on military operations are evaluated. The joint force METOC officer is the source for weather information, and assists the joint force staff in determining the effects of METOC on adversary and friendly military operations. The overall effects of forecasted weather may be summarized in the form of a weather effects matrix.

(4) Non-military impacts/characteristics of the OE: Other characteristics include all those aspects of the OE that might affect friendly or adversary COAs that fall outside the parameters of the categories previously discussed. Because the relevant characteristics will depend upon the situation associated with each mission, there can be no definitive listing of characteristics appropriate under all circumstances.

For example, the characteristics that may be relevant to establishing stability and providing essential humanitarian assistance and services are very different from those required for combat operations against an adversary. Some examples to address while evaluating the OE are host nation/indigenous forces, time, political and military constraints, environmental and health hazards, infrastructure, industry, agriculture, economics, politics, and history. The country characteristics of an adversary nation will be developed through the analytic integration of all the social, economic, and political variables derived through applying "systems perspective" in SoSA or Step 1 of the process. Country characteristics may also provide important clues as to where a nation may use military force and to what degree.

Step 3 — Evaluate the Adversary:

Based on a thorough systems analysis of the OE, efforts now focus on identifying and evaluating the adversary's military and relevant civil COGs, critical vulnerabilities (CVs), capabilities, limitations, and the doctrine and tactics, techniques and procedures (TTPs) employed by adversary forces, absent any constraints that may be imposed by the battlespace environment described in Step 2. Failure to accurately evaluate the

adversary may cause the command to be surprised by an unexpected adversary capability or result in the unnecessary expenditure of limited resources against adversary force capabilities that do not exist.

A COG may be viewed as the set of characteristics, capabilities, and sources of power from which a system derives its moral or physical strength, freedom of action, and will to act (See Chapter 5 and JP 5-0). The COG is always linked to the objective and the mission for the campaign. If the objective changes, the COG could also change. At the **strategic level**, a COG could be a political leader or regime, an alliance, economic influence through controlling a specific regional or global commodity, or national will. At the **operational level** a COG often is associated with the adversary's ability to impose a political solution through the use of force — such as a powerful element of the armed forces or support for an insurgent/terrorist movement — but could include other capabilities in the OE. Since the adversary will protect the COG, it is usually found among strengths rather than among weaknesses or vulnerabilities. **Commanders consider not only the enemy** COGs, but also identify and protect their own COGs, which is a function of the J-3.

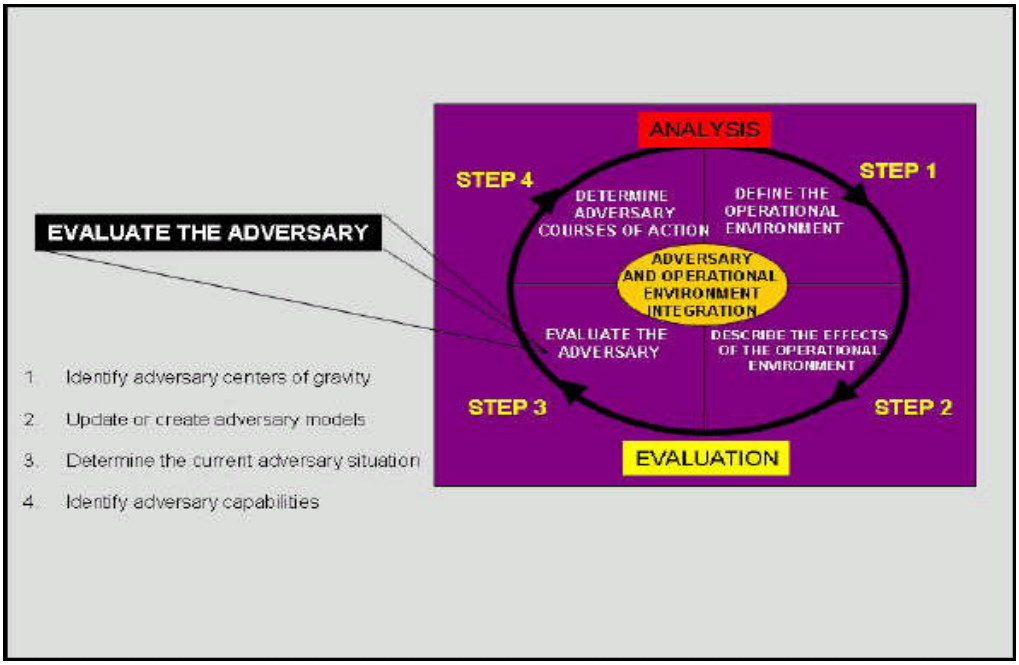

Figure 22 JIPOE Step 3

The analysis of friendly and adversary COGs is a key step in the planning process. **Joint force intelligence analysts identify adversary COGs for a staff analysis** that is conducted after gaining an understanding of the various systems in the OE. The analysis addresses PMESII systems of the OE, including the adversary's leadership, fielded forces, resources, population, transportation systems, and internal and external relationships. **The goal is to determine "critical factors," the elements**

from which the adversary derives freedom of action, physical strength (means), and the will to fight.

The JPG with the J-2's analysis then attempts to determine if the tentative or candidate COGs truly are critical to the adversary's strategy. This analysis is a linchpin in the planning effort. After identifying friendly and adversary COGs, JFCs and their staffs must determine how to protect or attack them, respectively. An analysis of the identified COGs in terms of critical capabilities, requirements, and vulnerabilities is vital to this process. **Understanding the relationship among the COGs not only permits but also compels greater precision in thought and expression in operational design.** (See Chapter 5 on COG Analysis)

In addition to the initial results of COG analysis, the **primary products from JIPOE produced in JIPOE step three are doctrinal templates, descriptions of the adversary's preferred tactics and options, and the identification of high-value targets (HVTs)** (i.e., "*targets that the enemy commander requires for the successful completion of the mission. The loss of high-value targets would be expected to seriously degrade important enemy functions throughout the friendly commander's area of interest*."). **Adversary models depict how an opponent's military forces prefer to conduct operations under ideal conditions.** They are based on a detailed study of the adversary's normal or "doctrinal" organization, equipment, and TTP. Adversary models are normally completed prior to deployment, and are continuously updated as required during military operations. The **models consist of three major parts**: (1) graphical depictions of adversary doctrine or patterns of operations (**templates**); (2) **descriptions of the adversary's preferred tactics and options**; and (3) the **identification of high-value events/actions that future options must effectively counter/defeat.**

Doctrinal and Operational Templates are also of value in understanding the employment patterns and dispositions preferred by an adversary when not constrained by the effects of the OE. They are usually scaled graphic depictions of adversary dispositions for specific types of military (conventional or unconventional) operations such as movements to contact, anti-surface warfare operations, insurgent attacks in urban areas, combat air patrols, and aerial ambushes. JIPOE integrates the elements of single-service doctrinal templates that portray adversary and, sea, air, special, or space operations, and produces joint doctrinal templates to portray the relationships between all the adversary's service components.

In addition to the graphic depiction of adversary operations portrayed on the doctrinal template, an adversary model must also include a **written description of an opponent's preferred operational approach**. This description should address the types of activities and supporting operations that the various adversary units portrayed on the doctrinal template are expected to perform. It also contains a listing or description of the options (branches) available to the adversary — should either the joint operation or any of the supporting operations fail — or subsequent operations (sequels) if they succeed.

The adversary model must also include a list of HVTs. HVTs are those assets that the adversary commander requires for the successful completion of the joint mission (and supporting missions) that are depicted and described on the joint doctrinal template. These targets are identified by combining operational judgment with an evaluation of the information contained in the joint doctrinal template and description. Assets are identified that are critical to the joint mission's success, that are key to each component's supporting operation, or that are crucial to the adoption of various branches or sequels to the joint operation. The joint intelligence community collaborates to identify DPs/events and HVTs with the responsible producers for various intelligence product category codes.

Step 4 — Determine Adversary COAs:

The first three steps of the JIPOE process help the commander and staff visualize the OE by analyzing the environmental impacts, assessing adversary doctrine and capabilities, and identifying adversary COGs and operations. The **fourth step of the JIPOE process seeks to go beyond OE awareness to help the JFC attain knowledge of the OE** (i.e., a detailed understanding of the adversary's probable intent and future strategy). The process for step four provides a disciplined methodology to analyze the set of potential adversary COAs in order to identify the COA the adversary is **most likely** to adopt, and the COA that would be **most dangerous** to the friendly force or to mission accomplishment.

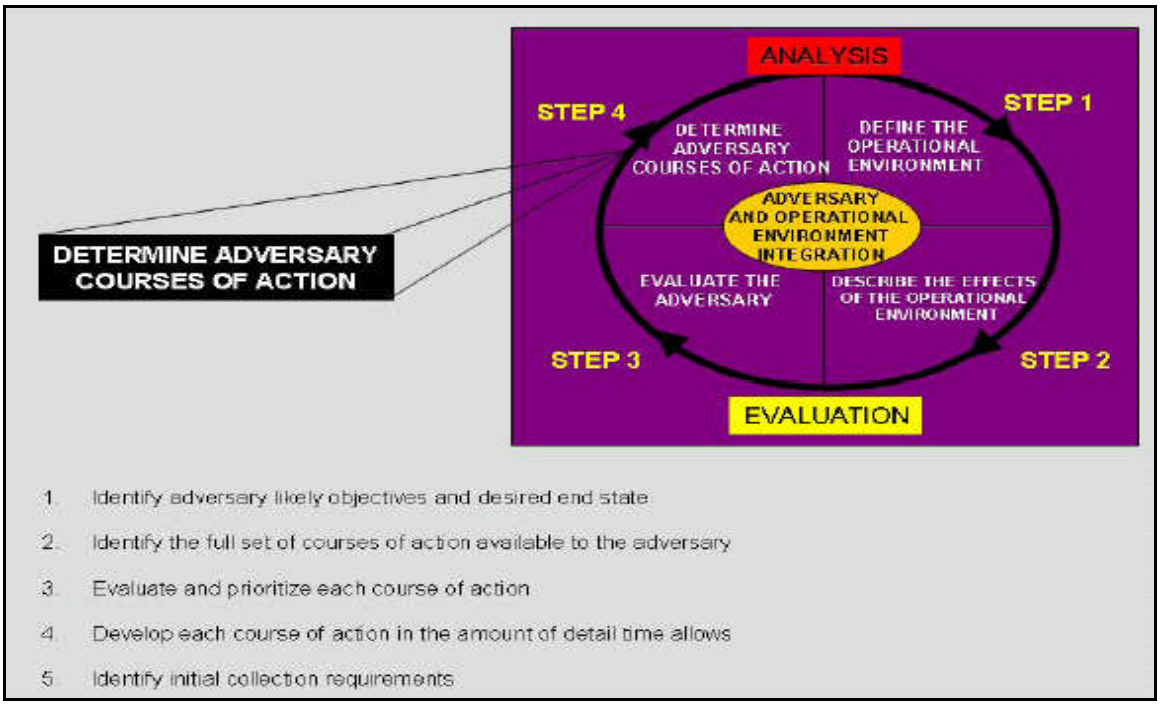

Figure 23 JIPOE Step 4

The first activity in JIPOE Step Four is to identify **the adversary's likely objectives and desired end state** by analyzing the current adversary military and political situation, strategic and operational capabilities, and the country characteristics of the adversary nation, if applicable. The JIPOE analyst should begin by identifying the adversary's overall strategic objective, which will form the basis for identifying subordinate objectives and desired end states.

During this step, a consolidated list of all potential adversary COAs is constructed. At a minimum this list will include

(1) All COAs that the adversary's political leadership, strategic culture, and military leadership/doctrine considers appropriate to the current situation and accomplishment of likely objectives,

(2) All adversary COAs that could significantly influence the friendly mission, even if the adversary considers them suboptimal under current conditions, and

(3) All adversary COAs indicated as possible/likely by recent policy statements, activities or events.

Each enemy COA is generated based on what we know of the adversary and how they operate (learned from Step 3 of JIPOE) to determine if the adversary can in fact accomplish the COA. If not, it is eliminated. J-2 analysts' study how an adversary operates compared to the environment it must operate in, which we analyzed during step 2 of JIPOE. Essentially, they superimpose the probable/doctrinal adversary mode of operation on the environment. The result of this analysis is a full set of identified adversary COAs – time permitting.

Adversary COAs that meet specific criteria are then completed in detail, to include an analysis of their entire range of PMESII actions available. Much like friendly forces determine if their COAs meet specific criteria, J-2 personnel must also weigh the identified adversary COAs against certain criteria. The criteria generally includes: (1) suitability, (2) feasibility, (3) acceptability, (4) uniqueness, and (5) consistency with their own policy, capabilities and doctrine.

The J-2 evaluates and ranks a full set of identified adversary COAs according to their likely order of adoption. The purpose of the prioritized list of adversary COAs is to provide a JFC and his staff with a starting point to develop an OPLAN that takes into consideration the most likely adversary COA as well as the adversary COA most dangerous to the friendly force or mission accomplishment.

Pending the publication of JP 2-01.3, Intelligence Preparation of the Operational Environment, the process outlined above encompasses the best intelligence-based practices in use.

For more information on analysis of the OE**,** refer to:

- JP 5-0, Joint Operations Planning
- JP 3-0, Joint Operations
- Joint Advanced Warfighting School, Campaign Planning/Operational Art Primer AY07
- Joint Forces Staff College, Joint Information Operations Planning Handbook, Sept 2006.

TAB A: Systems to Analyze as Part of an NA

The following is a partial list of the areas that should be considered during an analysis of each of the PMESII areas. Some may be potential nodes in each of the systems as well:

Political System

Leadership
Core Leadership
National Leadership
Regional Leadership
Local Leadership
Local Workers Parties
Regime Control of National Resource Systems
Security Apparatus
Secret Police
Detention Camps
Informants
Alliances & External Support
Legal
Symbolic
Domestic image of omnipotence, omnipresence, infallibility

Military System

Leadership
Command and Control
Intelligence
SIGINT
HUMINT
Electronic Warfare
Logistics
Mobilization
Civil Defense
Training

Army

Artillery
Long-Range Missile Systems
Infantry
Armor
Engineers

Mobility
Mine Clearing
Bridging
Counter mobility
Obstacles
Survivability
Underground facilities
Stockpiles
Power Ventilation Access
Communications

Navy

Surface Capabilities
Subsurface (Submarine)
Remote Control Vehicles
Mine Laying Submarines
SOF Platforms
Patrol Fleet Anti-Ship Missiles
Coastal Defenses
Radar Capabilities

Air Forces

Air-to-Ground
Fixed Wing
Rotary Wing
Air Defense
Radar/Integrated Air Defense System (IADS)
Precision munitions capabilities
Bases (runways, refuel capabilities, ramp space)
Industrial/Technical Base (for production and repair of advanced equipment)
Communications
Missiles (Theater/Ballistic)
WMD (Research, Production, Storage, Delivery)
Space

Economic System

Industry
Financial
Distribution Humanitarian Aid
Currency
Arms Exports
Corruption/Linkages
Black Market Agriculture

Drug Crops & Trafficking
Mining
Natural resource areas/production
Foreign investment
Trade linkages

Social System

Culture/System
Personality
History
Religion
Family ties/tribal linkages
Organized Crime
Families: traditional/influential controlling major decisions
Impact of local traditions

Infrastructure System

Transportation

Rail
Trains Bridges
Tunnels
Switches
Road Ship/Boat
Dams Locks
Air

Communications

Military Networks
Radio Telephone
Teletype Fiber Satellite
Visual
Civilian
Radio Telephone
Television Speakers
Signs

Energy/Power

Coal
POL
Hydro
Nuclear

Water

Information System

Education
Propaganda
  Inside Country
  Outside Country
Newspapers/Magazines Information Technologies
Radio
Television
Internet
Informal transmissions (word of mouth/rumor)
Cyberspace

TAB B: SoSA Points of Analysis -- Political

SoSA analysis begins with an assessment of the internal political dynamics of a country to include its leadership, internal political stability, economic position, labor supply, physical resources, and relative military power.

Political analysis of a foreign country begins with an assessment of the basic principles of government, governmental operations, foreign policy, political parties, pressure groups, electoral procedures, subversive movements, as well as criminal and terrorist organizations. It then analyzes the distribution of political power - whether it is a democracy, an oligarchy, a dictatorship, or has political power devolved to multiple interest groups such as tribes, clans, or gangs. Key is analysis must focus on determining how the political system really operates, not the way it is supposed to operate.

Basic Governmental Principles. The starting point of political analysis is the formal political structure and procedure of a foreign nation. Analysts must evaluate:

- Constitutional and legal systems
- Legal position of the legislative, judicial, and executive branches
- Civil and religious rights of the people
- People's national devotion to constitutional and legal procedures

Governmental Operations. Governments are evaluated to determine their efficiency, integrity, and stability. Information about how the government actually operates and/or changes its method of operation gives the intelligence user clues about the probable future of a political system. When assessing governmental operations, analysts should consider the following:

- Marked inefficiency and corruption, which differs from past patterns, may indicate an impending change in government.
- Continued inefficiency and corruption may indicate popular apathy or a populace unable to effect change.
- Increased restrictions on the electoral process and on the basic social and political rights of the people may mean the government is growing less sure of its position and survivability

Foreign Policy. Analysis of a target country's foreign policy addresses the country's public and private stance toward the US, foreign policy goals and objectives, regional role, and alliances. Analysts gather foreign policy data from various sources, to include:

- Diplomatic and military personnel
- Technical collection systems
- Official foreign government statements

- Press releases
- Public opinion polls
- International businessmen
- Academic analyses

Political Parties. Analysts study special interest parties and groups (e.g., labor, religious, ethnic, industry) to evaluate their:

- Aims
- Programs
- Degree of popular support
- Financial backing
- Leadership
- Electoral procedures

Pressure Groups. With few exceptions, most states have some type of formal or informal pressure groups. Examples include political parties, associations, religious or ethnic organizations, labor unions; and even illegal organizations (e.g., banned political party). The analyst must identify these pressure groups and their aims, methods, relative power, sources of support, and leadership. Pressure groups may have international connections and, in some cases, may be almost entirely controlled from outside the country.

Electoral Procedures. Elections range from staged shows of limited intelligence significance to a means of peaceful, organized, and scheduled revolution. In addition to the parties, personalities, and policies, the intelligence analyst must consider the circumstances surrounding the actual balloting process and changes from the historical norm.

Subversive Movements. In many countries there are clandestine organizations or guerrilla groups whose intention is to overthrow or destroy the existing government. When analysts report on subversive movements, they should address:

- Organizational size
- Character of membership
- Power base within the society
- Doctrine or beliefs system
- Affiliated organizations
- Key figures
- Funding
- Methods of operation

Criminal and Terrorist Organizations. Criminal organizations in some countries are so powerful that they influence or dominate national governments. Analysts must examine the organization's influence or forceful methods of control. Most terrorist organizations are small, short-lived, and not attached to any government. Analysts should determine if external factors or even the area's government assists the terrorist group.

Political Questions

National Political Structure:

- What is the type of governmental system in place?
  - Where does it draw its legitimacy from?
  - Are the sectors stable or in transition?
  - Does the electoral process affect them?
  - Where do they draw their power?
  - What is the source of their knowledge and intellectual income?
  - Who are the leaders? Where do they draw their power from?
  - Does a core bureaucracy staff them?

- Governmental Departments or Agencies (D/A)
  - Who are the key leaders? How are they linked within the power network?
  - Are the D/A stable or in transition?
  - *Are* new departments of agencies being created?
    - If so, what is the cause of this transition?
    - Societal/Cultural/Educational
    - Technical
    - Economic
  - By D/A - What is the source of its workforce?
    - Who are the leaders? Is it staffed by a core bureaucracy? What skill level?
  - Inter Agency and Departmental dependencies?
  - External dependencies - Societal/Cultural/Educational

National Political Demographics Structure:

- Ethnic and Religious Groups having political power:
  - Are these groups regionalized? Familiar?
  - How do they exercise political power?
  - What is their legislative representation?
  - Is there a paramilitary structure?

- How do these Ethnic and Religious groups wield power within urban society? Rural Society?

- Political Parties
  - What are the political parties? Externally or internally supported

- Are they associated with ethnic, religious, or cultural groups?
- Who are their leaders? Their allies?
- What is their political opposition? Their allies?

- Political Action Groups
  - Where do they draw their power? Societal, cultural, technical, economic?
  - Where do they draw their intellectual capital?
  - What is the source of their leadership? Knowledge?
  - What are their external organs? Expatriate communities?
  - What is their relationship with the government?

Regional Political Relationships:

- **Regional -** Non-adversarial and adversarial? How are relations maintained – through economics, religion, culture, ideology, common needs?

- **International -** Non-adversarial and adversarial? How are relations maintained – through economics, religion, culture, ideology, common needs?

- **Potential Allies during a conflict -** National resolve to engage in conflict? Military resolve to engage in politically motivated action?

Other Considerations:

- Public confidence in government and in society
- Factionalism or regionalism within the governmental structure Challenges faced by the Government
- Political effects caused by Organized Groups
- Government Political Response to Group pressures
- Political effects upon Internal and External Security - relates to Military
- Government Response to Diplomatic Overtures
- National Economic Goals affecting the Political structure
- Police Mechanisms

TAB C: SoSA Points of Analysis -- Military

The analysis of the adversary's military will focus on its leadership, capabilities, dispositions and morale/commitment to its government, to include:

- Key military leadership, including their training and previous experience in senior leadership
- Installations and facilities of a military significance (both primary and secondary purpose)
- Infrastructure in place to support identified installations and force structure.
- Military Units, including personnel and chain of command
- Assigned equipment
- Current and projected weapons system capabilities

Military Questions

Military Environment:

1. Will the leadership (national as well as military) use military means to achieve objectives?

2. Does the leadership intend to forge or enhance military ties with another state that poses a threat to regional security or US interests?

3. Does the leadership intend to enhance national military capabilities in a way that could be regionally destabilizing?

4. Are the national leader's political goals a cause for concern?

5. Identify Key

Leaders:	MoD, CJCS equivalent, Service chiefs, SOF Commander, Regional Commanders, Elite Forces, Leadership - residence, office, wartime CP, telephone, email political patronage, religious affiliations, ethnic affiliations Personal assets, non-military activities, influences
Soldiers:	Ethnic/religious composition by region of regular forces and elite forces Pay, training, morale, benefits, gripes/issues

Capabilities:	Equipment imports: what, from whom, where based Support (spare parts, maintenance and operational training) Indigenous production and assembly, Raw materials, natural resources, Supply - production, movement, storage Imports - how, points of entry, special handling/storage requirements Days of supply on-hand-unit, direct support (DS), general support (GS) of key supplies (POL, ammo)
Transportation:	Road capacity, primary lines of communication (LOCs), organic transportation assets (weight, size limits), Rail (same as roads) Water - Inland? Intra-coastal? Bridges - classification, construction materials, length, bypass, Tunnels - height/width restrictions, bypass
Organizations:	Garrison locations, brigade or larger combat, battalion or larger combat support (CS) and combat service support (CSS) Naval port facilities, home stations
Airfields:	Fixed fields, home station, associated dispersal/highway strips Number and type aircraft at base
Intelligence, Surveillance and Reconnaissance (ISR):	Assets and capabilities by echelon National level/controlled assets Associated ground stations/downlinks Centralized processing and dissemination facilities Center of excellence/HQ for each intelligence discipline Commercial sources for imagery, dissemination capability, mapping, other
Military Communications:	Fixed facilities, Mobile capabilities Relay/retransmission sites Commercial access

Integrated Air Defense: Early warning, Target acquisition and tracking, guidance, fixed launch sites, mobile AD assets, centralized C2, airfields associated with counter-air assets, airborne warning aircraft (e.g., AWACS), electrical power requirements

Theater Ballistic Missile/Coastal Defense missiles:
Fixed launch sites, mobile assets, meteorological stations supporting, C2 decision makers, target acquisition, target guidance/terminal guidance, power requirements

Weapons of Mass Effects capabilities- # and type:
Production, assembly, storage, delivery means
Imports required - source and mode of transport
C2 - decision maker

C2: See "Leadership"
Rivalries - personal and inter-service
Decision making –
Dissemination/transmission means,
Direct or through chain of command
Special capabilities, Special Operations Forces (SOF), Weapons of Mass Destruction (WMD), TBM, Human Intelligence (HUMINT), and Submarines

MILITARY SITUATION: Under what conditions does the military execute its missions?

1. Internal Conflict: Is there internal conflict within the military that could destabilize this country?

- **Rivalry/Factionalism*:*** Are there emerging or increasing rivalries or factionalism within the military?
- **Power Struggle:** Are there emerging or increasing power struggles within the military?
- **Deteriorating Morale/Increasing Dissention:** Is there deteriorating morale or increasing dissention within the ranks or in the officer corps?

2. Civil-Military Relations: How loyal is the military to the current regime? Are there cultural or religious factors that might cause frictions and dissention? Are there changes or developments in civil military relations that could destabilize the country?

- **Government - Military Relations:** Will the senior military leadership support and defend the government against internal resistance and insurgency? What factors might cause a loss of confidence and/or support? What factors

might cause a military coup to occur?

- **Civil-Military Conflict:** Is there increasing conflict between the civilian and military leaders? Is there a difference in views between junior and senior leaders toward service to the government? To the peoples/constitution?
- **Constitutional/Legal Conflict:** Is there increasing civil military conflict over constitutional/legal matters?

3. Socio-Military Conflict: Are there growing tensions/conflicts in socio-military relations that could destabilize the country?

- **Internal Security Role:** Is the military assuming a new internal security role or increasing its involvement in internal security affairs?
- **Military Activities:** Are military operations/activities having an increasingly adverse impact on society?
- **Criminal Activities:** Is the military involved in criminal activity that are contributing to increased tensions/conflict between the military and the public?

4. External Military Threat: Is an external military threat emerging or increasing?

- **Limited/Covert Military Action:** Is an adversary engaging in or increasing limited/covert military action?
- **Conventional Military Action:** Is an adversary preparing to engage in conventional military action against this country?
- **WMD/Advanced Weapons:** Is an adversary trying to acquire or is in the process of deploying WMD or advanced weapons?

5. Operational Status/Capability: Are there changes or developments in the military's operational status or capabilities that suggest pending military action?

- **Activity Levels/Patterns:** Is there unusual change or a sudden increase in activity levels/patterns?
- **Personnel Status:** Are there changes or developments in personnel status?
- **Force Capabilities:** Are there significant changes or developments in force capabilities?

TAB D: SoSA Points of Analysis -- Economic

Analysis focuses on all aspects of the adversary's economy that have the potential for exploitation. Among these are industrial production, agriculture, services and armament production. Concentration will be on those elements of the economy that are factors in foreign trade and factors on the internal economy that can have an impact on the political decision making process and popular support for the government. Both the official and underground (black-market) economies must be examined.

Concentration will be on the adversary and the regional and global countries with which it has its major trade and exchange linkages. Certain specific nations and regional economic alliances could be highly dependent upon adversary exports, and the impact upon these must be considered. The focus will be on critical elements of the trading partners that may be exploited and not their economy as a whole.

In the economic system, a great deal of information is available from open source. The initial task is to develop a baseline of information on the adversary's economy, such as gross domestic product, growth rates, unemployment rates, money supply, economic plans, inflation, and national debt. Analysis may include:

Sources of National Wealth:

Natural Resources
Products (Agriculture & Manufacturing)
Foreign Aid
Foreign Trade
Import/Export
Trading Partners
Domestic Consumption
Management of the Economy
Government Role
Private Sector Role
Corruption
Slush Funds, Leaders' Bank Accounts
Counterfeiting

Economic Questions

- What are the key indicators of the economic health of the country(ies) of interest (COI)?

- Which external factors have the most impact upon the economy? What areas of the economy are most susceptible to foreign influences and exploitation?

- What is the impact of foreign economic assistance? What would be the impact of its reduction/removal?

- What percentage of the economy should be classified as "black/gray market"? Are we able to quantify activities in this sector? Can we influence this sector?

- What are the governmental rules on foreign investment? Who do they favor?

- Which nations have the most to gain/lose from damage to, or a collapse of the economy? What are the most likely areas of economic growth?

- Will there be growth in the private sector share of the economy? Who would benefit the most from this change?

- How effective will be steps to diversify the economy?

- What is the inflation rate? To what extent will steps to control inflation be successful?

- Will government subsidies of selected products for domestic use continue? What would be the impact of their reduction/removal?

- What is the anticipated trend in demand for foreign (particularly US) currency?

- What is the prognosis for food production? Are they dependent on imports? Will rationing of essential goods continue? Which items are most likely to be rationed?

- How will demographic factors (e.g., birth rate, adult/child ratio, rural migration to urban areas, etc.) affect the economy in the future?

- What is the impact of the drug trade on the overall economy? Regional economies?

- Will imports of military spending/hardware increase? Who are the most likely suppliers? Will these be cash transactions, or will a barter system be established?

- What is this nation's standing within the International Monetary Fund and World Bank?

- Is trade with European Union member nations expected to increase? If so in what specific areas?

- Have any key members of the economic sector leadership been educated in the West or China? If so, have they maintained contacts with their former colleagues?

- Are changes to the current system of state-owned monopolies anticipated? If so, what will be the impact?
- What are the key industries of the state(s)?
- What are the major import/export commodities?
- What is the trade balance? Is this a strength or vulnerability?
- What is the labor situation (e.g., unemployment statistics, labor sources, unions, etc.)?
- Who/what are the key government economic leaders/agencies?
- Who are the principal business leaders in the country?

TAB E: SoSA Points of Analysis -- Social

Analysis must study the way people, particularly the key leadership and natural leaders, organize their day-to-day living, including the study of groups within society, their composition, organization, purposes and habits, and the role of individuals in society. For intelligence purposes, analysts study seven sociological factors. The detailed list should be viewed as guide for developing the necessary information to develop the Sociological Systems Summary for the target countries.

Population. Intelligence data derived from censuses and sample surveys describe the size, distribution, and characteristics of the population, including rate of change. Most countries now conduct censuses and publish detailed data. Analysts use censuses and surveys to evaluate an area's population in terms of:

Location
Growth Rates
Age and Sex
Structure
Labor Force
Military Manpower
Migration

Characteristics of the People. Analysts study social characteristics to determine their contribution to national cohesion or national disintegration. Social characteristics evaluated by analysts include:

Social Stratification
Number and Distribution of Languages
Prejudices
Formal and Informal Organizations
Traditions
Taboos
Nonpolitical or Religious Groupings and Tribal or Clan Organizations
Idiosyncrasies
Social Mobility

Public Opinion. Key indicators of a society's goals may be found in the attitudes expressed by significant segments of the population on questions of national interest. Opinions may vary from near unanimity to a nearly uniform scattering of opinion over a wide spectrum. Analysts should sample minority opinions, especially of groups capable of pressuring the government.

Education. Analysts concentrate on the general character of education and on the quality of elementary through graduate and professional schools. Data collected for these studies include:

Education Expenditures
Relationship between education and other social and political characteristics
Education levels among the various components of society
Numbers of students studying abroad
Extent to which foreign languages are taught
Subjects taught in schools

Religion. Religious beliefs may be a potentially dangerous friction factor for deployed US personnel; this was experienced in the Middle East with Fundamentalist Islamic sects. Understanding those friction factors is essential to mission accomplishment and the protection of friendly forces. Analysts evaluate data collected on an area's religions, which includes:

Types
Size of Denominations
Growth or Decline Rates
Cooperative or confrontational relationships between religions, the people they represent, and the government
Ways the government deals with religious organizations
Roles religious groups play in the national decision making process
Religious traditions and taboos

Public Welfare. To evaluate the general health of a population, analysts must identify:

Health delivery systems
Governmental and informal welfare systems
Social services provided
Living conditions
Social insurance
Social problems that affect national strength and stability (e.g., divorce rate, slums, drug use, crime) and methods of coping with these problems

Narcotics and Terrorism Tolerance. A population's level of tolerance for narcotics and terrorist activities depends on the relations between these organizations and the population as a whole. Analysts should determine if the tolerance is a result of the huge sums of money trafficker’s pump into the economy or a result of trafficker's use of force. Terrorists may be accepted and even supported by the local populace if they are perceived to be working for the good of the local people. The intelligence analyst must evaluate the way these organizations operate.

Sources: Due to the nature of the social focus area, the preponderance of information is envisioned to be open source. The initial task is to develop a baseline of

information on the target nation. Basic data such as those listed in paragraph I above, will be collected and analyzed. Numerous studies, sponsored by the US Government as well as academic treatises are available. A more difficult problem will be making the essential linkages within the sociological area and with other focus areas, particularly political and economic.

Social Questions:

- What are the general perceptions of social stability, Instability and conflict, socio-political unrest, ethnic racial tensions and religious conflict, socio-economic instability and unrest?

- Who are the population's most respected figures, why are they so respected, and how do they maintain the public focus?

- What are the government's most effective tools for influencing the masses? Is there a particular subset within the medium to focus upon?

- What dominant areas of society are emerging and causing instability or areas of conflict? Are any of these areas linked to political factors? Ethnic/racial?

- What are the predominant economic areas that are contributing to, promoting, or exacerbating social instability?

- How can interrelationships be established between religious and ethnic minorities in the COI? How can we effectively manipulate these relationships to affect a desired outcome?

- What are perceptions of public safety primarily attached to? How is the level of violence defined by society? What elements may make it appear excessive?

- What psychological effects does an increased level of violence have on a person's notion of safety? Their states' ability to combat or provide for their safety?

- What are the effects of increased criminal activity: on the family, the town, the region, and nationally?

- How can the Coalition increase the psychological perception that the global economy is surpassing the COI?

- How can the Coalition stimulate the notion that the government is failing to provide for basic elements, or is slow to produce results?

- Examine the adverse effects of increased organized criminal activity upon society by industrial component.

- White collar or financial crime
- Drugs and drug smuggling
- Proliferation of weapons: Note: the types of weapons and to whom they are going.
- Gang related activity: Is there a predominant ethnic group asserting themselves in this arena, and are they utilizing any particularly violent tactics to assert themselves?
- What are the significant effects of increased public health problems? What public health issues have increased and how effectively is the government addressing them?
- Identify how extensive the division of wealth is between ethnic and religious groups and their potential for promoting tension or conflict.
- What are the effects of environmental problems having on society? Any particular region hard hit?
- Identify the key groups adversely affected by increasing poverty rates (i.e., the young)?
- Identify primary tools used by the government for influencing the masses? How do the masses validate information obtained by the government? Do they feel they need to validate information?
- Who are the key opposition leaders? How are they linked with popular movements? How do they influence the masses? How are they funded and by who are they primarily funded?
- Who are the key opposition groups? How do they influence the masses? How are they funded and by who are they primarily funded? Identify any common themes to unite them, identify areas that may divide them.
- How do opposition groups recruit? Do they target a specific social group? Is there a hierarchical structure? How are members dismissed from the ranks? What would cause a dismissal? How is dissatisfaction expressed?
- How do these groups affect one another? How do they affect similar groups in neighboring countries? Do they have external support?
- What are each factions mechanisms for influencing the others? How do they communicate officially and unofficially? What factions are armed? Where do they get their weapons?

- Are acts of civil disobedience increasing? Is the level of violence employed by the government to quell civil disobedience increasing? Are acts of vigilantism on the rise? How are disturbances quelled? What tools are brought to bear?

- Identify consumer goods that are most valued by the COI's populace? Who controls supply? How are they networked? Any increase in a particular product?

- What are the "hot button" issues dividing the various factions of the society?
- Where are wedges best inserted? What networks and mediums can be used to subvert and confuse each faction? What are the capabilities of regional allies to polarize these factions? What are the links?

- How are rumors spread most effectively? What informal networks can be exploited?

- What is the social perception of the military's ability to meet that threat? The states' ability to meet the threat? The states' ability to provide overall security in a micro/macro context?

- How are troops conscripted? What are the incentives for service? What unofficial groups/associations exist within military? How do they recruit or dismiss people?

- Is criminal behavior increasing within the military? What types of criminal activity occur within the military?

- Identify the hierarchal structure of the military. Is there a dominant ethnic group assuming more leadership roles? How are they networked? What ethnic groups stay the most connected in the military, which groups are more apt to include outsiders?

- Which ethnic and religious minorities feel the most repressed? How do they express their discontent? Do any organizations exist to channel their feelings? How responsive do they feel the government is to their issues?

- How does the population view outside assistance? How likely is the government to ask for assistance? How is the need for assistance determined?

- How are relief organizations viewed within the country? Are they busy? How effective are they at solving problems and meeting the needs of those they serve?

- Problems with immigrant flows? How are refugees treated?

- What consumer goods are in short supply, how are those goods brought to market and who controls the flow of such goods? Is there a dominant ethnic group controlling the flow? How effective is the Black Market in producing hard to obtain goods?

- What goods dominate the black market? Who are the primary producers and end receivers of goods? Is there a particular group emerging as the leader of the black market?

- How are minority laborers networked with minority leaders? What are the links between labor groups and minority activists? What ethnic group(s) compose the majority of the skilled labor force? How is skilled labor kept from going abroad?

TAB F: SoSA Points of Analysis -- Infrastructure

Infrastructure analysis focuses on the quality and depth of the physical structures that support he people and industry of the state. In developed countries, it is *the underlying foundation or basic systems of a nation state; generally physical in nature and supporting/used by other entities (e.g., roads, telephone systems and public schools).*

Infrastructure Questions

Infrastructure: What are the key elements of infrastructure and how are they related?

Lines of Communications: Where are the key ports, airfields, rail terminals, roads, railroads, inland waterways, etc located?
Nodes: Where are key bridges, tunnels, switching yards, scheduling /control facilities, depots/loading stations, switching yards, etc.?

Electrical Power: Where are power plants, transformer stations, and relay and power transmission lines located?
Nodes: Where are the key substations, switching stations, and line junctures?

Potable Water: Where are the water treatment plants, wells, desalination! Bottling plants, and pumping stations?
Nodes: Where are the key pumping stations, control valves, and distribution line junctures?

Telecommunications: What are the location and architecture of the domestic telephone system, cable, fiber-optic, microwave, internet, and cell phone networks and satellite stations?
Nodes: Where are the key control points and junctures?

Petroleum and Gas: Where are the gas and petroleum fields, gathering sites, pumping stations, storage areas, refineries and distribution lines?
Nodes: Where are the key pumping stations, control valves, and distribution junctures?

Broadcast Media: What are the location, frequency, power, and radius of effective range (coverage) of the am/fm radio and TV stations? Where are the studios, antenna, and rely towers located? How are they powered?
Nodes: Where are the key control points and junctures?

Public Health: What are the location of the hospitals and clinics? Are they adequately staffed, supplied and equipped? Is the equipment well maintained? Is the staff well trained? Do they depend on foreign or domestic sources for their supplies, medications, and spare equipment parts?
Nodes: Where are the key control points and junctures?

Schools: What are the location of the public, private, and religious primary and secondary schools and universities?
Nodes: Where are the key control points and junctures?

Public Transportation: What are the public (bus/streetcar/taxi/etc.) Transportation routes?
Nodes: Where are the key control points and junctures?

Sewage Collection and Treatment: Where are the collections systems, pumping stations, treatment facilities and discharge areas located?
Nodes: Where are the key control points and junctures?

Common Infrastructure Questions

1. How are they linked? How are these key facilities linked? (Physically, electronically etc.)

2. What are the key nodes? Where are they? Where are the disabling yet non-lethal/non-destructive infrastructure nodes?

3. What are their alternates? What are the alternates for the above and how are they linked to the key facilities and each other?

4. Are there indigenous capabilities? What indigenous capabilities could be used? How are they linked and organized? What are the critical nodes?

5. What is the security surrounding the nodes?
What is the security posture at these facilities? Who controls the forces? How are security forces/police/paramilitary networked? What training do they receive? What is their level of proficiency? Are they augmented as alert status (national or local) changes? What are the ground/naval/air defense capabilities at/near these facilities? How are they networked? What groups are likely to conduct industrial sabotage? How are they tasked, linked, supported?

6. Who owns and who controls the infrastructure? Who owns and/or controls all of the above entities? Is ownership by private, corporate or governmental entities? What organizations have regulatory oversight/control?

7. What is the capability to repair damage to the system and restore it to service? Is maintenance and repair an integral part of the organization? What are their capabilities and limitations? Which contractors are normally used and for what purpose? Are repair/restore materials readily available or is there a long lead-time for critical supplies/components? Who are the key engineering contractors for these facilities? Can/will they share plans, blueprints, schematics, etc.?

8. What would be the second-order effects of influencing the infrastructure?

TAB G: SoSA Points of Analysis -- Information

Analysis of adversary Information Systems and Operations includes:

- Telecommunications capabilities and level of sophistication, tele-density rates, radio and television broadcast coverage including television, landline, cellular, Internet, radio, etc.

- Interconnectivity of communications via ISDN, fiber optic, satellite, microwave

- Primary nodes and trunks of telecommunications infrastructure including government, non-government, citizen and military use of Information Operations.

- Knowledge of COI key leaders' style and decision-making habits, advisors' perception and cultural influences

- Understanding governmental use of media influence, public affairs and civil affairs interrelationships

- Knowledge of military, non-governmental organization and law enforcement interrelationships

- Understanding of effects on adversary under psychological, computer network attack and defense, electronic warfare and space operations

- Information Systems and Operations is delimited by:

    - Breadth and depth of reliable, verifiable information on COI practices: Psychological Operations, Information Operations (I0), Computer Network Attack (CNA), Computer Network Defense, and Counterintelligence, etc.

- Locations and purpose of physical infrastructure of communications and broadcast towers, cables and supporting operations centers are included within the infrastructure focus

- Development of and use of computer network operating systems, IT industry skill sets and software applications

- Media affiliations, perceptions and sympathies to include censorship and self censorship in news and entertainment print and broadcast industries.

During analysis, focus on:

- Interview experts in COI communications, IO, CNA in order to correlate commander's intent with Information knowledge
- Review literature, documentation, assessments of COI for broad conceptual understanding of technological issues
- Enable authorized access to data, web pages and on-line documents whenever possible, especially products resulting from standing collection requirements
- Research information sources' relativity, authenticity, loyalties, completeness and currency
- Open-source research including library, Scientific and Technical (S&T) journals, on-line library queries, Internet meta-searches, Federally Funded Research and Development Centers and Defense Universities/Staff colleges
- Academia: Professors, foreign graduate students from COI, especially in the scientific and technical programs
- Media: COI originated S&T programs, news and informative broadcasts, Internet content; business news

Information Questions

- How effective are the COI's network defense capabilities? What reactions could be expected following an incident? What recovery procedures are routinely exercised?

- What is the organizational structure of the telecommunications industry? How effective is the COI at managing physical security of infrastructure an implementing network security practices?

- What interrelationships exist between civil law enforcement, military, commercial and non-governmental agencies that would enhance the COI's response to an emergency?

- What redundancies exist within the COI's network to eliminate or reduce network down time? Cellular, satellite, landline, power back up? How effective is their exchange, backbone, architecture in providing redundancies?

- What would cause a slow-down of COI's network? In what ways can the effect be localized? (Geographic, logic, by agency, etc.)

- What bandwidth issues exist within the COI's communications industry? How well, and in what ways, does the government manage its allocation?

- What type of OPSEC practices does the COI routinely exhibit to deny exploitation?

- In what ways have military/civil/corporate operations centers improved their practices/tactics in keeping with the COI's technological improvements? Do they

rely more heavily on computers/cellular/networks than in the past?

- What are the indicators, if they exist, that the COI has developed a more focused vision and strategic plan for using technology than it had in the late '90s? What effect has technology had on productivity, transportation, logistics, etc. in government, commerce, corporate, private sectors?

- How does the COI perceive their use of technology from a governmental perspective? From the citizens' perspective? Military? Business? Legal? Law enforcement? Non-governmental organizations?

- What is known about the COI's assessment of Blue network vulnerabilities and defense measures?

- Do regional and neighboring countries or satellite broadcasts (television, radio, and internet) have an audience in the COI's population? Which broadcasts are popular with citizens and what is the audience's the demographic and statistic data? What programs or broadcasts are popular with minority political parties, resistance movements, academia, etc.?

- What is the topology design the COI networks utilize? Which exchanges and trunks are co-located within government-controlled facilities? Are government-commercial partnerships used to provide network services?

- What is known of current and planned technology projects: fiber optic cabling? ISDN access expansion? Satellite leases and launches? What is the operational status and capability of COI's Low-Earth Orbit satellites?

- What Internet domains are accessible to the population? Is reliable language interpretation software available? What licenses does the government require for web hosting?

- What governmental directives address network security in supporting national security objectives?

- What messages might be effective in the COI? What themes are prevalent in the media?

- What advances in communications technology have enabled improvements in military hardware employment? Describe the use of telecommunications technology in law enforcement operations.

- To what degree and direction are telecommunications infrastructure investments impacting military readiness? Describe the state of international telecommunications connectivity to the CO!?

- Which current telecommunications and Internet security operations have been exercised? Is there a national crisis action plan?

- What practices and policies does the government use in monitoring information-related media (TV, radio, Internet, etc)? What enforcement methods have been employed?

- Which print media and on-line content do citizens turn to for news? Entertainment? Do censorship policies or self-censorship trends exist in the COI?

- Is there a market and distribution pipeline for recorded or intercepted news or entertainment programs? In what ways does law enforcement interact in this market?

- What is known about COI's network operating systems? What IT skill sets are known to be in high demand?

- Is software piracy prevalent? Counterfeiting? Drug smuggling? Organized crime? Identity theft?

Chapter 4:
Develop Campaign Focus Through Mission Analysis

As the commander leverages the network analysis to understand the complexities and possibilities presented by the OE, the staff begins efforts to understand the strategic purpose for future military operations. The commander and the staff focus their efforts on fusing strategic guidance with their understanding of the OE to develop the focus of the campaign. As the staff presents analysis on both the requirements and potential points of focus for the campaign, they enable the commander to develop a vision to use synchronized, integrated military operations as a part of unified action.

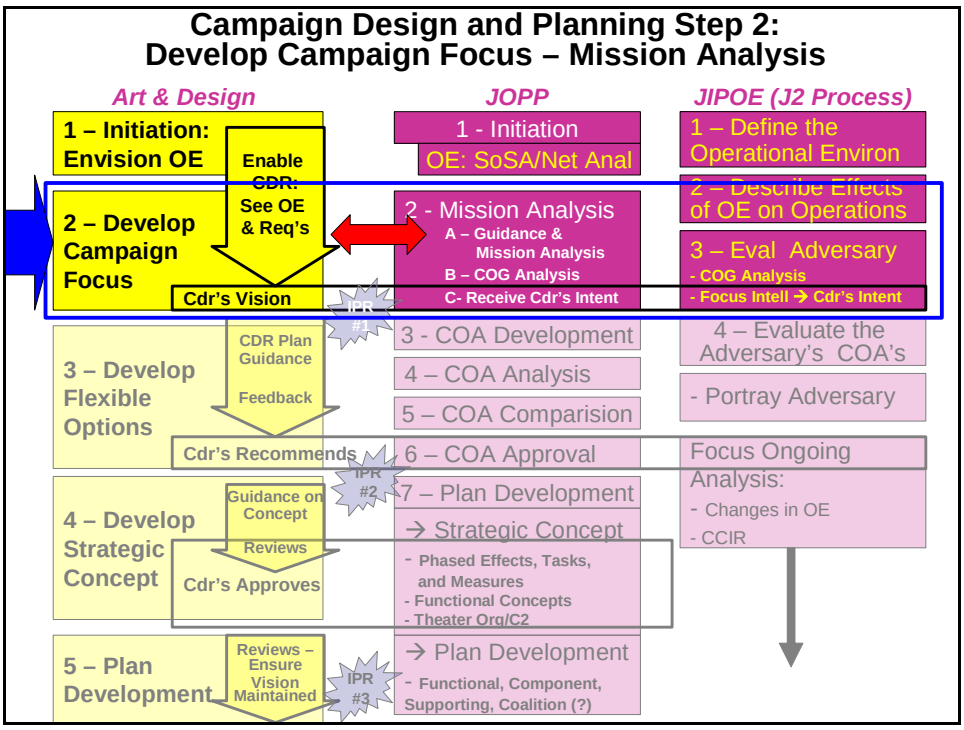

Figure 24 Campaign Design and Planning Step 2

<u>The Commander and Staff During Campaign Mission Analysis:</u>

The national or multinational strategic guidance the CCDR receives from higher authority, whether explicit or implicit, drives the campaign design process. Strategic guidance is expressed through the National Security Strategy and National Military Strategy, as well as from a variety of other means such as the JSCP, Strategic Guidance Statements, and other sources. After receiving strategic guidance, the CCDR will organize and direct his staff's activities to provide him with specific analyses that will enable him to develop a clear vision of the design for the campaign ahead. In order to

analyze the guidance provided, the JPG and subordinate planners will organize their activities around the basic steps of the "Mission Analysis" process (JOPP Step 1). Concurrently, the J-2 conducts the initial steps of JIPOE to describe the potential effects of the OE and analyze the strengths of the enemy (their COG). Throughout the initial stage of campaign design, the staff will support the commander in three major ways:

- **Step 2a - Guidance and Mission Analysis:** The CCDR directs the JPG to systematically analyze all sources of guidance provided and develop a "derived" mission statement for his approval that accomplishes the essential tasks that flow from the strategic guidance.

- **Step 2b - COG Analysis to Determine DP's and LOO's:** The JPG determines both adversary and friendly COGs – the mutual centers of all power and freedom of action. After determining the critical factors inherent in the COGs at strategic and operational level, the JPG develops and proposes DPs for the campaign. The commander approves and determines which of these points are critical to the outcomes of the campaign, around which the JPG will develop the LOOs for the campaign. These COGs, DPs, and LOOs are key elements of campaign design. They designate the commander's approved vision for the orientation and focus of the major joint actions of the campaign as the JPG and subordinates develop future COAs.

- **Step 2c – Develop Commander's Vision and Intent for the Campaign:** Using the JPG's analysis, the CCDR develops his vision for the upcoming campaign. This vision provides the centerpiece for campaign design, as it provides the commander's intent for what must be accomplished in the upcoming campaign (purpose and endstate), as well as the framework for developing and executing future operations. It includes his guidance on desired and undesired effects during the campaign, and may also include other information that outlines and clarifies his views on method, risk, and LOOs to guide future planning.

These three parts of the mission analysis process enable the commander to provide sufficient vision and guidance to allow the JPG to develop effective COAs for the CCDR's consideration, and for submission to the SecDef for final selection and approval. This vision and guidance must be clear enough to enable the JPG to clearly define phased objectives and effects, determine subordinate tasks and command relationships, and develop initial requirements for sustainment and supporting plans.

Conducting Step 2a - Guidance and Mission Analysis

Efforts here focus on developing a clear picture the strategic guidance provided for future military action. A clear understanding of this guidance is essential to design as it lays out the general expectations for long- and short-term success critical to effective campaign design. The commander uses staff analysis to understand the strategic (national) purpose and endstate, and to synthesize requirements against the

OE. Using this understanding, the commander must derive, envision and articulate the key elements of campaign design for further staff efforts to include:

- **Termination Criteria**: Analyze and understand the President and SecDef's vision for the national strategic endstate and intent (i.e., the specified standards that must be met before a joint operation can be concluded).

- **Military Endstate**: The point in operations at which military power is no longer the primary means of national power required to achieve remaining national objectives

- **Objectives**: The strategic and theater/military goals for the operation.

- **Effects:** The physical or behavioral states of the adversary's systems (as outlined during SoSA/ONA) that will be in place when endstates and objectives are accomplished. In other words, if the goal of military operations is to "bend the enemy to our will," effects should describe how the enemy will act when we succeed in these efforts.

- **Mission:** The final product of this first portion of mission analysis is the mission statement for the future campaign. This statement should be a direct, brief and effective articulation of the essential tasks and purpose for military operations. This mission is also critical in that it (or its key elements) are approved by the SecDef, and will most likely be adopted by the President and SecDef as they orchestrate unified action and articulate the reason/rationale for military operations to potential coalition partners.

After developing an initial understanding of OE, the JPG supports the commander by conducting Mission Analysis (JOPP Step 2). JOPP provides a common process that orients staff actions at all levels. Interpreting strategic guidance and analyzing the requirements for the mission ahead establishes the initial bounds of planning - though this orientation and any planning boundaries must be continuously assessed, since theater situations will likely change between planning initiation and plan completion. Assumptions may become invalid or be replaced with competing facts that render many of the initial products of mission analysis "overcome by events." Objectives and end states may change based on political, economic or social factors, or in response to other unforeseen requirements that compete for national resources.

The sequence that follows is a simplified outline of a process that's dynamic, non-linear, and absolutely critical to successful planning. Actions, such as revising intent and estimates, are continuous and concurrent. The figure below shows the doctrinal steps of JOPP Mission Analysis (on the left). **As noted in joint doctrine, the steps are not done in a set sequence and may be accomplished in a variety of different ways**, based upon the preferences of the CCDR. Therefore, based on experience and the move to effects-based thinking in planning and operations, **this**

handbook will propose that mission analysis steps be conducted in the order shown on the right side:

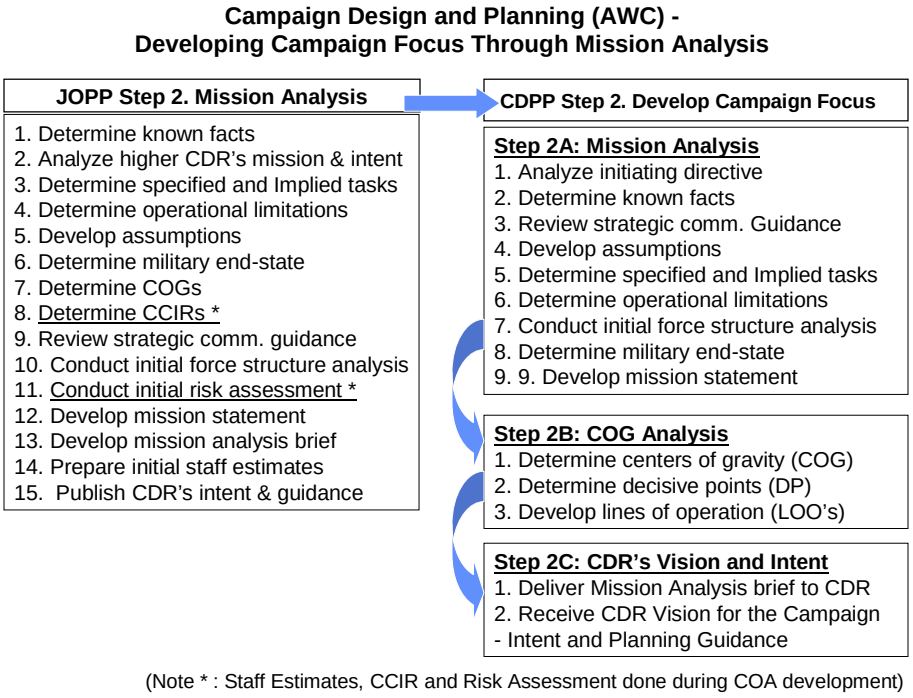

Figure 25 Developing Campaign Focus Through Mission Analysis

1. Analyze the Initiating Directive to Understand the National Strategic Endstate. The first step in Mission Analysis at the combatant command level is to determine the strategic end state and objectives. The end state gets to "why" we are developing a campaign plan and seeks to answer the question: "How does the US strategic leadership want the OE (i.e., the region and/or potential adversary) to behave at the conclusion of the campaign?" Objectives normally answer the question of "what" needs to be done to achieve the end state. As you might expect, the distinction between end states and objectives can be very vague.

In designing and planning, we must recognize and define two end states in a single campaign – a national strategic endstate and a theater-strategic/military endstate. The ***national strategic end state*** describes the President's political, informational, economic, and military vision for the region or theater when operations conclude. National strategic end states are derived from President/SecDef guidance that is often vague. More often than not, senior military leaders will assist the President/SecDef in developing that end state. Below is an example of a national strategic end state:

"An economically viable and stable Country X,
without the capability to coerce its neighbors."

The ***theater strategic or military end state*** is a subset of the national strategic end state discussed above and generally describes the *military conditions* that must be met to satisfy the objectives of the national strategic end state. (We will develop our military endstate after analyzing the tasks required by strategic direction.)

Strategic objectives clarify and expand upon endstate by clearly defining the decisive goals that must be achieved in order to ensure we achieve of US policy.

- Country X deterred from coercing its neighbors
- X ceases support to regional terrorism
- X's WMD inventory, production and delivery means reduced
- Provisions of United Nations Security Council Resolution (UNSCR) __ enforced and adversary complies with all requirements of the resolution

Answering these questions is what makes mission analysis different at this level when compared to the tactical level – **you will not find the clear and definitive guidance in one location that you may be used to**. There is no "higher order" to cut and paste from. Instead the National Security Strategy, National Defense Strategy, National Military Strategy, National Security Presidential Directives (NSPD), SecDef and Presidential speeches, and verbal guidance all provide input to help define an end state and corresponding objectives. With so many sources of guidance, consistency is normally an issue to overcome. Though not directive in nature, guidance contained in various US interagency and even international directives, such as UNSCRs, will also impact campaign end states and objectives.

2. Determine Known Facts. "Facts" are the major pieces of information known to be true and that are pertinent to the planning effort. First, understand and synopsize the geostrategic factors derived from analysis of the OE (the SoSA and baseline ONA) that will influence the strategic endstate. This is not a laundry list of factors, but a synthesis of the key factors in the OE that will enhance mission analysis (i.e., "How will the domestic and international environments impact the conduct of the campaign?"). To answer this question, consider the political long- and short-term causes of conflict, domestic influences (including public will), competing demands for resources, economic realities, legal and moral implications, international interests, positions of international organizations, and the impact of information.

The JPG should leverage the adversary's SoSA (developed at initiation) as a useful means to organize and consider geostrategic factors in an attempt to gain a better understanding of their impact and interrelationships. Using the PMESII approach, interagency planning communities examine complex problems to determine key relationships that may impact decisively on campaign design. In addition, the JPG leverages all available analysis of the characteristics of the OE within the theater. They analyze topography, hydrography, climate, weather, and demographics, and evaluate how weather, light conditions, the environment and terrain effect friendly and enemy forces and capabilities (i.e., C4ISR, maneuver, employment of special weapons,

deception and psychological operations). Additionally, they assess factors such as adversary organization, communications, technology, industrial base, manpower and mobilization capacity, and transportation.

3. Review Strategic Communications Guidance. When provided, this guidance is a subset of "facts" and specifies how the US government will understand and engage key audiences to create, strengthen and/or preserve conditions favorable to accomplishing national policy objectives. It may also describe the coordination of programs to inform and influence key audiences and provide limitations on what can and cannot be said through combatant command and subordinate IO during the campaign. This may not be available in the early stages of contingency and crisis action planning. It is normally developed over time as our strategic leadership and the interagency develop a specific policy to deal with an emerging problem.

4. Develop Assumptions. The staff develops assumptions in order to continue the planning process in the absence of facts. Assumptions are artificial devices to fill knowledge gaps, but they play a crucial role in planning and <u>are kept to an absolute minimum throughout planning</u>. Assumptions are initially developed to fill gaps in essential knowledge needed to continue analysis and design. They are <u>continuously revalidated</u> and facts may replace them as more information is gathered.

A planning assumption must be logical, realistic and essential to continuing the analysis and planning. It is logical and realistic if there is sufficient evidence to suggest that it will become a fact. It is essential if it is required for the plan to be successfully executed. Assumptions should also be clearly stated. Normally, the higher the command echelon, the more initial assumptions will be made. Incorrect or risky assumptions may partially or completely invalidate the entire plan, for which the JPG should consider developing branches to the basic plan. Examples of theater-level assumptions are:

- Political:
  - Countries A & B will allow overflight, basing and Host Nation Support.
  - Countries C & D remain neutral.
  - Country E supports Country X with air and naval forces only.

- Forces:
  - V US Corps will not be available.
  - APS 3 and MPS 1 & 2 will be available for employment at C+10.
  - A CSG and an ESG are forward deployed in theater.

- Timeline:
  - Major deployments begin upon unambiguous warning of enemy attack.
  - X days ambiguous/unambiguous warning prior to enemy attack.
  - PRC activated on C day. Partial Mob activated on D day.
  - Theater access will not be obtained until C day.

- Enemy
    - X's forces can sustain an offensive for 7 days before culmination.
    - X will use WMD once coalition forces cross the border.

5. Determine Specified and Implied Tasks, and Designate Essential Tasks. Analyze strategic direction to determine the strategic tasks that have been specified or that may have been implied as a part of the strategic endstate and objectives given. Examples of **specified tasks** given to a combatant command might be:

- Deter country X from coercing its neighbors
- Stop X's aggression against its neighbors
- Reduce X's WMD inventory, production and delivery means
- Remove X's regime
- Enforce the peace as outlined in the peace accords

Note that these tasks focus on achieving the strategic endstate and are taken from strategic guidance. They are broad tasks that may require using many elements of national power and the action of several elements of the joint force. Also, they do not specify actions by components or forces (the JPG does this as part of COA development).

After identifying specified tasks, the staff identifies additional major tasks necessary to accomplish the assigned mission. These additional major tasks are ***implied tasks***. These are tasks that must be done in order to accomplish the specified tasks given by the President and SecDef. Tasks that are inherent responsibilities (deploy, conduct reconnaissance, sustain, etc) are not considered implied tasks unless such routine tasks must be *coordinated* or *supported* by other commanders to be successful. Examples of implied tasks are:

- Build and maintain a coalition
- Show force through Flexible Deterrent Options
- Conduct Non-combatant Evacuation Operations
- Focus information operations to discourage violence among country X's disparate population groups
- Destroy X's elite armored corps
- Provide military government in the wake of regime removal
- Secure and stabilize country X

Essential tasks are derived from the list of specified and implied tasks and are those tasks that <u>must be accomplished in order to successfully complete the mission</u>. These are the tasks that appear in the mission statement.

6. Determine Operational Limitations (Constraints and Restraints)

These are the limiting factors for the campaign (i.e., the restrictions placed on the commander's freedom of action). They may be given in the many sources of strategic

direction or derived from regional or international considerations or relationships. Limiting factors are generally categorized as constraints or restraints. Constraints are "must do" actions, while restraints are "must not do" actions.

- **Constraints**: Constraints are tasks that the higher authority requires subordinates to perform (e.g., defending a specific DP, maintaining an alliance, meeting a time suspense, or eliminating a specific enemy force, etc.)

- **Restraints:** Restraints are things the higher authority prohibits a subordinate commander(s) or force(s) from doing (e.g., not conducting preemptive or cross-border operations before declared hostilities, not approaching the enemy coast closer than 30 nautical miles, not decisively committing forces, etc.).

7. Conduct Initial Force Structure Analysis. This may also be viewed as a subset of "facts" and specifies the forces apportioned for planning in Global Force Management Guidance. It clearly identifies the types and sizes of forces available for planning any initial guidance on anticipated levels of coalition forces.

8. Military Endstate, Objectives, and Effects: Future military operations must be designed and planned to achieve strategic ends in the most effective and efficient manner necessary. To guide developing future options for unified action, it is essential for the CCDR to provide clear guidance on the endstates, objectives and effects (on the adversary and OE) that military operations must achieve.

The ***military end state*** nests within the national strategic endstate, and describes the *military conditions* that must be met to satisfy the objectives of the national strategic end state. Often, the military end state is achieved before the national strategic end state; it signifies when the President <u>no longer requires the military as the *primary element* of national power required to achieve the remaining objectives of the national strategic end state</u>. An example of a theater strategic or military end state:

"Country X is no longer a regional aggressor and does not possess WMD capabilities. By the end of military operations, Country X will no longer pose a continued military threat to regional stability."

Objectives are the clearly defined, decisive and attainable goals toward which future joint actions are directed to accomplish the military endstate. They define the role of military forces in the larger context of national strategic objectives, and are nested within national strategic objectives. Military objectives are one of the most important considerations in campaign and operational design. They specify what must be accomplished and provide the basis for describing campaign effects. Examples of combatant command military objectives that support the above endstate might be:

- Country X's offensive military capabilities eliminated.

- X ceases support to regional insurgent and/or terrorist groups that threaten stability in neighboring countries.
- X possesses only defensive capabilities and is integrated into regional cooperative defense arrangements.

Campaign effects are an essential element of campaign design – they are articulated by the commander as part of the "Commander's Intent" and planning guidance that guide plan development. Effects describe the physical and/or behavioral state of the theater OE when objectives are achieved. During design, the CCDR will provide his vision on the desired and undesired effects to be achieved through unified action. In turn, the staff and subordinate commands will use these effects to analyze which of the adversary's nodes are most vulnerable to actions, and the tasks and resources required to create the effects desired.

In the initial stages of design, the CCDR and staff analyze endstates and objectives to determine what behaviors would be present and observable when strategic and military success are achieved. In joint doctrine, there is not yet a specific convention for writing effects, but there are four primary considerations:

- They should link directly to one or more objectives
- They should be measurable
- Statements should not specify ways and means for accomplishment
- They should be distinguishable from the objective they support for success

The same consideration applies to undesired effects (i.e., the behaviors which the CCDR wants to avoid as military and non-military power is applied). Additionally, we may use effects as a prime means of bridging military and interagency understanding by describing and seeking to achieve consensus/buy-in from all players on how an adversary must behave when policy has been achieved. In short, Clausewitz wrote that, "The aim of war is to bend the enemy to our will." Effects are a way of describing what the adversary (within the OE) will look like when he has been forced to accept our will.

In mission analysis, the staff develops broad, overarching effects for the commander's consideration and later use. Examples of campaign effects are:

- X's military forces do not conduct cross-border offensive military operations
- Y does not support X in destabilizing the region
- Regional terrorist networks are incapable of influencing regional governments and populations
- Local governments conduct effective administration and support to the populace

9. Develop Mission Statement: After identifying the essential tasks, the staff normally develops a derived mission statement using a *who*, *what*, *when*, *where*, and *why* format. At the combatant command level, guidance provides what must be done, but will rarely, if ever, provides a "higher mission statement" as described in the JOPP. For that

reason, the CCDR and staff must use mission analysis to fully analyze all elements of strategic direction to "derive" a mission statement that accomplishes endstates within the conditions present in the OE.

The mission is written around the essential tasks identified during mission analysis. Essential tasks comprise the "what" in a mission statement and are normally listed in the sequence to be accomplished. Often tasks given to the CCDR from national leaders are stated in language that doesn't fit doctrinal norms. Since mission statements are primarily written to focus military subordinates, it's important that we use doctrinal terms to describe the tasks to be completed. Mission statements must be continuously reconsidered and revised as required. It is important to revisit the mission statement during the entire plan development process to ensure that it meets the needs of the commander and the national leadership. A sample CCDR's mission statement might look like this:

> *"When directed, USAFRICOM employs joint forces in concert with coalition partners in order to deter country X from coercing its neighbors and proliferating WMD. If deterrence fails, defeat X's armed forces, destroy known WMD production, storage and delivery capabilities, and destroy its ability to project force across its borders. On order, stabilize the theater, transition control to a UN peacekeeping force, and redeploy."*

Conclusion: The Next Step – Determining DPs Through COG Analysis

The essence of campaign design lies in being able to envision and direct the planning of focused joint actions/tasks that produce the right combination of effects in time, space, and purpose. By approving the mission statement, the CCDR focuses analysis and design efforts when he articulates the essential tasks that must be accomplished in clear and concise terms that are understandable to superiors and subordinates to ensure clarity in both purpose and responsibility. This mission statement frames future analysis. It focuses subsequent effort toward identifying both adversary and friendly sources of power or COGs, and developing the right combinations of joint actions to achieve campaign endstates and objectives. In the next step of campaign design and planning, the staff will support the commander by analyzing friendly and adversary sources of strength, as well as weaknesses and vulnerabilities, in order to develop the potential points against which we direct future actions.

Chapter 5:
Develop Campaign Focus Through Mission Analysis: Determine Decisive Points by Center of Gravity Analysis

After the CCDR has approved the mission, the JPG continues the mission analysis process by using this mission to focus their analysis on determining friendly and adversary COGs (i.e., the centers of power and strength that both the US/coalition and adversary possess that gives them the ability to accomplish their strategic objectives in the OE).

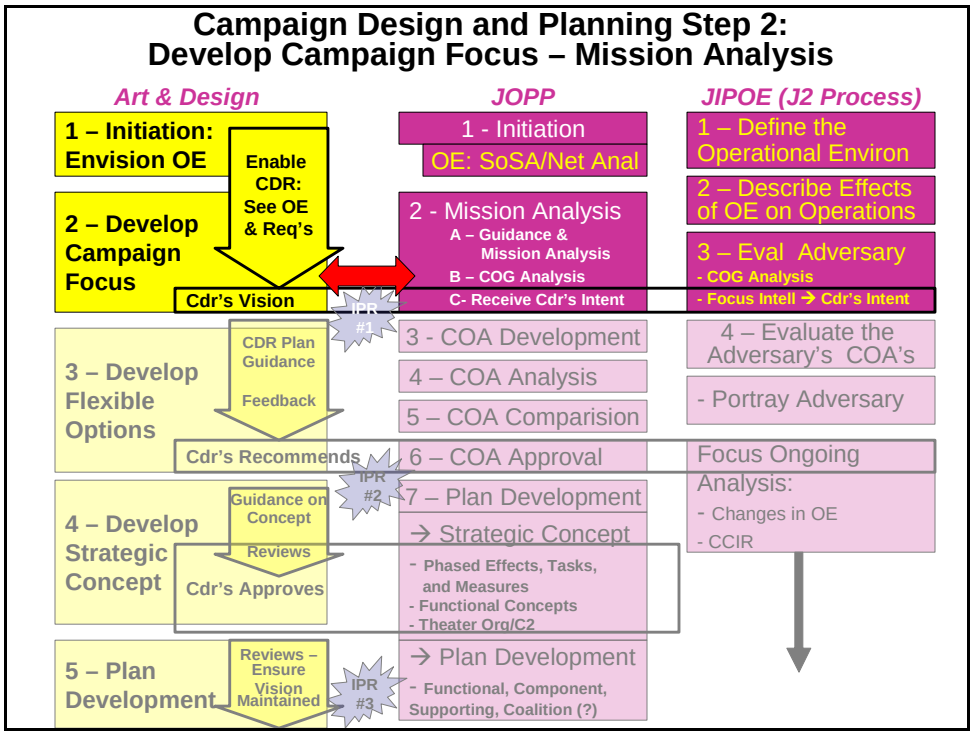

Figure 26 Develop Campaign Focus – COG Analysis

The Commander and Staff During COG Analysis:

The analysis of friendly and adversary COGs is a key step in the campaign design process. Just as an initial analysis of the OE provides a "systems perspective" during "Initiation," COG analysis enables the CCDR to visualize the broad range of DPs in both enemy and friendly centers, and to decide upon and prioritize those DPs at which he will focus efforts for maximum effect as part of his campaign design. Using this view of the DPs and events during the campaign, the commander also examines, directs and approves the initial staff analysis of the physical and logical LOOs for the

campaign. These initial LOOs provide the CCDR's vision on the command's orientation and efforts with respect to these DPs. With the staff's assistance the commander envisions the major lines of thrust or effort through major military and non-military means that will guide developing a series of flexible options (COAs) during campaign design and planning.

Throughout the COG process, the staff uses the commander's objectives, endstates and mission to focus their **analysis of the critical factors that contribute to or detract from both friendly and enemy strength** at the military strategic and operational levels. Leveraging the analysis of nodes and linkages accomplished during SoSA/ONA, the staff weighs and evaluates factors to determine the critical centers where both friendly and adversary strengths come together synergistically to form the decisive "source of moral or physical strength, power and resistance." (JP 5-0, p IV-8)

While the analysis and identification of COGs and their critical factors are an important step in campaign design, they are not an end unto themselves. COG analysis is aimed at enabling the Commander to identify the major events, physical points, and functions upon which to focus unified action during the campaign. **The value of the staff's COG analysis lies in determine the DPs for the campaign** (i.e., the key geographical places, factors or functions in friendly/enemy systems, and/or major events that, when acted upon and dominated, will provide a marked advantage over the adversary, or a marked step toward success). **The Commander and staff then use <u>these DPs</u>**, which may also be viewed as "decisive actions or events," **to develop the major efforts or thrusts in the campaign framework, or LOOs along which military forces will orient their efforts over the depth and breadth of the campaign.** These "logical" and "physical" LOOs provide planners and subordinates a vision of how military efforts will be employed concurrently across several major areas to organize US and coalition efforts to dominate the adversary at key geographical and moral points of the campaign. Logical LOOs help explain the "logic" of the campaign by indicating what the major efforts will be for the campaign and the DPs where/when they must dominate the adversary for decisive advantage.

COG analysis makes two other major contributions to campaign design. First, once approved by the commander, the COG analysis and logical LOOs **provide the focal points and guiding principles along which future options (COAs) will be developed.** Second, the JPG as a whole – not just the J2 – are involved in the process of analyzing friendly and enemy COGs in order to **develop a shared view among the JPG of the critical factors that will influence developing future options for action.** As the commander develops a vision for the campaign, he and the staff share a common view of the potential points of focus and major unifying efforts that will enable effective COA development.

<u>COG Analysis Process:</u>

If we could be everywhere at once and match adversary strengths with overwhelming strength at every turn, COG analysis would provide little more than an

interesting intellectual exercise for planners. However, there are rarely enough resources to accomplish the broad objectives required of a combatant command, without risk, in any campaign. Therefore, it's essential in campaign design that the commander, assisted by the staff's analysis, identifies the enemy's COG and neutralizes or destroys it, by attacking the key inherent vulnerabilities in the COG.

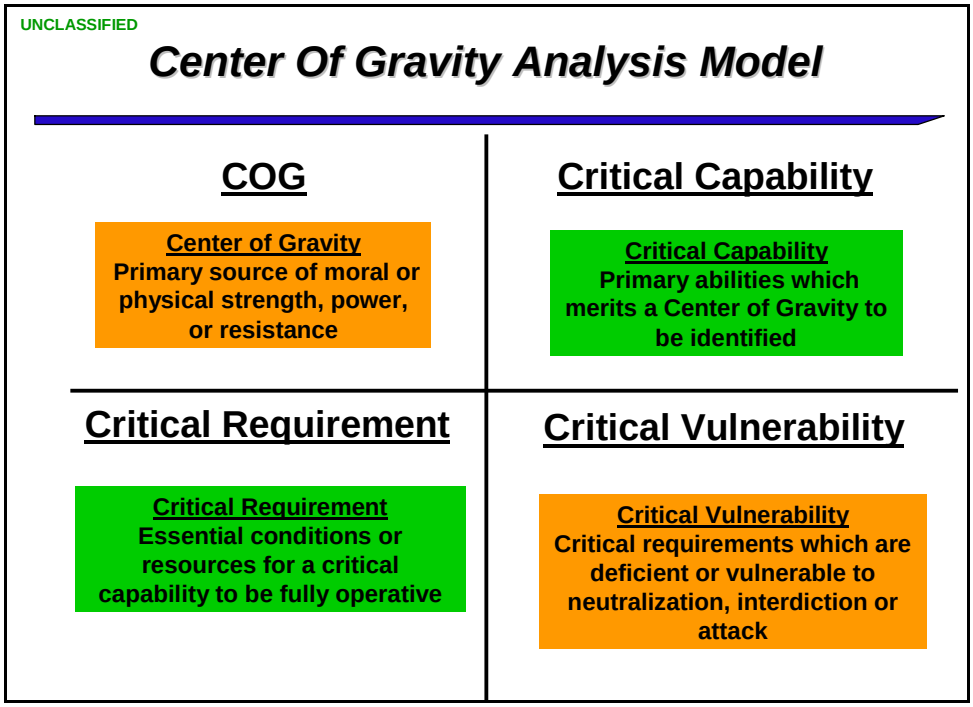

Figure 27 COG Analysis Model

Analysis provides a construct and process to determine DPs that, if dominated, permit friendly efforts to gain a marked advantage over the adversary at critical points of the campaign. Gaining and maintaining advantage over time generates leverage as the adversary's military operations are forced into early culmination and their strategic leadership is forced to recognize that their strategic objectives are unattainable, thus forcing them to abandon their efforts to oppose US policy and objectives. Key also is that COG analysis **must include the enemy's strategic and cultural perspectives.** Objectives and missions focus actions from their perspectives as well; therefore, staff's must analyze, understand and present to the commander how and where the adversary perceives its own centers of strength and power, and the critical factors that feed this strength. Additionally, the DPs developed must be viewed by the enemy as "decisive" in order for actions against these points to have the desired strategic effects.

Overall analysis is **focused on identifying the critical factors that comprise the COG in order to determine its vulnerabilities**. Using these critical factors, the staff develops their analysis of the DPs, from which the commander designates those that he believes will provide the greatest effects to focus on during the campaign. Using these DPs, the staff develops and proposes for commander approval the LOOs that will guide

COA and concept development. **The COG analysis process involves the following steps:**

- **Determine initial enemy and friendly strategic COG** for analysis.
- **Develop and analyze the critical factors** that make up the COG.
- **Analyze critical factors** (particularly vulnerabilities) to **determine DPs.**
- Complete the same process (above) to **determine COGs/DPs at the operational level.** If major conditions and the mission change, then examine if the operational COGs may change over the course of the campaign.
- **The Commander approves the COGs and identifies the DPs** that he considers important to his emerging design for the campaign.
- **Arrange these DPs and determine the initial campaign LOOs** for commander consideration/approval.

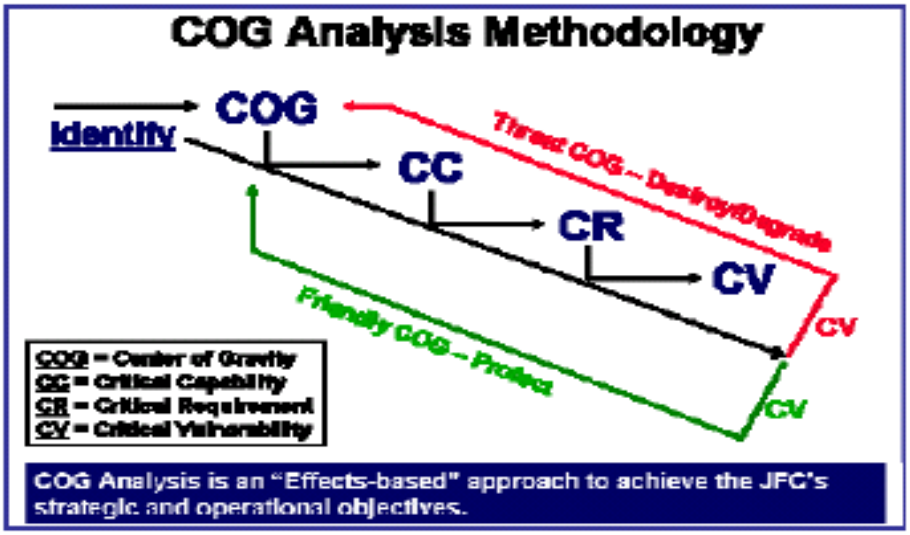

Figure 28 COG Analysis Methodology

Determining the COG:

A COG is defined as the "set of characteristics, capabilities, and sources of power from which a system derives its moral or physical strength, freedom of action, and will to act." The COG is always linked to the objective and mission; therefore, as these factors change, the "center of all strength and power" to accomplish these objectives may change as well. Therefore, when determining a COG, objectives and missions frame how each side views their center of strength, with a variety of characteristics:

At the **strategic level**, a COG could be a military force, an alliance, a political or military leader, a set of critical capabilities or functions, or national will. At the **operational level** a COG is often associated with the adversary's military capabilities, such as a powerful element of the armed forces or an essential function in projecting violence/force, but could include other elements in the OE. Since the COG is a source of power and ability to accomplish objectives, the adversary will protect the COG. The COG invariably is found among strengths rather than among weaknesses or vulnerabilities.

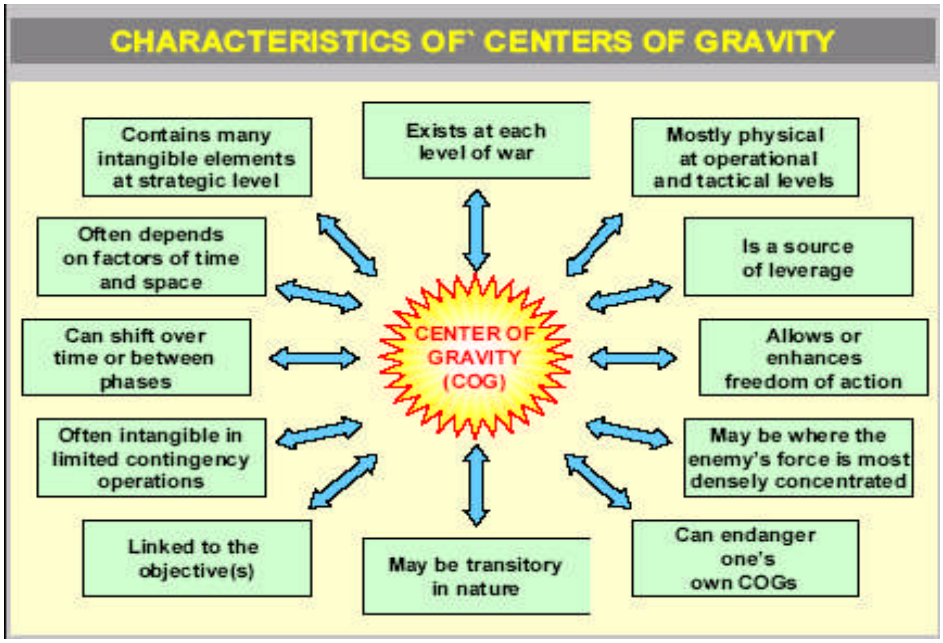

Figure 29 COG Characteristics

COGs exist in an adversarial context involving a clash of moral wills and/or physical strengths. They are formed out of the relationships between the two adversaries and they do not exist in a strategic or operational vacuum. They are framed by each party's view of the threats in the OE, and the requirements to develop/maintain power and strength relative to their need to be effective in accomplishing their objectives. Therefore, commanders must consider not only the enemy COGs, but they must also identify and protect their own COGs. For example, during the 1990-91 Persian Gulf War the coalition itself was identified as a friendly strategic COG and the CCDR took measures to protect it, to include deploying theater missile defense systems.

Develop Critical Factors:

After identifying friendly and adversary COGs for analysis, commanders and their staffs must determine how to protect or attack them. An analysis of the identified COGs

in terms of critical capabilities, requirements, and vulnerabilities is vital to this process. Analysis uses a framework of three **critical factors** to aid in this understanding.

- **Critical capabilities** are those that are considered crucial enablers for a COG to function as such and are essential to achieving the adversary's assumed objective(s).

- **Critical requirements** are essential conditions, resources, and means for a critical capability to be fully operational.

- **Critical vulnerabilities** are those aspects or components of critical requirements that are deficient, or vulnerable to direct or indirect attack in a manner that achieves decisive or significant results.

This framework highlights the fact that a COG is usually a complex entity composed of multiple *critical capabilities* (using the PMESII systems approach, the COG would not be a single node, but rather several nodes and their respective links or relationships). Critical capabilities are the crucial enablers that allow the COG to function and are essential to achieve the adversary's objective and may be best described as "the ability to……." The critical capabilities which make up a COG as a whole are enabled by *critical requirements*, which are means or aspects (resources or conditions) required for capabilities to be fully operational. Critical vulnerabilities are susceptible to attack and, if neutralized, will create decisive or significant effects disproportionate to the military resources applied. Within every COG lies inherent vulnerabilities, that when attacked, can render those COGs weaker and even more susceptible to direct attack and eventual destruction. In general, the combatant command and subordinates must possess sufficient operational reach and combat power to take advantage of an adversary's critical vulnerabilities. Similarly, a supported commander must protect friendly critical capabilities within the operational reach of an adversary.

Analyze Both Strategic and Operational COGs:

Planners should strive to identify only one COG at any level of war, *at any given time,* in the campaign, or the term will lose its meaning and usefulness. The COG is always linked to the end state or objective, and (assuming the strategic end state or objectives do not change) normally the strategic COG will not change during the campaign. However, the operational COG may, and normally will, change during the span of the campaign as conditions in the OE and objectives change. At the operational level, common examples are of a COG are a military force or component of it, a military capability that can hold another nation's interests or forces at risk, or a skilled and inspirational military commander.

Analyzing the operational COG is focused on determining the critical factors of the adversary's strength as seen in his military system (or ability to exercise force/violence in an irregular environment) that military and non-military efforts can be focused against for decisive effect. Throughout the course of a campaign, as

both friendly and adversary missions change, COGs may also change. For example, in pre-hostilities, the enemy's mission is to prevent the US from rapidly deploying and building forces for future operations; therefore, his operational COG might be "Effective Anti-Access Efforts." If successful, then his objectives might change from anti-access to attacking or destabilizing another regional neighbor, and his center of "strength and power" to accomplish these ends would then shift to "conventional forces" if an invasion is his desired option, or "irregular forces" if he chooses to accomplish these ends indirectly.

Identifying Decisive Points:

JP 5-0 describes a decisive point as, "A geographic place, specific key event, system, or function that, when acted upon, allows commanders to gain a marked advantage over an adversary or contribute materially to achieving a desired effect, thus greatly influencing the outcome of an action." Developing DPs is oriented on the key vulnerabilities or other critical factors (when the system is looked at holistically) identified through the COG and SoSA analysis. Generally, commanders design campaigns that attack adversary vulnerabilities at DPs so that the results they achieve are disproportional to the military and other resources applied.

In determining where and how to apply friendly capabilities to exploit enemy vulnerabilities, commanders and their staffs will need to identify points in the campaign where success demands that the joint force gain and maintain strategic and/or operational advantage over the adversary. DPs may be physical in nature, such as a constricted sea lane, a hill, a town, WMD capabilities, or an air base; but they could also include other elements such as command posts, critical boundaries, airspace, or communications or intelligence nodes. In some cases, specific key events also may be DPs, such as attaining diplomatic permission to overfly foreign nations, air or maritime superiority, commitment of the enemy's reserve, repairing damaged infrastructure, or establishing control/stability over a population center. In still other cases, DPs may be systemic, such as political linkages among key leaders of the regime, power or communications systems for a country/region, or trust among a particular influential social group. **DPs are not COGs, but they are the keys points to attacking an adversary's COGs or defending our own. DPs may be thought of as a way to relate what is "critical" to what is "vulnerable."**

CCDRs normally attack adversary vulnerabilities at DPs so that the results they achieve are disproportional to the military and other resources applied. Consequently, commanders and their staffs must analyze the OE to determine and prioritize which systems vulnerabilities (through nodes or links) or key events offer the best opportunity to affect the enemy's COGs or to gain or maintain the initiative. The commander then reviews the DPs, evaluates which points are important to his overall design, and designates them as DPs for the campaign. These DPs then form the basis for developing LOOs which focus and orient the joint force during COA development to create options to focus sufficient resources to produce the desired effects against them.

The following is an example of using the critical factors method for determining an operational COG: Envision a campaign conducted against an enemy that is postured to invade a neighboring country that is friendly to the US. The friendly neighbor has asked the US to help stop the enemy forces from seizing its country. If you were the enemy commander planning this invasion, what would you view as the US operational COG, vulnerabilities, and DPs on the day you decided to attack?

- *US Operational COG*: Forward deployed (in-place) forces

  - *US Forward Deployed Forces Critical Capabilities or the "Ability to….":*
    - Deploy forces into theater
    - Deter the enemy from actually attacking
    - Defeat enemy attack, if deterrence fails
    - Protect forces and capabilities within the host nation
    - Sustain forward deployed forces

  - *US Forward Deployed Forces Critical Requirements:*
    - Strategic land, air and sea LOCs, strategic lift platforms (air and sea)
    - Host Nation (HN) support and access (HN basing, infrastructure and overflight)
    - Fuel, ammo, life support, repair parts

  - *US Forward Deployed Forces Vulnerabilities:*
    - US or regional land, air and sea LOCs that support force deployment
    - Dependence upon host nation access and support – potential HN hostility toward US actions or presence
    - Assailable fuel, ammo, and repair parts
    - Dependence upon en route infrastructure – key infrastructure nodes

Using these critical factors, the enemy commander could best neutralize the effectiveness and responsiveness of US forward deployed forces by attacking the sustainment stocks for those forces, and denying US forces access into the theater – at the DPs shown.

DPs:

- US or In-theater ports, airfields and rail lines or roads needed for deployment/operational movement
- Maritime or land choke points at canals, rivers or straits
- Establishing effective air superiority
- Enroute aerial refueling system (air bridge)
- Friendly nation overflight corridors in theater
- Host nation security capabilities (for self-defense or protection of coalition forces during deployment)

Developing Initial Lines of Operations:

Before moving into COA development, it is important for the commander and staff to establish the orientation and direction that employment option development must take in relation to objectives. As the CCDR and staff visualize the design of the campaign, they may use several LOOs to help visualize the intended efforts and direction of effects for the joint force in achieving operational and strategic objectives. By definition, LOOs define the "orientation of the force in time and space or purpose in relation to an adversary or objective." Commanders may **describe the operation along LOOs that are physical**, **logical**, or **both.** Logical and physical LOOs are not mutually exclusive, and both are used during design and planning. As the staff conducts COA development, physical and logical LOOs are refined to ensure coordinated, synchronized joint action at DPs and events.

From the perspective of unified action, there are many diplomatic, economic, and informational activities that can affect the sequencing and conduct of military operations along both physical and logical LOOs. Normally, joint operations require commanders to synchronize activities along multiple and complementary LOOs working through a series of military strategic and operational objectives to attain endstates. There are many possible ways to depict LOOs, which may assist planners and subordinate commands with visualizing/ conceptualizing the joint operation from beginning to end.

Physical LOOs connect a series of physical/terrain DPs over time that lead to controlling a geographic objective or defeating an enemy force. Physical LOOs also show how the commander intends to connect the force with its base of operations and objectives when positional reference to the enemy is a factor. Physical LOOs may be either *interior* or *exterior*. **In developing and portraying physical LOOs, the staff:**

- Identifies and portrays the strategic base and theater base of operations.
- Then identifies the physical DPs that are the physical objective of the campaign (seizing, controlling, or denying these will ensure mission accomplishment at "endstate"). They then array the physical DPs in the theater of operations during the campaign.
- Then portrays how the commander might approach applying force to these DPs by establishing the physical LOOs that joint forces will use in moving from the joint force base to the final physical objective(s). The staff should include, if time permits, both direct and indirect (that avoid enemy strength) approaches.

A force can operate on **interior lines** when its operations diverge from a central point and when it is closer to disconnected adversary forces than the latter are to one another. Interior lines benefit a weaker force by allowing it to shift the main effort laterally more rapidly than the adversary and provide increased security to logistical

support operations. A force operates on **exterior lines** when its operations converge on the adversary. Successful operations on exterior lines require a stronger or more mobile force, but offer the opportunity to encircle and annihilate a weaker or less mobile opponent. Assuring theater and strategic mobility enhances exterior LOOs by providing greater freedom of maneuver.

Logical LOOs are used by the commander and staff to visualize and describe the major efforts/actions of the campaign *when positional reference to an enemy or adversary has less relevance or is insufficient to guide the conduct of the campaign*. In contrast to physical LOOs, a logical LOO focuses more on depicting a logical arrangement of tasks, effects, and/or objectives, and helps the commander visualize and articulate the "logic of the campaign" (i.e., how he might organize his major efforts over the course of the campaign to achieve synchronized, unified action). They provide his vision on the conduct of multiple major operations/efforts that must be conducted concurrently throughout the campaign. Logical LOOs can link and explain planning for multiple DPs or decisive events with the logic of purpose to defeat an adversary or achieve an objective.

Using logical LOOs is common in many joint operations, particularly from the theater-strategic perspective. In describing the linkage between objectives, effects and forces over the extent of a campaign, only the logical linkage of LOOs may be evident. They assist subordinates and staffs at all levels to understand the major "lines of thrusts" or "guiding principles" that they follow in developing COAs and supporting plans for action. Logical LOOs are particularly useful when working with interagency and multinational partners in either a supporting or supported capacity. Logical LOOs also help commanders visualize how military means can support nonmilitary instruments of national power and vice versa. In all, just as the joint force maneuvers and sustains along physical LOOs, the actions and efforts of the campaign must proceed along logical lines, and all COAs must be consistent with and developed within these logical LOOs.

Developing Logical Lines is more art than science, and requires creative analysis and the ability to envision how potentially decisive events throughout the campaign are linked together. In turn, logical LOOs portray the major lines of effort or thrust for unified action that changes the current, undesirable behaviors by the adversary and/or conditions in the OE into the conditions/behaviors that are desired at strategic and military endstate. These logical LOOs articulate the "logic" or "guiding principles" of the campaign (i.e., how the CCDR envisions the concurrent, mutually supporting military and non-military efforts that will dominate the enemy at theater DPs/events). **In developing and portraying logical LOOs, the staff must**:

- Understand and portray the initial conditions in the OE with respect to the adversary (i.e., what are the action, conditions, etc. that are unacceptable to the US and that must be changed through unified action).

- Understand and portray objective/mission for the campaign that forms the logical endpoint for the campaign (the logical outcomes/points that are the objective of operations).

- Array decisive events (actions, functions, etc) for both enemy and friendly efforts as they come into contact with one another across the depth of the campaign, from pre-hostilities, through hostilities, and ending in post hostilities.

- Examine the friendly and adversary DPs and how they may be grouped or connected into patterns or unifying factors. First, examine and group these points as come into contact with one another (such as the need for friendly "access to bases and ports" that comes in contact with enemy "anti-access efforts"). In addition, group or connect similar DPs under common themes or around common major actions that may constitute major friendly or adversary efforts. For example, the following DPs/events across the campaign all deal with coalition operations:

    - DP: Build a regional coalition
    - DP: Establish coalition C2/Heaquarters
    - DP: Effective coalition combat operations
    - DP: Transition coalition from combat operations to stability
    - DP: Effective coalition C2 transitions from US to multinational control in post-hostilities period

- Just as with physical LOOs, determine how these groups of non-physical/logical DPs may be connected through a major line of effort/thrust or unifying theme that runs throughout the campaign. Through analysis, determine how the commander might approach applying force through a logical LOO that connects these DPs, and contributes to achieving final objectives/endstate. The sample DPs and events from above might be connected into a logical LOOs as follows:

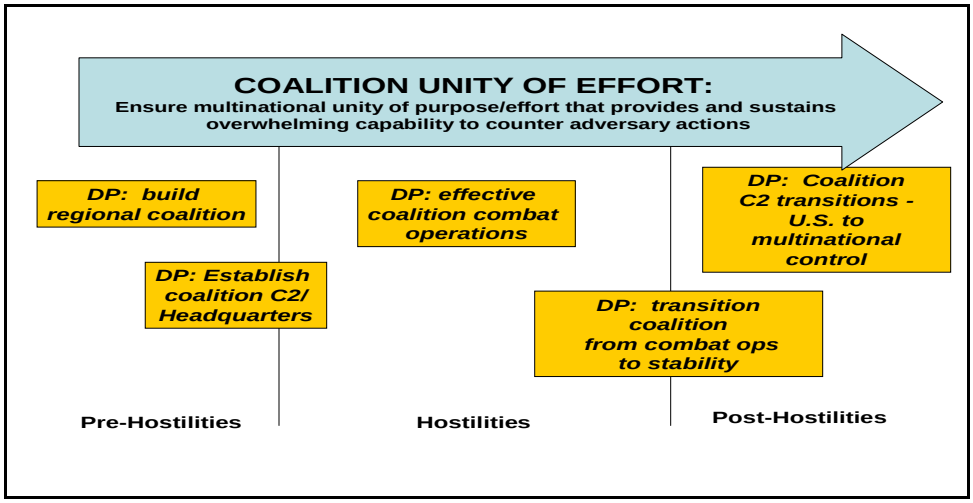

Figure 30 Example - Coalition Unity of Effort LOO

This logical LOO articulates that in moving from start to end point in the campaign, it is essential to dominate these DPs and events. In planning, all elements of the joint force must plan for and ensure that coalition unity of effort is maintained throughout all subordinate operations. Therefore, operations developed at the combatant command and all subordinate/supporting commands must ensure that they facilitate/enhance unity of effort at all times, and that no actions are undertaken which might allow the enemy to dominate these DPs and gain a marked advantage by disrupting unity of effort.

Direct versus Indirect LOO's. In theory, direct attacks against enemy COGs resulting in their neutralization or destruction is the most direct path to victory — if it can be done in a prudent manner (as defined by the military and political dynamics of the moment). Where direct attacks against enemy COGs mean attacking into an opponent's strength, CCDRs seek an indirect approach until conditions are established that permit successful direct attacks. In this manner, the enemy's critical vulnerabilities may offer indirect pathways to gain leverage over its COGs. For example, if the operational COG is a large enemy force, the joint force may attack it indirectly by isolating it from its C2, severing its LOCs, and defeating or degrading its protection capabilities. In this way, CCDRs employ a synchronized and integrated combination of operations to weaken enemy COGs indirectly by attacking critical requirements, which are sufficiently vulnerable.

Importance of COG Analysis in Developing Flexible Options (COAs):

The essence of campaign design lies in being able to envision and direct the planning of focused joint actions/tasks that produce the right combination of effects in time, space, and purpose relative to an adversary's COG to neutralize, weaken, destroy (consistent with desired end state/CCDR's intent), or otherwise exploit it in a manner that best helps achieve military objectives and attain the military end state. In theory, this is the most direct path to mission accomplishment. The COG construct is useful as an analytical tool to help CCDRs and staffs analyze friendly and adversary sources of strength as well as weaknesses and vulnerabilities. *COGs are not vulnerabilities*. However, within every COG lies inherent vulnerabilities, that when attacked, may render those COGs weaker and even more susceptible to direct attack and eventual destruction. **This process cannot be taken lightly, since a faulty conclusion resulting from a poor or hasty analysis can have very serious consequences, such as the inability to achieve strategic and operational objectives at an acceptable cost.** Planners must continually analyze and refine COGs. Friendly and enemy COGs can change over time and are based on the end state, mission, and objectives as well as the adversary's strategy. So while COG analysis is done during mission analysis, it warrants revisiting and re-evaluation as guidance and major factors in the OE change during the course of designing and planning the campaign.

Understanding the relationship between the COGs and the DPs that emerge not only permits but also compels greater precision in thought and expression in campaign design. Analysis seeks to understand how the enemy is organized in terms of strengths and vulnerabilities within the OE, as a method toward developing a focus for the campaign in how best to focus scarce resources to achieve maximum effectiveness - the very heart of campaign planning. The success of any CCDR will depend on his ability to accurately describe the enemy's COG, its vulnerabilities, and then direct actions against those vulnerabilities at a decisive place and at the right time. In short, the CCDR must determine and strike the enemy at the DPs.

Chapter 6:
Develop Campaign Focus – Mission Analysis: Providing Vision for the Campaign Through "Commander's Intent"

Throughout the mission analysis process the staff and commander work to develop a full perspective of the OE, understand strategic requirements, and determine the potential points against which the joint force can and should act. As the final step of developing campaign focus, the commander uses this understanding, along with his experience and wisdom, to develop an overarching "vision" for the campaign. This vision is more than tactical intent -- it is the commander's personal vision of how he will employ major military operations, in conjunction with interagency and multinational efforts, over time to achieve theater-strategic success. This vision, provided through commander's intent and planning guidance, provides the initial campaign design that will facilitate developing military COAs, as well as proposed actions among the interagency that he feels will accomplish the endstates and objectives desired.

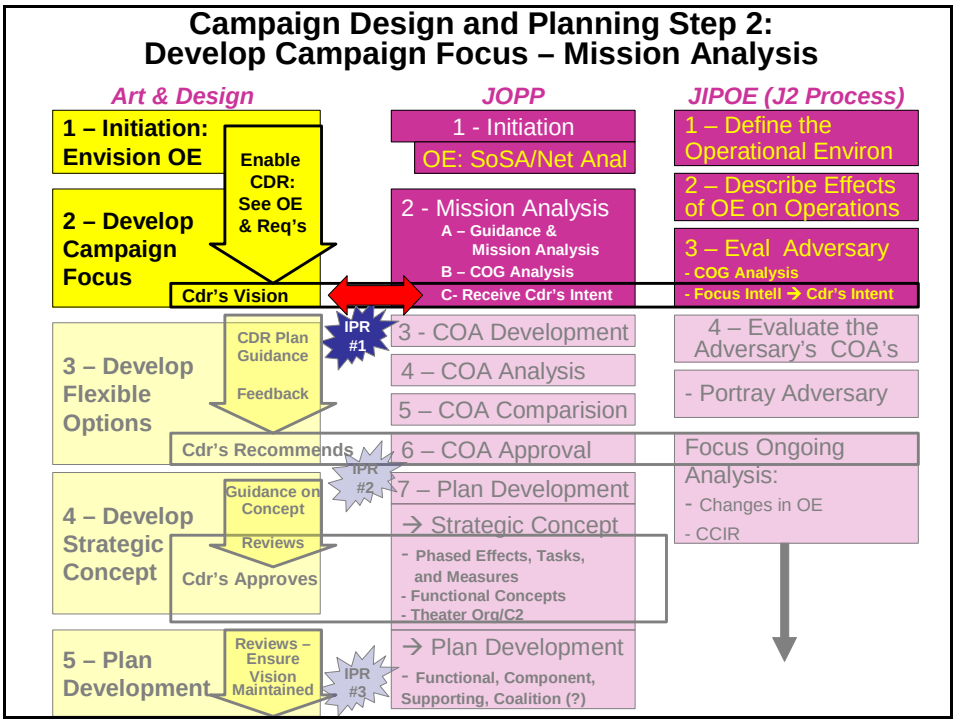

Figure 31 Develop Campaign Focus – Commander's Intent

Developing Commander's Intent:

Given the complexities of the OE at the theater-strategic level, the CCDR must empower subordinates to make decisions within an overall vision for success in the campaign. The CCDR leaves much of the detailed planning and execution of joint

warfighting to his subordinate component commanders who resource, integrate and synchronize service, functional and coalition forces and capabilities, and requires them to use initiative and judgment to accomplish the mission. Joint commanders expect subordinates to identify and act on unforeseen circumstances, whether opportunities or threats, while synchronizing their operations with those of adjacent unit commanders. Seizing, retaining, and exploiting the operational initiative requires subordinate commanders and leaders to exercise individual initiative and higher commanders who give them authority to do so. Initiative enables the joint force to rapidly adapt to changes in the situation and exercise initiative within the commander's intent to accomplish the mission. The guide for exercising such initiative to achieve unified action is the CCDR's intent for the campaign.

In joint terms, the commander's intent is "a clear and concise expression of the purpose of the operation and the military endstate." The purpose of intent is to focus the staff and assist subordinates and supporting commanders in taking actions to achieve the military endstate, even when operations do not unfold as planned. It also includes where the commander will assume risk during the operation.

At the theater strategic level, commander's intent must necessarily be much broader – it must provide an overall vision for the campaign that helps staff and subordinate commanders understand the intent for integrating all elements of national power and achieving unified action. **The CCDR must envision and articulate how military power and joint operations will dominate the adversary and support or reinforce the interagency and our allies in accomplishing strategic success**. Through his intent, the commander identifies the major unifying efforts during the campaign, the points and events where operations must dominate the enemy and control conditions in the OE, and where other elements of national power will play a central role.

The format and content of commander's Intent is based upon the commander's preferences, situation, etc. In providing his vision for the campaign through commander's intent, he ensures the following are expressed as clearly and succinctly as possible:

- **Mission** – revalidates or updates based upon increased information gained through COG analysis

- **Purpose –** why we are conducting the campaign and what it must accomplish to advance/achieve strategic objectives

- **Military Endstate –** conditions in place when military force will no longer the lead element for policy accomplishment, along with a view of how it might continue to support other elements of national power (if directed)

- **Effects –** a vision of how the OE should look, with respect to the adversary (as a minimum)

The bottom line is that whatever format used, the commander is responsible for providing enough information, with sufficient clarity, to effectively drive developing a range of flexible options by the staff and subordinate commands. In action, this intent is critical to ensuring focused, flexible, and adaptive execution among subordinate and supporting commands.

Elements of Commander's Intent:

At the theater level, the Commander's Intent should articulate the purpose of the campaign, a vision of the military end state and effects that must be achieved. After reading the commander's intent, subordinates should have a clear understanding of why the campaign is being waged and what the regional conditions will look like when the campaign is over. In this regard, intent must be crafted to allow subordinate commanders sufficient flexibility to accomplish their assigned mission(s). Intent provides sufficient vision on the major points of emphasis, sequencing and direction of joint operations, but it does not dictate nor repeat the concept of operations.

At the combatant command level intent includes a clear vision of how the joint force will operate in a unified effort to achieve national objectives. As such, essential elements of are:

- **Derived Mission** proposed by the staff during mission analysis is updated and approved based on the information and analysis gained during COG development. Additional strategic guidance and clarifications by the SecDef and CJCS may also influence changes.

- **Purpose** clearly explains why the operation is required to achieve strategic/policy success. It answers the question, "Why are we conducting this campaign?" This may look a lot like the national strategic end state the command is trying to achieve. However, it must articulate to subordinate and supporting commanders why this campaign (i.e., the use of military power as an element of national power) is essential to achieving US policy and strategic endstate. This is essential not only to achieve a unity of purpose among subordinate commands, but is also crucial as these major supporting commands plan, resource, coordinate and negotiate key campaign elements in conjunction with non-military and multinational partners. Additionally, it should provide a purpose around which the military commander may build consensus with interagency and multinational partners. This statement is vital to building the "unity of purpose" among these key shareholders in success that precedes "unity of effort" in planning and execution.

- **Endstate** specifies that desired theater-strategic/military *end state* (i.e., military success) is achieved and that military effort is no longer the lead element of national power. The commander uses the strategic and military endstates developed during mission analysis as a basis for articulating when military success (deter, defeat, etc) is achieved. Additionally, since military forces may

be required to support other elements of national power, the CCDR articulates when these supporting efforts will conclude at the termination of the crisis.

- **Effects Guidance** provides a vision of the conditions and behaviors in the OE that must be in place at the successful conclusion of the campaign. **These "effects" describe success in the overall campaign** (i.e., how the OE must be changed (among both adversaries and allies) through unified action). Effects, like end states and objectives, are an element of operational design. They clarify the relationship between objectives (developed in mission analysis) and tasks (developed in detail during COA development).

  - Effects focus on defining the desired and undesired effects that will best achieve the overall objectives of the campaign. There are two key questions answered by effects guidance:

    1. Desired Effects: "How will the adversary (its systems) behave when he complies with our demands (at military and strategic endstate)?"

    2. Undesired Effects: "What are the behaviors and conditions in the OE that we must avoid during the campaign?"

  - Examples of campaign effects might be:

    1. **Political:** Regime relinquishes control and a representative government is formed by local efforts that don't threaten neighbors or the region.

       - **Undesired Effect (to avoid):** Neighboring nation Y does not view the COI as a threat to regional influence and does not attempt to disrupt their efforts to threaten neighbors or the region.

    2. **Military:** Enemy forces cease military operations and submit to coalition control of forces/weapons. Conventional and security/police forces reshape capabilities for defensive/internal security focus. Secure environment in place that supports/enables other efforts**.**

       - **Undesired Effect (to avoid):** Military forces continue to resist by organizing resistance/insurgent movements. Rejectionists take violent actions against emerging government/coalition forces assisting in reconstruction.

Because Commander's Intent is based upon the commander's preference, it may also include a number of other items which assist the staff, subordinate commands, and coalition partners to fully share the commander's vision for unified action. Other elements may include:

- **Method** provides a *visualization* for subordinates on purpose, arrangement, and synchronization of the major operations that should be used to develop future options for action. While "method" will focus on how the commander envisions operations to achieve military endstate, it should also give his views on how we will support accomplishing policy as the command becomes a supporting effort to the final achievement of the US strategic ends at conflict termination.

  Key here is that this provides a vision on how we should develop operations and their importance to the overall purpose and endstate, but does not describe the specific conduct these operations. Put simply, the *method* enhances developing and understanding a concept of operations by others, but does not describe the details of it – it helps others understand what is important and leaves the "how to" for component commanders to figure out. An example of "method" might be:

  > *"My intent is to persuade country X through a show of coalition force to stop intimidating its neighbors and cooperate with diplomatic efforts to abandon its WMD programs. If X continues its belligerence and expansion of WMD programs, we will use force to reduce X's ability to threaten its neighbors, and restore the regional military balance of power. Before US and coalition forces redeploy, X's military will be reduced by half, its modern equipment destroyed, its capability to project force across its borders eliminated, and its WMD stores, production capacity, and delivery systems eliminated."*

- **Operational Risk** is focused on mission accomplishment. The commander gives his vision of what portions of the campaign are absolutely essential to overall operational success. Strategic guidance heavily impacts what US leadership will/will not risk (especially in the political and economic areas), as does the commander's assessment of what will enable success among regional allies and multinational partners. Knowing that everything cannot be accomplished with absolute surety and security; the commander defines the portions of the campaign that he will accept risk in slower or partial accomplishment. Within these areas, the commander defines a range of acceptable risk and how assuming risk in these areas may or may not impact overall outcome of the mission. An example might be:

  > *"Because access to key bases/ports in the region is essential to deterrence, I will accept low risk in loss of freedom of navigation and interdiction of our sea lines of communications."*
  >
  > *"I will reduce risk of enemy success in anti-access efforts to a moderate/low level to deploying forces early to reassure the host nation and protect them against enemy strikes through early deployment of theater protection capabilities."*

In addition, when developing the "strategic concept" CCDRs normally provide **intent for the phases of the campaign**. Because each of these phases of the operation will include a broad range of joint, interagency and multinational actions over an extended period of time, CCDRs require these diverse elements to clearly understand the commander's vision for how operations/actions within each will contribute to overall campaign success. An example of intent for the "Seize Initiative" phase of a campaign might be:

> *"The purpose of this phase is to set the conditions for the counter-offensive by building combat power as rapidly as possible while shaping the operational environment for offensive action. Phase II is completed when X's offensive is halted, its combat forces are fixed and reduced by 30%, its military services are incapable of re-supplying fielded forces, the national leadership is incapable of effective communications with its forces, and US and coalition forces are poised for offensive operations."*

Although the format of "Commander's Intent" is a personal item and will vary between commands, its purpose remains constant. Clear, concise intent articulates the broad ends and ways that unified action will take throughout the campaign, enables effective planning of the detailed ways and means of the campaign, and guides subordinate/supporting command execution. When finalized during the "strategic concept" phase of the design and planning process, Commander's Intent will be written into the final OPLAN under paragraph 3, "Execution."

Planning Guidance:

Once the commander has given his intent for the upcoming campaign, he will normally provide the JPG/staff (and subordinate commanders as required) with initial *planning guidance that provides additional clarity and detail* essential to clarify his vision for the campaign in order to facilitate timely and effective COA development. Planning guidance should enable the staff and components to understand the major themes and guiding principles for the campaign and concurrently develop detailed and complementary COAs for future unified action.

This guidance precedes further development of staff estimates in order to **ensure all planners have a very clear understanding of the desired outcomes and limits for formulating a series of flexible options for using military power during COA development.** Planning is always time constrained, and the commander searches for the right balance of detail and direction to the staff. The Command must provide enough guidance (preliminary decisions) to enable the staff and subordinates to effectively and efficiently plan the necessary actions to accomplish the mission consistent with the commander's intent. **However, guidance not should be so specific as to limit the staff from investigating a full range of options for the Commander**.

The content of planning guidance varies from commander to commander and is dependent on the situation and time available. No format for the planning guidance is prescribed. However, the guidance should be sufficiently detailed to provide a clear direction to the staff or subordinate commanders. Planning guidance may include:

- Updated strategic guidance and/or information available (or unavailable) that supplements that used during mission analysis, as a result of discussions with the SecDef, CJCS, regional leaders or coalition partners. This may include:
  - Additional forces available for planning
  - Limiting factors (constraints and restraints) – including time constraints for planning
  - Additional assumptions
- The commander's views of how the OE has/will change as a result of our operations.
- Further clarification or emphasis on points of the mission – and associated objectives or desired effects.
- Additional clarification of his intent for the forthcoming military action, to include the logical LOOs that outline the major, enduring and unifying concepts/themes that will guide joint action throughout the campaign.
- Guidance that frames developing COAs, to include friendly strengths to emphasize or enemy weaknesses the COAs should attack; specific planning tasks, or priority effects that must be achieved.
- Coordinating instructions, to include requirements to coordinate/plan with the interagency, inter- and non-governmental agencies, and coalition partners.
- Acceptable level of operational risk and risk to own and friendly forces.
- Strategic Communications and IO guidance.
- Initial CCIR to further clarify questions about the OE.

Planning guidance will provide a framework (the "left and right limits") to develop future options for using military and non-military power. As such, guidance for developing COAs may be explicit and detailed or very broad in order to allow the staff and/or subordinate commanders wide latitude in developing subsequent COAs. However, no matter its scope, the content of planning guidance must be arranged in a logical sequence to reduce the chances of misunderstanding. Moreover, one must recognize that all the elements of planning guidance are *tentative only*.

The commander may provide guidance in a variety of ways and formats, based on his preference. He may provide it to the entire staff and/or subordinate commanders, or meet each staff officer or subordinate unit commander individually as the situation, security concerns and information

dictates. Additionally, the commander can give guidance in a written form or verbally, but the key challenge is to ensure that this guidance is universally and clearly understood – across all elements of a very broad command, as well as across a wide range of supporting commands and enabling agencies. Though the initial planning guidance should provide the framework to keep the staff focused in the initial stages of developing options, the commander may issue updated planning guidance throughout the decision-making process. Because the COA development process will continue to analyze the OE and examine effects on enemy, neutral and friendly elements, the commander will be engaged in the COA development process as the JPG examines issues, challenges and limitations. This may also cause the commander to revisit his design for the campaign. Consequently, there is no limitation as to the number of times the commander may refine and reissue his planning guidance.

IPRs in Joint Strategic Planning:

If the combatant command does not identify the correct end state and corresponding objectives to orient the campaign, further planning is meaningless. The staff could develop a perfect plan to achieve objectives that are NOT what the leadership of the nation desires. If this occurs, the staff will waste time by initially orienting on the "wrong" end state or objectives. The criticality of this step is highlighted by the SecDef's requirement for an In-Progress Review (IPR) to allow visibility and possible course corrections once the combatant command has completed Mission Analysis.

Based on strategic direction, the CCDR will participate in the first of three IPRs to ensure the CCDR's views are in-synch with those of the SecDef (or other designated senior leader) before further contingency planning proceeds. The CCDR will normally present his initial analysis in the form of a briefing that synopsizes his understanding of strategic guidance, the analysis of facts and assumptions, and proposed mission and intent for the upcoming campaign. A result of IPR A is a mutual understanding of the OE, assumptions, and the endstates and objectives for the campaign. The SecDef will approve the CCDR's mission statement and provide further guidance as required to guide continued design and planning.

Chapter 7:
Developing Flexible Options – Course of Action Determination

As the third step in the campaign design and planning process, the Combatant Commander and Staff will work together to refine and develop the commander's initial vision and intent for the campaign into a specific, well-developed design for accomplishing unified action. The staff supports the commander through in-depth analysis and presentation of a range of options for future military and non-military actions that will accomplish the strategic and military ends desired. In turn, the commander further clarifies and refines his vision into a final campaign design for development into a "strategic concept" that forms the core of the future campaign plan.

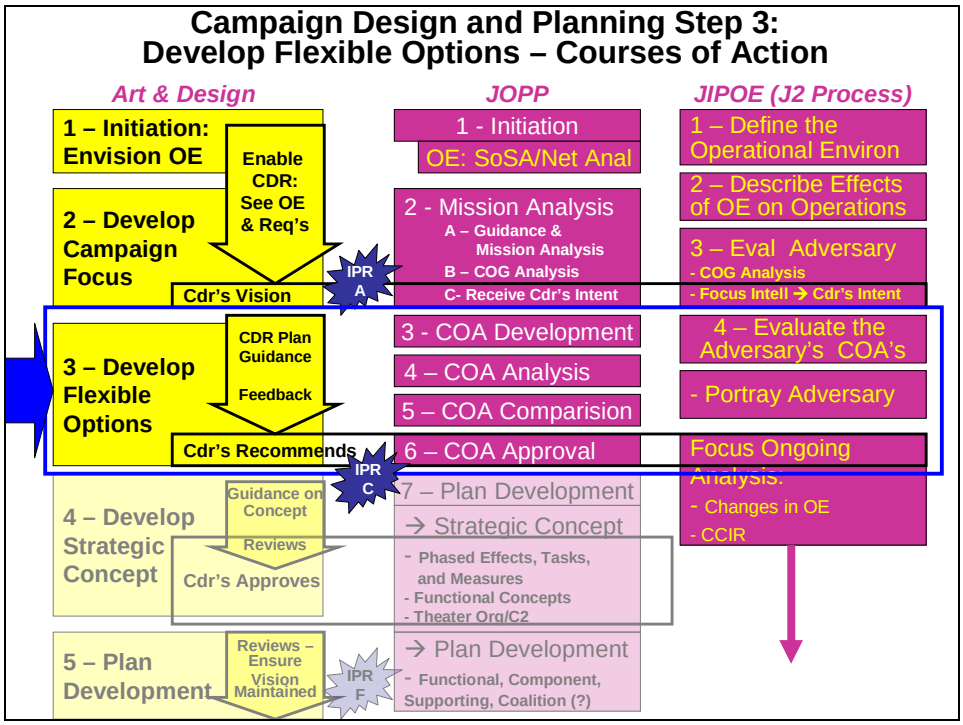

Figure 32 Campaign Design and Planning – Step 3

<u>The Commander and Staff in Developing Flexible Options:</u>

Following review and guidance by the SecDef at the initial IPR, the Combatant Commander refines his design for the campaign and provides further guidance to both staff and subordinate commands on how they should begin developing options for future unified action. The JPG will then develop and analyze a full range of potential military and non-military actions, and assess how well each of these options can accomplish the desired effects on the OE given the time and resources available. In

developing, analyzing and proposing theater-strategic “courses of action” for the campaign, the Commander and JPG analyze not only how the joint force will dominate its adversary through military actions, but also how all elements of national power can be brought to bear against the adversary’s critical systems (PMESII) to achieve military and strategic ends.

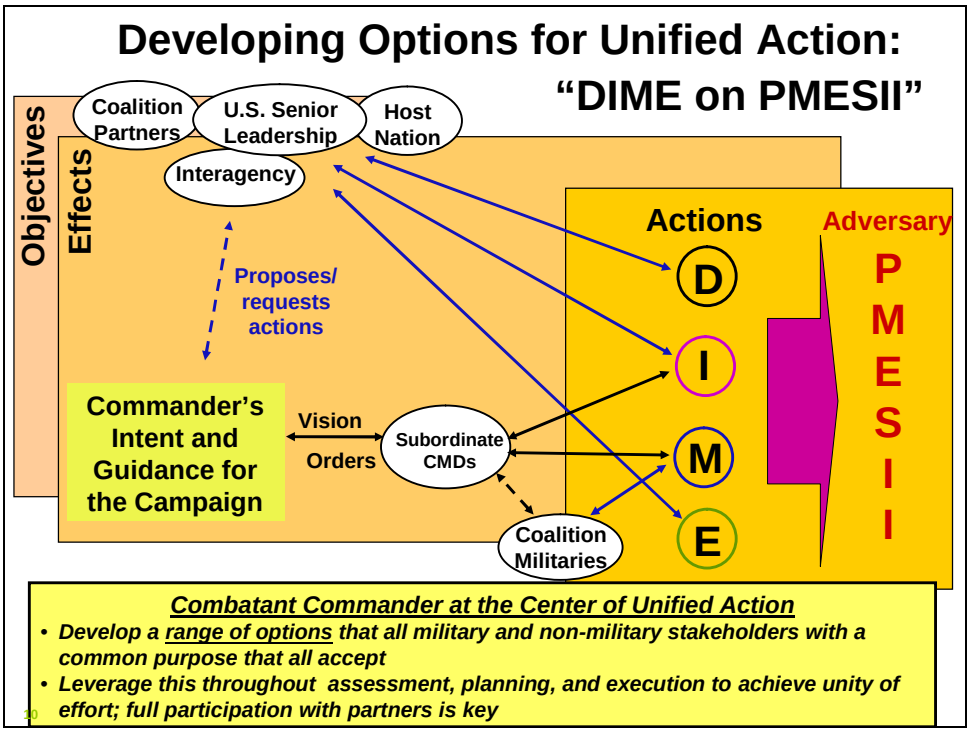

Figure 33 Develop Options for Unified Action

Using both the commander’s intent and specific planning guidance, the staff now begins to analyze anticipated enemy actions using the JIPOE process. The JPG analyzes these anticipated actions and enemy vulnerabilities and employs the elements of operational design to develop concepts for action that accomplish the commander’s vision. Using the JOPP for Course of Action Development, the staff develops COA’s for employing joint force capabilities in a variety of combinations. During COA development, the staff must accomplish the following to support the commander:

- **Develop a variety of diverse and distinguishable options** for accomplishing the Commander’s vision so as to provide a broad range of options for his consideration and selection.

- **Employ the elements of operational design as a framework** for development and analysis of how joint operations should be sequenced, synchronized and integrated.

  - **Sequence and focus joint functions** to accomplish the tasks required to dominate and control decisive points.

- **Ensure objectives and effects are clearly articulated and used as the guidelines for action** for each portion of the campaign (i.e. all tasks are consistently focused toward accomplishing these objectives across the duration of the campaign).

- **Provide only valid options that are suitable, feasible, and acceptable** based upon the levels of time, forces/capabilities, and resources available, and that fall within acceptable levels of operational risk.

As the JPG develops COA's, the Commander remains fully engaged to ensure that his priorities remain clear and that the options being developed truly meet his vision for campaign success. As an involved coach in this process, the commander receives updates from the JPG which cause him to reconsider and alter planning guidance. Additionally, the commander may also provide insights and updates on how strategic guidance and operational conditions are changing (particularly during crisis action). By being involved in development rather than just the final decision, the commander ensures an enhanced quality of the COA's from which he will eventually choose a strategic concept.

Determining the Enemy's Courses of Action (JIPOE Step 4):

Before beginning to develop options for unified action, the commander and staff **must have a clear view of how the adversary will act within the constraints and restraints of the OE** to accomplish his objectives. As part of the initial steps of campaign design, the staff has helped the commander visualize the adversary in the OE as a "system of systems". During mission analysis, the staff provided analysis of the enemy's strategic and operational centers of gravity as well as critical factors, specifically critical capabilities, requirements and vulnerabilities. The J2 will lead further analysis to determine how the enemy will attempt to accomplish its strategic goals by identifying likely objectives and desired endstates, potential strategic and military capabilities, and estimate how the enemy's leadership may utilize military force in the future – the enemy's courses of action (ECOA's).

The staff's analysis will identify all known factors effecting military actions, including time, space, weather, terrain, and the strength and disposition of enemy forces, as well as other key factors within the PMESII construct (see Chapter 3, JIPOE). The analysis of military capabilities will focus primarily on air, space, naval, ground and SOF assets. This analysis of the adversary's intent and capabilities forms the **J2's *Intelligence Estimate*** which should include the following:

- Analysis of Strategic/National Power: The J2's will provide analysis on the adversary's strategic and operational leaders decision making process and will also include information and analysis on the diplomatic, economic and informational capabilities that they will employed to shape the operational environment for successful military operations.

- Analysis of Military Capabilities: This in-depth analysis focuses on how the adversary will dispose and utilize force, based upon strategic culture, doctrine, training and past tendencies. This will include:

    - Location and Disposition: The geographic location of enemy units and other elements of combat power in, or deployable to the area or theater of operations.

    - Strengths: Lists the number and size of enemy units committed and those available for reinforcement in the area. This should *not* be just a tabulation of numbers of aircraft, ships, missiles, or other weapons, *but* rather *an analysis of what strength the enemy commander can bring to bear in the area* in terms of ground, air, SOF and naval units committed and reinforcing. Also consider aircraft sortie rates, missile delivery rates, unconventional, psychological, and other strengths the commander thinks may impact the ratio and effectiveness of forces in the area of operations or the theater of operations.

    - Composition of Forces: Includes the Order of Battle (OB) of major enemy formations, equivalent strengths of enemy and friendly units, and major weapons systems and their operational characteristics.

    - Reinforcements: Estimate friendly and enemy reinforcement capabilities that can impact the forthcoming action in the area under consideration. This study should include SOF, ground, naval, air elements; Weapons of Mass Destruction (WMD); and an estimate of the relative capacity to move these forces into the area of operations or theater of operations.

    - Sustainment: Summarize such considerations as transportation, supply, maintenance, hospitalization and evacuation, labor, construction, and other elements of logistical support.

    - Time and Space Factors: Estimate where and when initial forces and reinforcements can be deployed and employed. Such a study will normally include distances and transit times by land, sea, and air from major bases or staging/deployment areas into the theater or area of operations; compute distances and transit times for each unit/force.

    - Combat Efficiency: Estimate enemy state of training, readiness, battle experience, physical condition, morale, leadership, motivation, doctrine, discipline, and whatever significant strengths or weaknesses may appear from the preceding paragraphs.

Developing ECOA's requires the commander and his staff to "think as the opponent thinks." From that perspective, it is necessary first to postulate possible

enemy objectives and then visualize specific actions within the capabilities of enemy forces that can be directed to achieve these objectives. Potential enemy actions relating to specific physical objectives *normally need to be combined to form course of action statements*. These statements should be broad, but still clearly articulate the fundamental choices available to the enemy. Below are the key elements of an ECOA:

- Enemy objectives
- Enemy force posture at the outset of the conflict
- How the enemy will employ its force to accomplish its objectives
- How the enemy force will be postured when the conflict is over
- A sketch to accompany the verbiage in points 2-4 above

Once all ECOAs have been identified, the staff must ensure they are distinct by reducing duplication and/or combining them as required.

In prioritizing the ECOA's, J2 staff will list ECOAs in the order that they are *likely* to be adopted based on the analysis conducted above. To establish such a sequence requires an analysis of the situation from the enemy's perspective, coupled with what may be known about the enemy's intentions. Enemy intentions should be applied from their strategic and operational perspective, and not from the friendly perspective, with the view that the enemy will see, analyze and decide as a Western decision maker. Additionally, the commander and staff must avoid eliminating any viable enemy ECOA based solely on perceived enemy intentions.

The staff will identify for the commander both the most dangerous ECOA (to friendly forces and objectives) as well as the most likely (based upon the situation anticipated and/or at hand). Often, the most likely and most dangerous ECOAs are not the same, so a choice must be made as to which ECOA will become the baseline assumption for friendly planning. Usually, commanders consider the enemy's most likely ECOA as their baseline for friendly action unless the consequences of not focusing on the most dangerous ECOA make it prohibitive to do otherwise.

Remember always that the J2's analysis is indeed just that – our best analysis of the adversary's perspectives and probable actions. In fighting a thinking and adaptive adversary, he too has a vote and will change perspectives and COA's to maximize his chances for success based on how the joint force succeeds in changing the OE. Regardless of which ECOA is chosen to support the baseline planning effort, staffs must ensure that branches are developed for the others, *as time permits*. After selecting an ECOA to support your baseline planning effort, a listing of associated enemy vulnerabilities that can be exploited by your own forces should be compiled. This list will aid in subsequent steps when your own COAs are analyzed against the selected baseline ECOA, and also assist in determining the advantages and disadvantages of your own COAs when they are compared.

Finally, this analysis will not only influence the JPG's development of COA's, but will form the basis for focusing and developing intelligence. The combatant

commander's requirements will be the principal driver of the intelligence system. Based upon the combatant commander's guidance, Priority Intelligence Requirements (PIR) serve as the focus for developing collection and analysis efforts and forwarding Requests for Information (RFI) to national systems. The J2 can then focus the intelligence effort to collecting, processing, producing and disseminating the required intelligence. While PIRs can be derived from many sources, the estimate process can identify aspects of the OE, assumptions, enemy capabilities, geostrategic factors, etc. that need to be clarified by the intelligence system

Course of Action (COA) Determination:

A COA is any force employment option open to a commander that, if adopted, could result in the accomplishment of the campaign mission. For each COA, the staff must enable the commander to envision the employment of own/friendly forces and assets as a whole, taking into account externally imposed limitations, the factual situation in the area of operations, and the conclusions reached during mission analysis. Equally important, the commander must envision how military force will work in conjunction with the other elements of national power to achieve military and strategic ends. The process outlined in this handbook as the "development of flexible options" is based upon the 4 steps of the JOPP that lead to COA determination (COA development, analysis (wargaming), comparison, and approval).

COA Development:

The focus of COA development (JOPP Step 3) is a tentative concept of operation (with sketch if possible) which describes in broad but clear terms what is to be done, the size of forces deemed necessary, and where and how the force (or other resources) needs to be brought to bear. An initial COA should be simple, brief, and complete, and will answer the following questions:

- What are the objectives and effects that must be accomplished over time to obtain military and strategic success?
- Based upon these desired (and undesired) effects, what major tasks must be performed and in what sequence?
- Where and how should coalition air, space, naval, ground and SO forces be employed in theater?
- How much force is required to accomplish the mission?
- Generally, in what order should coalition forces be deployed?
- How is the coalition to be sustained for the duration of the campaign?
- What are the initial command relationships?
- How does the COA achieve the desired end state?

Potential COAs may be based on the varied use of forces (ARFOR, MARFOR, etc.), differing timing and sequencing of operations, or varied use of national capabilities (Information, Economic, Diplomatic) in combination with military capabilities (Maneuver, Intelligence, Fires, Command and Control, or Force Protection). In addition, because COAs are meant to be rough, initial concepts, *phasing at this point is not useful* as it is

too time consuming a process. Therefore, it is only required to organize tasks and lines of operation into a Pre-hostilities, Hostilities, Post-hostilities arrangement.

In developing these initial concepts for theater-level action, the JPG must fight the temptation usually found at the tactical level to start planning at the beginning of the campaign and work to the end. Campaign design should do just the opposite in "starting with the end in mind" -- start with a clear view of the endstate and objectives desired, develop a framework for how these objectives will be accomplished over time, and begin at the end of the campaign and work backwards to the beginning. The figure below shows a step by step approach to developing a complete COA.

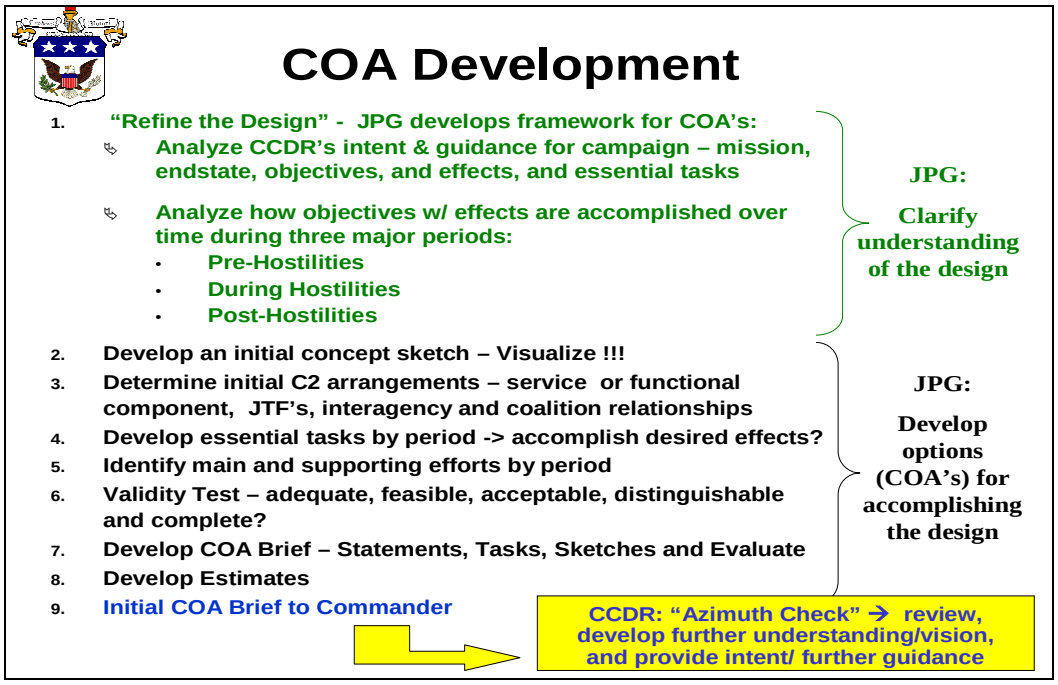

Figure 34 COA Development Steps

Step 1- "Refine the Design" to Develop an Initial Framework for the Campaign: The Commander has provided his initial vision for a campaign design through his intent and planning guidance. This is based upon his guidance, experience, wisdom, and best understanding of the OE, but given the limited amount of information and analysis thus far he has not had the opportunity to visualize and understand the details of how this design can be accomplished over time. In this first step, the JPG will analyze the commander's approved endstates, objectives and effects (developed during mission analysis) to develop a more detailed "framework" of nested objectives and effects that must be accomplished during the major periods of the campaign (i.e., before hostilities begin, during hostilities, and post-hostilities) when the military endstate has been achieved.

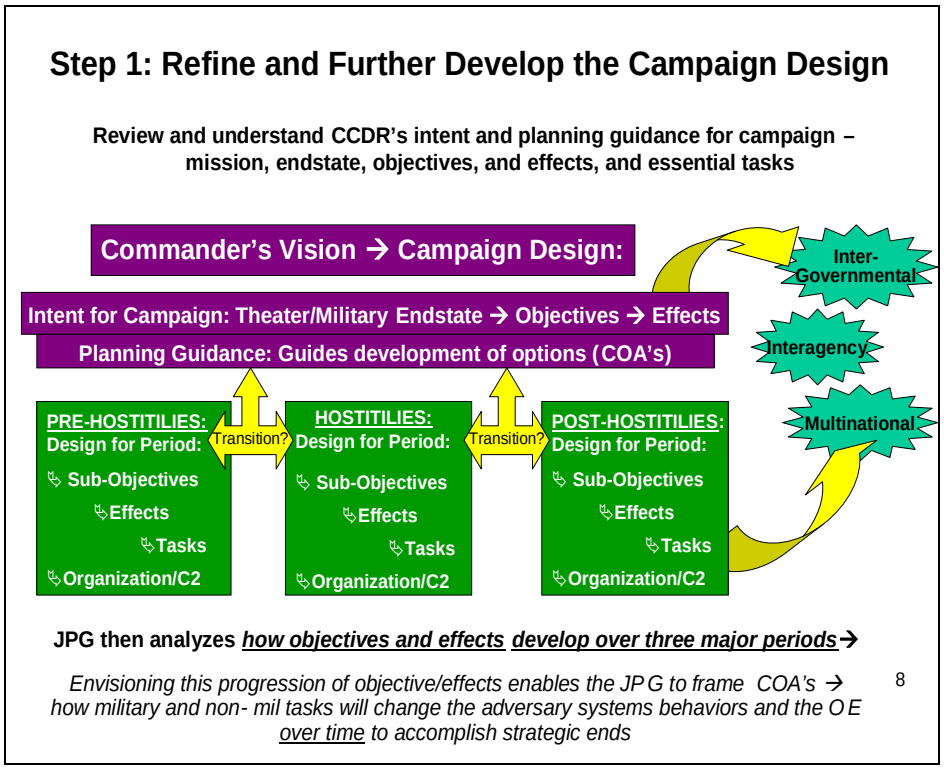

Figure 35 Develop Campaign Focus – Commander's Intent

In "refining the commander's design," the staff analyzes how the broad, overarching guidance for the campaign will be broken-down into more detailed and achievable blocks as the campaign unfolds over the extended period. This analysis of "nested" (integrated and supporting) objectives and effects provides a framework for the logical development of task by components/functions that will achieve the desired changes/conditions in the OE that will gauge how and when military and strategic success is achieved.

Step 2 - Develop an Initial Concept with Sketch: Based upon the initial framework, the JPG begins development of COA's by visualizing how these objectives/effects can be accomplished over time. The staff develops an initial concept sketch that portrays the major actions of the campaign as a useful reference in the following stages of COA development:

A - Determine Force Available/Apportioned: Determine how much force is positioned in theater, and how much has been apportioned for planning. As COA development progresses, it may be useful to visualize these at the end of each stage (pre-hostilities, hostilities and post-hostilities) of the campaign *if planning time is available*, but remember at this point the staff is only developing a concept, not refining a plan. The staff can get to this detail later during COA analysis as it checks to see if these forces are sufficient for the tasks required.

B - Post Enemy COG's and Decisive Points: Review the enemy's operational COG's (as the point of focus for our operations) and post the major physical decisive points that will be relevant to the COA. These might include ports, population center, access points, critical infrastructure, etc. During COA development, these serve as points where our actions can (and probably will) come in contact with the enemy, and serve to orient us on where major tasks/actions must be focused.

C - Array Forces at Military Endstate: Position forces geographically where they will be needed in the theater at the end of the campaign and determine what those forces will be doing. Use the sketch to help you visualize the forces and their locations.

D - Identify Initial Entry Points: Based on our initial guidance and knowledge of theater access and facilities, display where the forces can enter the theater from air and sea deployments (APODs and SPODs) and portray the initial bases/staging areas available to support this deployment. Also portray the initial lines of communication that will connect our initial forces back to our in-theater (intermediate staging bases) and strategic (CONUS or forward deployed) base of operations.

E - Array Forces at Pre-Hostilities: Visualize how forces will be positioned in pre-hostilities after they enter the theater at these potential entry points, and formulate your initial concept for a basing plan and JRSOI.

F - Maneuver the Forces Forward to Endstate: Looking at your sketch (with the endstate and objectives/effects by period or phase in mind), determine the best way to get the forces into theater and to their ultimate locations at the end of the campaign from bases in friendly territory. This will help you formulate your desired basing plan for the beginning, middle and end of the campaign.

Step 3 - Determine Initial Command and Control Relationships: Based upon this initial concept/sketch, develop an initial structure for C2. At this point, identify the basics of how you will organize by components, where JTFs may be needed, and how the joint force will control or coordinate its efforts with the host nation, multinational forces, and interagency elements (if necessary). Again, this is an initial organization around which to continue COA development, and may change when tested in wargaming.

Step 4 - Develop Essential Tasks: Using your mission statement, commander's intent and guidance, and the objective and effects by period as a guide, determine the tasks that the force must accomplish enroute to their positions at the end of the campaign. Expand upon the tasks identified in mission analysis by identifying tasks for:

- Military – how best to engage and dominate the adversary using U.S. and multinational forces

- Interagency (DOS, Treasury, etc.) and Other Gov't Agencies (OGA)

- Coalition and International Organizations (U.N., regional organizations, etc) for future requests

For each period, sketch the maneuver plan for the joint force, and develop the tasks by component or joint function that will dominate the enemy's COG and accomplish the objectives and effects directed. In developing these tasks, analyze the forces and resources required to accomplish these tasks as you make sure that operations accomplish all objectives/goals that were included in strategic direction to the CCDR. The k**ey is to link the tasks accomplished to the objectives and effects you desire**.

During pre-hostilities, determine if the basing plan is sufficient to posture the force in friendly territory and the tasks the force must accomplish to get to these bases. Sketch this as part of the pre-hostilities/deployment plan. Begin your analysis of the sequence/order for deploying the force into theater, based upon the tasks that must be accomplished over time.

During each of the major periods, analyze how military and non-military actions will accomplish the required changes in the adversary and the operational environment. Focusing on the objectives/effects desired (or to be avoided), consider how you will employ air, land, maritime, and special operations forces, in conjunction with other forces for intelligence*, protection, projection, sustainment/ theater opening, and information operations. At this initial stage, think through and develop a basic concept that includes the major events/actions of each period. Considerations might include:*

- *Initial entry into theater – basing, access, and overflight*
- *Deployment and reception of the force (JRSOI)*
- *Protection of forces and host nation points of entry*
- *Building and maintaining a coalition force*
- *C2 with joint, host-nation, and coalition forces*
- *Relationships and synchronization with the interagency*
- *How operations will gain/maintain the initiative*
- *How to gain leverage over the enemy using all elements of national power*
- *Preventing undesired effects/events, such as a humanitarian crisis, loss of local support, etc.*
- *Sustaining the joint force, and additional support required for enabling and maintaining host national and coalition participation*
- *Post-hostilities conditions how the joint force will ensure military gains are maintained/transformed into long-term strategic success*

As you develop the COA, it will also lead you to an initial evaluation of force size and composition for the tasks to be accomplished. Determine initially if the force you just considered is enough to accomplish all the tasks you identified in Mission Analysis. Adjust the force strength to accomplish the tasks. This is mostly art, based on previous

experience, and grounded in your ability to apply military science. As you identify the need for additional forces (i.e., where apportioned forces are insufficient), annotate your force list and update your assumptions (that additional forces will be provided). We will analyze and test this initial analysis during the wargaming process.

Step 5 - Identify Main and Supporting Efforts: As tasks are developed by components/functions, identify which might be the main/supported efforts during each period. Identifying component missions (who will accomplish the stated purposes and stated tasks of the main and supporting efforts) will be key to clarify before moving into the wargaming process.

Step 6 - Test for Validity: Before preparing the brief for the commander, step back from the COA and assess if the COA accomplishes campaign mission and endstates as directed by the commander:

- **Adequate:** Accomplishes the mission within guidance; meets endstate, objectives and effects for campaign

- **Feasibility**: within time, space and resources?

- **Acceptability**: achieves ends balanced with costs/risk

- **Distinguishable**: COA's different and vary key elements (defeat mechanism, operational design elements, etc)

- **Completeness:** Incorporates all key elements

Step 7 - Develop COA Statements and Sketches: In presenting the COA to the commander, ensure that there is a balance between simplicity/ease of understanding and supplying enough detail so that the commander can understand and quickly grasp the key actions, challenges and risks of each COA. Commander requirements vary based on personality and experience, but generally the following elements should be included for each COA:

- **Concept:** Describe the major actions and effects accomplished over the three periods. During the briefing, these initial statements (that introduce each COA) should effectively communication how each succeeding COA is different than the one before it.

- **Concept by Period:** As in the overall concept, describe clearly 5W's for each period. Ensure that you include transition criteria that you see for moving into the next period.

- **Explain the Concept for each Period:** Present the objective, effects and tasks with a supporting sketch, and show how each nests within the overall intent and design for the campaign, and how objectives/effects are

accomplished through tasks being accomplished. Include a concept sketch of the major actions to enable the commander to visualize the flow of events. Include initial C2 relationships for each period.

Step 8 - Develop Staff Estimates: Staff estimates are the foundation for the combatant commander's selection of a COA. In this step, the staff divisions analyze and refine each COA to determine its supportability. Not every situation will require an extensive and lengthy planning effort. It is conceivable that a commander could review the assigned task, receive oral briefings, make a quick decision, and direct writing of the plan commence. This would complete the process and might be suitable if the task were simple and straightforward.

A. Most combatant commanders, however, are more likely to demand a thorough, well-coordinated plan that requires a complex staff estimate process. Written staff estimates are carefully prepared, coordinated, and fully documented.

B. The purpose of the staff estimates is to determine whether the mission can be accomplished and to determine which COA can best be supported. This, together with the supporting discussion, gives the CCDR the best possible information to select a COA. Each staff division:

- Reviews the mission and situation from its own staff functional perspective;
- Examines the factors and assumptions for which it is the responsible staff;
- Analyzes each COA from its staff functional perspective; and
- Concludes whether the mission can be supported and which COA can be best supported from its particular staff functional perspective.

C. Because of the unique talents of each joint staff division, involvement of all is vital. Each staff estimate takes on a different focus that identifies certain assumptions, detailed aspects of the COAs, and potential deficiencies that are simply not known at any other level, but nevertheless must be considered. Such a detailed study of the COAs involves the corresponding staffs of subordinate and supporting commands.

D. The product of this step is the sum total of the individual efforts of the staff divisions. Complete, fully documented staff estimates are extremely useful to the J-5 staff, which extracts information from them for the commander's estimate. The estimates are also valuable to planners in subordinate and supporting commands as they prepare supporting plans. Although documenting the staff estimates can be delayed until after the preparation of the commander's estimate, they should be sent to subordinate and supporting commanders in time to help them prepare annexes for their supporting plans.

Step 9 - Initial COA Brief to the Commander: The goal is to provide the commander an "azimuth check" before proceeding into analysis, and to gain insights on whether the work thus far meets his/her guidance. At the end of this briefing, the staff must know which COA's should be moved forward for further analysis and development, and additional guidance on modifications, improvements, and/or risk. Additionally, this initial exchange expands the commander's perspectives on what is/is not possible and helps the commander use his wisdom and experience to further visualize the opportunities and challenges within the OE. At this stage, this may also enable the commander to identify emerging resource shortfalls and challenges/impediments to accomplishing the full extent of the strategic objectives given, which in turn may lead to further discussions with the CJCS and SecDef.

Based on time available, the commander, and the nature of the mission will dictate the number of COAs to be considered. Staff sections will continually conduct course of action development through an ongoing staff estimate process to ensure COA validity. The staff should develop COAs that attempt to preserve flexibility for the commander well into the operation and be dependent upon the fewest possible assumptions. Each COA should create combat power asymmetries that the commander can exploit for success.

In all, remember that at this point in the process the staff is transforming its understanding of the vision and intent of the commander into an initial range of options for future action for his consideration, guidance and approval for further analysis. This process will enhance and support the commander's ongoing effort to better see the demands and opportunities available for the future campaign. By the end of the decision brief and SecDef IPR-C, the commander and staff's mutual goal should be to fully understand the options available within the OE and resources available, and to refine/clarify the design for the campaign that will enable effective planning during the development of a strategic concept and final campaign plan.

Course of Action Analysis ("Wargaming"):

Once complete COA's have been developed and an azimuth check completed with the commander, the JPG analyzes each in detail using the "Wargaming" process. This process subjects each COA to a rigorous examination against reasonable and likely adversary actions through the "action – reaction – counteraction process." Key also is that the COA's are evaluated through the adversary's eyes, i.e. given his political and cultural perspectives, biases, etc, in order to determine if the actions being taken will be seen and evaluated in the manner that we intend – a key element of achieving desire rather than undesired effects.

By definition "Wargaming" is "a simulation, by whatever means, of a military operation involving two or more opposing forces, using rules, data and procedures designed to depict an actual or assumed real-life situation" (JP 1-02). Wargaming is a conscious effort to visualize the flow of a campaign or contingency plan, within an OE, using joint forces, and a realistic, thinking, and adaptive adversary. It assists joint force

planners in identifying the strengths and weaknesses, associated risks, and asset shortfalls for each friendly COA. While joint doctrine refers to visualizing the flow of a military operation as the key element in wargaming, the Commander and staff must consider the application of all elements of national power (DIME). The application and integration of all elements of national power is the key to achieving strategic and theater strategic objectives. While the Commander does not control and cannot direct the actions of the D, I, and E elements, he or she can coordinate for these elements through the Joint Interagency Coordination Group or Task Force, the Secretary of Defense, or the Chairman, Joint Chiefs of Staff.

Wargaming provides a useful means for the commander and staff to analyze and test each friendly COA against a selected enemy's COA in an action-reaction-counteraction methodology. While time consuming, this procedure reveals strengths and weaknesses of each friendly COA, anticipates events, determines the command and control structures and task organization, identifies decision points, highlights the need for potential branches and sequels, and identifies cross-service or component support requirements.

The objective of this cognitive process is to critically analyze each COA, independently and according to the Commander's guidance, in an effort to determine the relative advantages and disadvantages associated with each COA. At the end wargaming, the staff must have identified:

- **A critical evaluation of whether the tasks identified will gain the desired effects**, and avoid generating unintended effects (based on the commander's intent/vision of success).

- **A view of how military operations will change the adversary and the operational environment** over the course of the campaign.

- **Points where COA's do not offer enough flexibility** to meet adversary actions where branches and sequels are required.

- **A relative appreciation of the strengths and weaknesses of each COA** and details on how well they meet the Commander's vision for success.

- **Potential decision points** where key decisions must be made, and the **critical information requirements** needed by the commander (CCIR) to make such decisions.

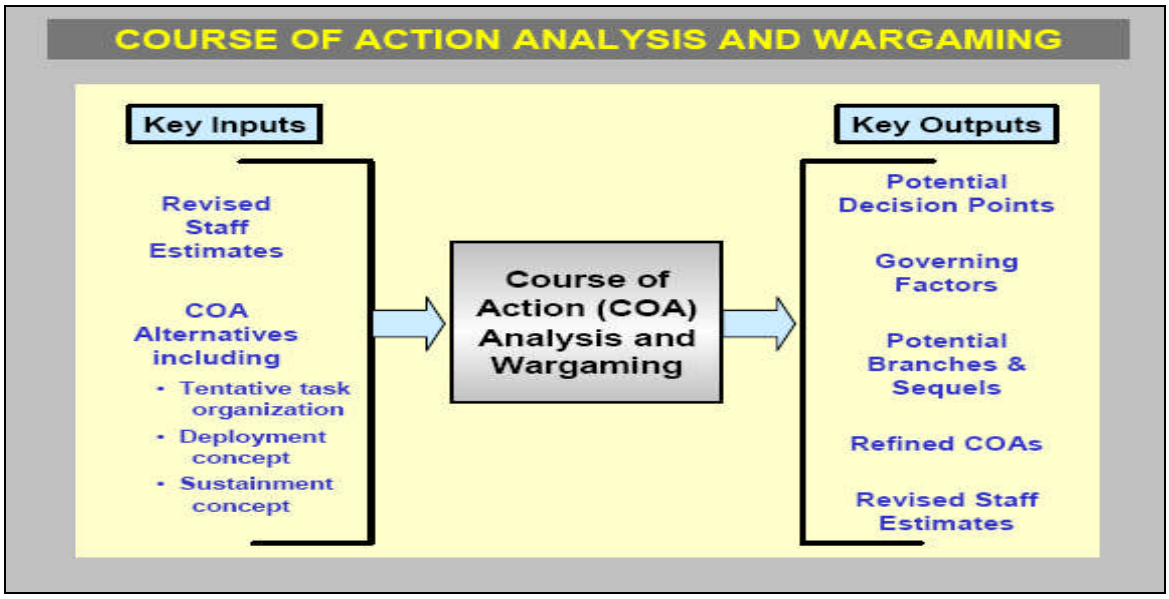

Figure 36 COA Analysis and Wargaming

The JPG will make three key decisions before COA analysis begins.

1. Decide what type of wargame will be used. This decision should be based on the Commander's guidance, time and resources available, staff expertise, and availability of simulation models. Wargaming has manual and computer-assisted components.

- **Manual wargaming** makes up the bulk of activity when staffs wargame.

- **Automation** is normally used to resolve questions regarding outcomes during specific moments in the fight, to determine the gross requirements for each class of supply, and to conduct initial (strategic) transportation feasibility. But even when automation is used, it can never supplant the combined experience of the persons conducting the wargame. When time and automated resources are lacking, manual-only wargaming will suffice.

2. Prioritize the enemy COAs the wargame will be analyzed against. In time constrained situations it may not be possible to wargame against all COAs, so consider carefully "why" you select the ECOA(s) to wargame against.

3. **Finally, the JPG must decide on some preliminary evaluation criteria** (sometimes called governing factors) to use in determining COA advantages and disadvantages. These should be selected carefully from the insights available in the Mission Analysis process. Through the wargaming process, some initial evaluation criteria may fall out, and others may become apparent for you to use later in COA comparison.

The JPG will conduct the wargame by assembling information, marshalling and assembling the proper tools and teams for analysis, following a well ordered process for systemic analysis of the COA's proposed. The table below synopsizes the key points.

SAMPLE WARGAMING STEPS

1. Prepare for Wargame
- Gather tools
- List and review friendly forces
- List and review enemy forces
- List known critical events
- Determine participants
- Determine enemy course of action (COA) to oppose
- Select wargaming method
  - -- Manual or computer-assisted
- Select a method to record & display wargaming results
  - -- Narrative
  - -- Sketch & note
  - -- Wargame worksheets
  - -- Synchronization matrix

2. Conduct wargame and assess results
- Purpose of wargame (identify gaps, visualization, etc.)
- Basic methodology (e.g. action, reaction, counteraction)
- Record results

3. Output of wargaming:
- Results of the wargame brief
  - -- Potential decision points
  - -- Governing Factors
  - -- Potential branches & sequels
- Revised staff estimates
- Refined COAs
- Feedback through the COA decision brief

Figure 37 Sample Wargaming Steps

As joint planning staffs conduct the wargame, they interpret the results of analysis to ensure the COA remains valid. If it becomes readily apparent that the COA is inadequate, infeasible or unacceptable, then discard or modify the COA and concentrate on other COAs. The JPG may also find that it needs to combine aspects of COAs to develop new ones. Throughout the analysis and wargaming process, the JPG must remain focused on the following areas:

- Strategic Objectives
- Theater Strategic Objectives
- Discussions and decisions focused at the combatant command level
- Balance between creativity and the OE
- The elements of operational art and design
- Joint Functions

There are three approaches to visualizing the flow of the wargame: the Pre-Hostilities, Hostilities and Post-Hostilities construct; the phasing model articulated in joint doctrine; or a phasing model adopted specifically for the campaign or contingency plan. The decision on which approach to use is based on a number of factors including: the preference of the JFC, the scope and nature of the plan, and the level of sophistication of the JPG.

A simple manual wargame method employs an action-reaction-counteraction format between "Blue" and "Red" teams. The supervisor of the wargame directs the questioning and ensures that wargame time isn't wasted. Critical to the process are Blue and Red teams who *THINK* and speak for their forces when directed by the supervisor. The supervisor should identify a separate recorder to document the results in a useful format and to record any issues that can't be resolved quickly. Several examples of formats for recording the results of a wargame are provided in Appendix B.

Desired Results of the Wargame:

- Pre-conditions or start points and end state for each stage
- Advantages/disadvantages of the COA
- Unresolved issues
- COA modifications or refinements
- Estimated duration of critical events
- Major tasks for components
- Identify critical events and decision points
- Identify branches and sequels
- Identify risks
- Recommended EEIs and supporting collection plan priorities
- Highlight ROE requirements

COA Comparison:

After rigorous evaluation, the JPG organizes and present its analysis to the commander. During the comparison process, the JPG focuses on evaluating the value of each COA through the commander's eye's -- against his standards in order to determine which is the best fit for his intent, with least cost/risk, and greatest chance of success. Using "governing factors" derived from his intent and guidance, the staff analyzes and rank-orders these against the commander's standards (not against one another) in order to identify the one that best meets the commander's needs.

The inputs to COA comparison are the wargame results and staff estimates that were conducted independently by each of the staff elements. The chief of staff or OPT leader directs participation in the comparison. Staff planners normally conduct, the comparison *in isolation* from the CCDR, and may include the subordinate component staffs. The staff planners brief the *results* of to the Commander in terms of advantages and disadvantages, with a recommendation on the preferred COA.

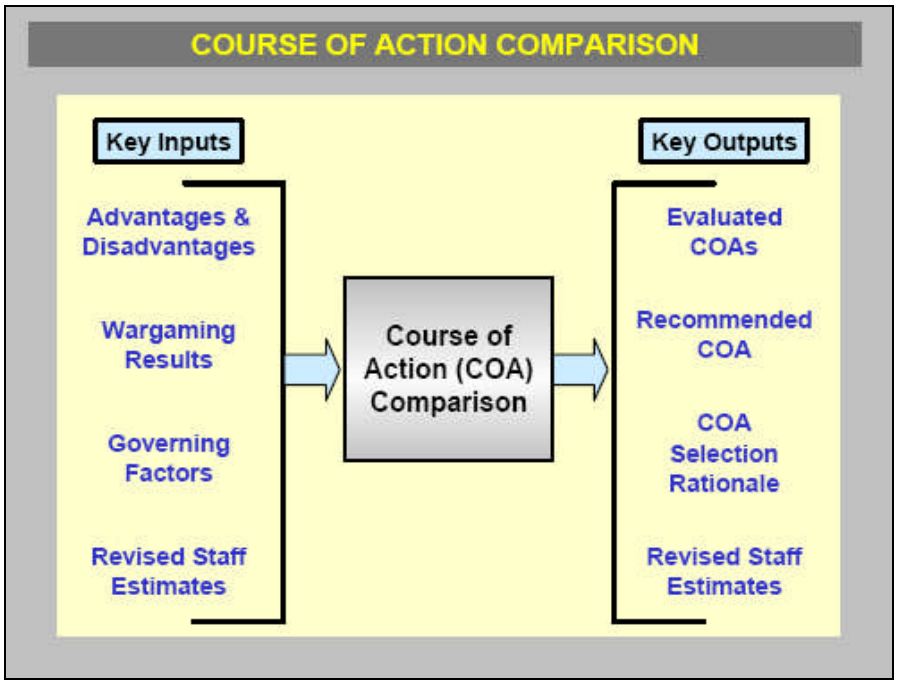

Figure 38 COA Comparison

COAs are not compared to each other directly. Each COA is considered independently of the other COAs and is compared to a set of evaluation criteria or governing factors. The CCDR may direct some of these criteria, but most criteria are developed by the JPG. These governing factors will vary based on a number of factors including: the nature and scope of the campaign or contingency plan, being derived from elements of the CCDR's intent, or areas of expertise resident in the JPG.

Determining the evaluation criteria is a critical requirement that begins before comparison of the COAs takes place. The staff should take some time and energy with this step. If the staff uses invalid evaluation criteria in the comparison, the process will not result in selecting the "best" COA for further refinement as a Strategic Concept. COA comparison facilitates the Commander's decision-making process by balancing the *ends, means, ways and risk* of each COA. Each staff planner is responsible for developing evaluation criteria for his functional area. Then the staff as a whole will select the most critical criteria as a basis to compare the COAs.

The staff should remain as objective as possible in comparing the COAs and be careful of manipulating criteria to promote a "favorite COA." Weighting evaluation criteria is frequently used and is often a helpful technique to identify the most critical criteria. Weighting however, like selecting and "defining" evaluation criteria, should be done prior to actually comparing the COAs to avoid manipulating the assigned weight.

COA comparison remains a subjective process and should not be turned into a mathematical exercise, though using +,-,0, or 1,2,3 as expressions of relative value may be appropriate. The key element in this process is the ability to *articulate to*

the Commander why one COA is preferred over another in terms of how well the COA meets the evaluation criteria requirements.

The following figure provides an example of a COA comparison worksheet, where (+) indicates a superior rating in relation to that criteria, (0) is average, and (–) is poor. In this example, COA #3 was determined to be the best.

COA Comparison

	COA 1	COA 2	COA 3
• Force build-up time	o	o	o
• Quickness of decision (duration)	o	--	o
• Forces enemy to move	+	o	o
• C2 Simplicity	--	o	+
• Operational Flexibility (Axis shift)	+	+	o
• Best prepared to deter	o	o	o
• Protects the force	o	--	+
• Ease of sustainment	o	o	+
• Manages post-regime chaos	o	+	--
• Post-hostilities posture	o	o	o
	1	0	2

Figure 39 Sample COA Scoring

COA Decision and Concept Development Guidance:

The commander will evaluate all analysis and options provided by the JPG, applying his own imagination, knowledge, experience and character to critically evaluate how each of the COA's would accomplish strategic and military success. The Commander may select a single COA as presented, but most likely will leverage the staff's analysis to expand his vision of success by incorporating the best portions of several options.

The forum for presenting the results of COA comparison is the Commander's Decision Brief. Typically this briefing provides the CCDR with an update of the current situation, an overview of the COAs considered, and a discussion of the results of COA comparison. The JPG usually facilitates this decision brief. Normally, each staff principal and component liaison will describe their comparison (evaluation) criteria and results. The component commanders and their staff principals may be linked with the

Headquarters by video teleconference in order to provide direct feedback to the Commander.

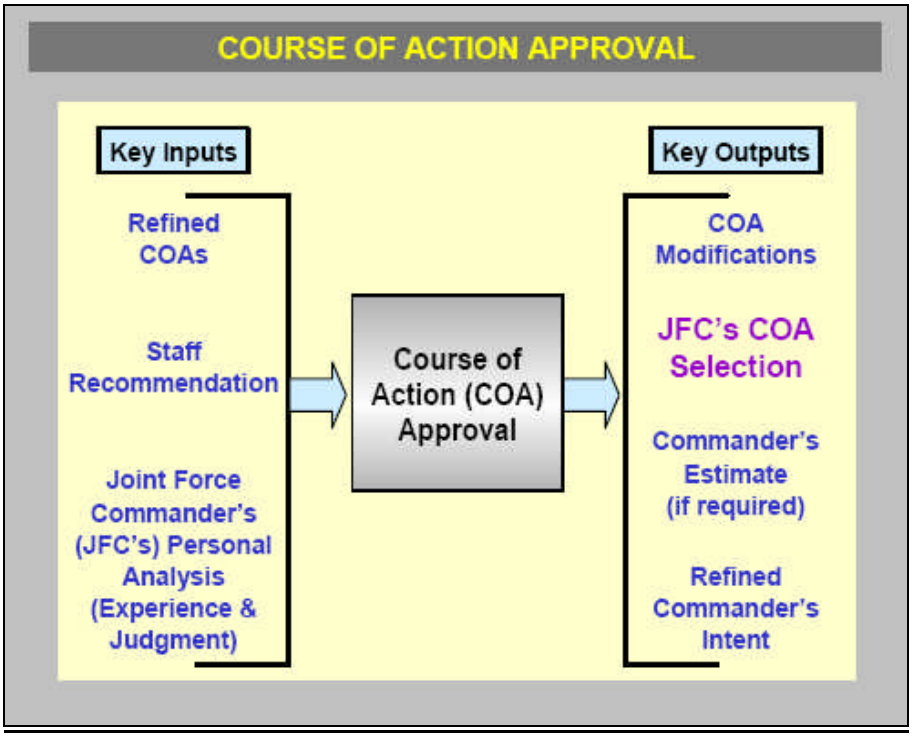

Figure 40 COA Approval

Once the CCDR makes a decision on a selected COA, provides any additional guidance, and updates his intent, the staff completes the Commander's Estimate. This estimate is forwarded for SecDef review as a JOPES product and is the basis for a decision on which COA to refine and potentially execute. The Commander's Estimate provides a concise statement of how the CCDR intends to accomplish the mission, and provides the necessary focus for campaign planning and developing an OPLAN/OPORD. Enclosure J of JOPES Volume I (CJCSI 3122.01) provides the format for the Commander's Estimate.

During IPR-C, the SecDef will consider the Combatant Commander's analysis and recommendations when selecting and approving the COA for further development. Based upon the SecDef's decision and further strategic guidance, the Combatant Commander will refine his design for the campaign and reissue his intent and planning guidance to drive development of the strategic concept during the next step of the process.

Chapter 8:
Developing the Strategic Concept

Following the SecDef's approval of the course of action through the commander's estimate process and IPR-C, the supported combatant commander directs the joint planning group to fully develop the approved course of action into a detailed strategic concept which is synonymous with a concept of operations used in the JOPP. The strategic concept or concept of operations is a clear and concise expression of what the JFC intends to accomplish and how it will be done using available resources. The "how" of the strategic concept (concept of operations) details the actions of the joint force and enables the supporting organizations (JPEC) to develop supporting plans and concepts.

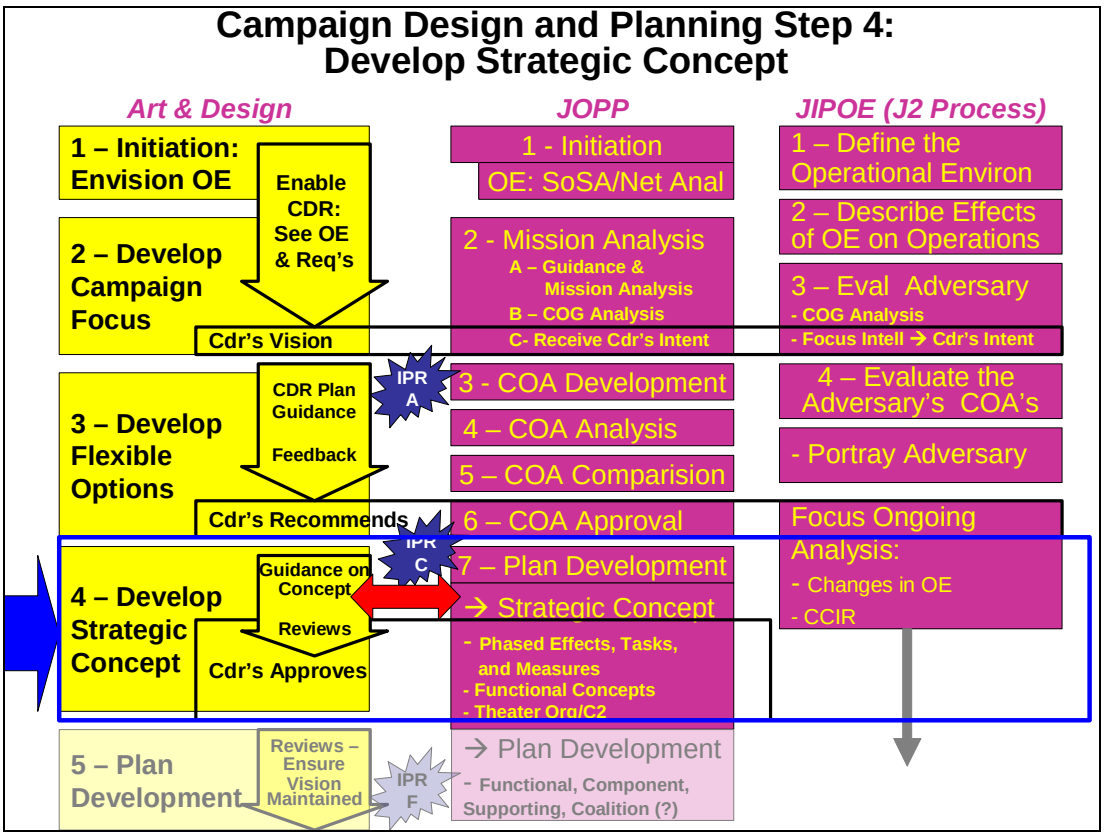

Figure 41 Campaign Design and Planning – Step 4

Developing the selected course of action into a fully developed strategic concept will include: developing an updated commander's intent (end state, objectives, and desired effects), developing a phasing construct for the campaign, refining the theater command and control structure and theater organization, refining the measures of effectiveness and measures of performance, and developing joint functional concepts.

Updating Commander's Intent:

Based on the outcome of IPR-C, the CCDR updates his vision for the upcoming campaign. As discussed in Chapter 4, this vision provides the centerpiece for campaign design and planning, as it provides the commander's intent for what must be accomplished in terms of the purpose of the campaign and the desired endstate. This includes an opportunity to update or refine his or her guidance on the effects (desired and undesired) throughout the conduct of the campaign. It can also include his or her views on: method, risk, and lines of operations to guide the development of the campaign plan and to provide guidance to subordinate or component commanders and commands. Finally, it is an opportunity to further communicate with the JPEC.

Phasing the Concept:

Arranging operations spatially and temporally is one aspect of operational design and phasing is a key aspect of this element. Phasing is a useful tool for visualizing the flow of a campaign and assists in framing the purpose and intent of the campaign and for assigning tasks to subordinate commanders. Generally, phases are developed using an event-driven rather than a time-driven methodology. However, the JFC will likely be required to provide *estimates* of the: total time envisioned for the completion of the campaign and the time required for accomplishing the objectives, tasks, and effects used in the development of each of the developed phases of the campaign.

Based on the approach used by the joint planning group during the analysis and wargaming step, the first requirement is to phase the campaign plan. Two options are available here.

- The first is to translate the pre-hostilities, hostilities, and post-hostilities construct into a either the notional six-phased construct provided in joint doctrine or to translate it into the phased construct developed in support of the campaign plan.
- The second is to refine the phased construct used during the analysis and wargaming step, if the notional six-phase construct or a campaign specific phase construct is developed and used.

If a temporal relationship was not established during the flexible options (course of action development) step, one is typically established during this step. The intent is to develop an estimate for the duration of each phase based on the experience of the CCDR and the results of the analysis and wargaming step.

Regardless of the phasing construct adopted, each phase should be defined with: the purpose of the phase, a statement addressing the conditions envisioned at the start

and the conclusion (beginning and endstate), objectives, tasks (by component), effects to be achieved, and transition criteria.

Refining the Theater Command and Control Organization:

During Step 3 of the course of action development process, an initial command and control structure was developed. This structure was developed based on the concept and tasks to be accomplished and answered the question "what is the best organization within each period to facilitate unified action?" This process resulted in the following determinations: the joint force commander, joint force organization, combined force organization, levels of authority, and the requirement to establish relationships with the inter-agency and various international organizations.

An approved strategic concept and phased campaign plan provides an opportunity to reevaluate the initial theater command and control structure and to make adjustments based on guidance or changes to the operational environment.

Refining Theater Organization:

An initial visualization of the theater geography was developed during Step 3 of the course of action development process. This view of the theater was developed based on the concepts and tasks to be accomplished combined with the requirement to provide space for the joint force to execute and sustain the campaign. Considerations included establishing: a theater of operations within a theater of war, a joint operational area, or an area of operations.

An approved strategic concept and phased campaign plan provides an opportunity to reexamine the initial theater organization and to make adjustments based on guidance or changes to the operational environment.

Refining Measures of Effectiveness and Performance:

Assessment is a process that measures the progress of the joint force toward mission accomplishment. Commanders continuously assess their operational environment and the progress of operations, and compare them to their initial visions and intent. Commanders adjust their operations based their assessment to ensure military objectives are met and the military end-sate is achieved.

At the theater-strategic level the assessment process is accomplished through the development and refinement of measures of effectiveness and measures of performance. While an initial set of measures of effectiveness and performance were developed during the mission analysis step and refined throughout the campaign design and joint planning process, an approved strategic concept provides the commander and his or her staff with the opportunity to validate and refine the existing measures of effectiveness and performance.

- Measures of Effectiveness assess changes in system behavior, capability, or operational environment. They measure the attainment of an end-state, achievement of an objective, or creation of an effect.
- Measures of Performance measure task performance and are typically more quantitative in nature. While they are more useful and prevalent at the tactical level, well crafted measures of performance can be useful tools at the theater-strategic level.

Developing Joint Functional Concepts:

Developing joint functional concepts assists the commander and his or her staff to ensure the integration and synchronization of joint forces during the execution of joint operations. Viewed broadly, a concept of the command and control, movement and maneuver, and fires of the joint force was developed during the course of action process and refined following the approval of the strategic concept. Similarly, an overarching concept for joint intelligence was developed throughout the campaign design and joint planning process.

A technique is to develop overarching concepts for joint protection, joint sustainment, and interagency support in order to ensure the complete integration of all elements of national power available to the joint force commander. At this point in the campaign design and joint planning process overarching statements for each of these three areas will assist in focusing the joint planning group during campaign plan development.

Chapter 9:
Plan Development

The final step in the campaign design and planning process involves transforming the approved strategic concept into a fully resourced, developed, and synchronized campaign plan which is then reviewed and approved at the national level. The Combatant Commander finalizes his campaign design that is then expanded through staff and subordinate/supporting command efforts into a full plan for joint, interagency, and multinational action. The process is monitored and supported by the CJCS and the JPEC, and the resulting contingency plan is then submitted for SecDef approval during a final in-progress review. Following final approval, the plan then is maintained and updated as required by changing conditions in the operational environment, strategic guidance, resource levels, etc, so that it remains current and readily executable during future "crisis action" as required by the President and SecDef.

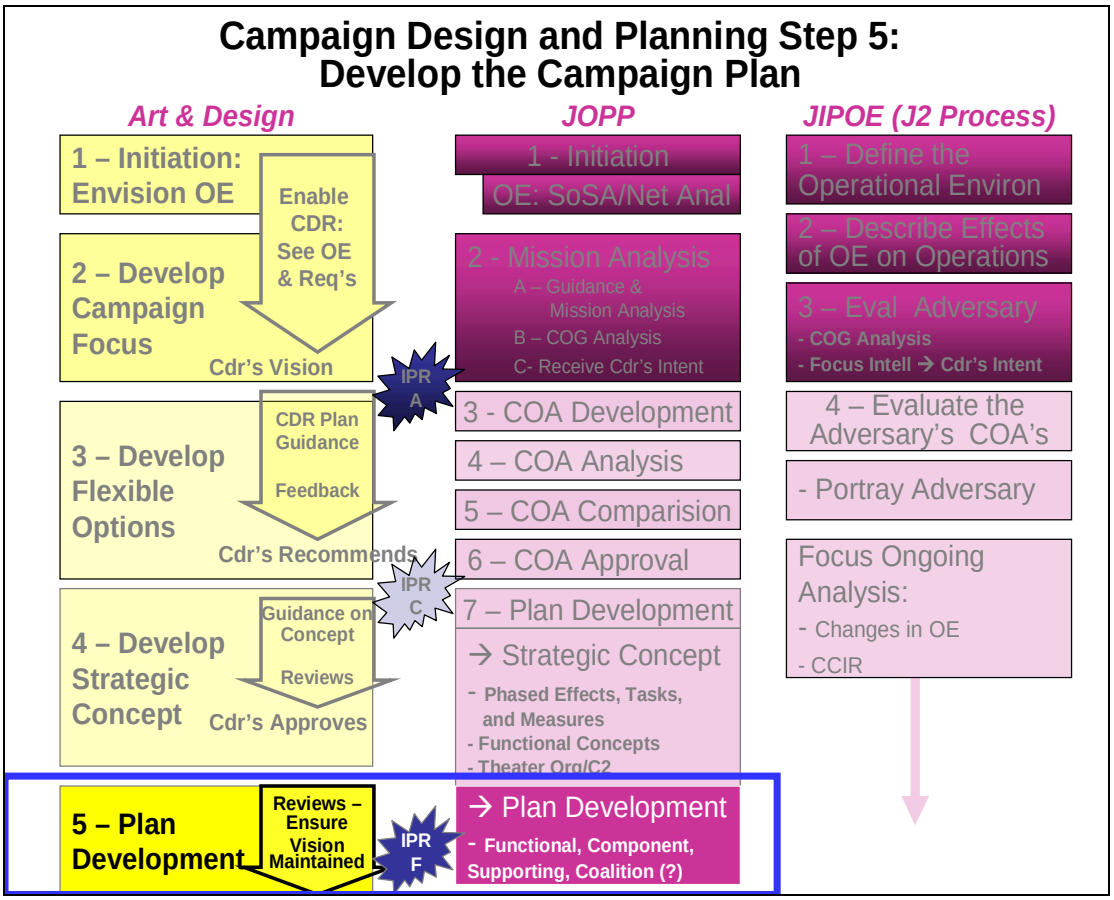

Figure 42 Campaign Design and Planning – Step 5

Following approval of the strategic concept, the supported combatant commander sets forth his “plan for planning” by issuing a Planning Order (PLANORD) or similar directive that will establish the framework for coordinating the activities of the subordinate and supporting commands and agencies involved. Throughout this process, all involved elements of the JPEC utilize the JOPES process to coordinate and synchronize their activities. Throughout the plan development process, the CJCS works in conjunction with both supported and supporting commanders to monitor planning activities, resolve shortfalls when required, and review the supported commander’s OPLAN for *adequacy, feasibility, acceptability, completeness, and compliance with Joint Doctrine*.

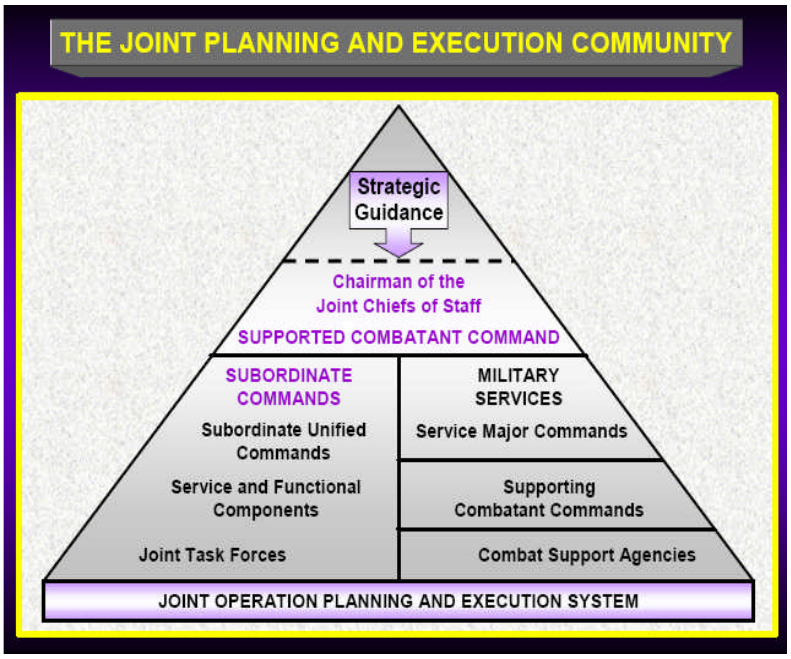

Figure 43 The Joint Planning and Execution Community

The final step in the design and planning process occurs when the CCDR conducts the Final Plan Approval IPR (IPR-F) with the SecDef in order to confirm strategic guidance, gain approval of the mission, assumptions and detailed concept, and gain approval for final resource and force levels required for future success. In conjunction with the Combatant Commander’s proposal at IPR-F, the CJCS and USD (P) will also offer their military advice to include issues arising from, or resolved during, plan review (e.g. key risks, decision points). The final result of IPR-F is SecDef approval of the basic plan and required annexes, the resolution of any remaining key issues, and approval to proceed with plan assessment (as applicable) with any amplifying guidance or direction. If the President or SecDef decides in the future to execute the plan, all three joint operation planning elements — *situational awareness, planning, and execution* — continue in a complementary and iterative process during the Crisis Action Process (CAP).

Planning Development Activities:

In this final stage of the process, the staff and supporting command efforts focus on developing a cohesive and detailed plan for how forces and capabilities will be employed throughout the depth and breadth of the campaign to accomplish the commander's design. During the initial stages, planners on the staffs of the component commands develop the total package of forces required for the operation. They start with the major combat forces selected from those apportioned for planning in the original task-assigning document and included in the combatant commander's concept of operations. Working closely with the staffs of service component headquarters, other supporting commands, and combat support agencies, they identify concepts for how the various elements of the joint force must be employed, along with the requirements for combat forces, support forces and sustainment, as well. The supported commander and staff consolidates each component's estimate of the actions, forces and supplies required, and uses the commander's design for arrangement and employment of joint forces and functions to sequence and phase their movements into the theater of operations. Based upon this detailed concept of employment, force levels and timing are determined for arrival in-theater and for final "combat readiness" using apportioned strategic transportation, combatant commander-controlled intra-theater transportation, and transportation organic to subordinate commands.

When planning the application of forces and capabilities, the **CCDR should not be completely constrained by the strategic plan's force apportionment if additional resources are justifiable and no other course of action within the allocation reasonably exists.** The additional capability requirements will be coordinated with the joint staff through the development process. Risk assessments will include results using both allocated capabilities and additional capabilities. Operation planning is inherently an iterative process, with forces being requested and approved for certain early phases, while other forces may be needed or withdrawn for the later phases. This process is particularly complex when planning a campaign because of the potential magnitude of committed forces and length of the commitment. Finally, when making this determination the CCDR should also consider withholding some capability as an operational reserve.

When developing an OPLAN, the supported CCDR should designate the main effort and supporting efforts as soon as possible. This action is necessary for economy of effort and for allocating disparate forces, to include multinational forces. The **main effort** is based on the supported CCDR's prioritized objectives and identifies where the supported CCDR will concentrate capabilities to achieve specific objectives. It also facilitates the synchronized and integrated employment of the joint force while preserving the initiative of subordinate commanders. As such, the CONOPS must clearly specify the nature of the main effort. Designation of the main effort can be addressed in geographical (area) or functional terms.

After the main effort is identified, joint force and component planners **determine those tasks and capabilities essential to accomplishing objectives.** The supported CCDR assigns these tasks to subordinate commanders along with the capabilities and support necessary to achieve them. Area tasks and responsibilities focus on a specific area to control or conduct operations. Functional tasks and responsibilities focus on the performance of continuing efforts that involve the forces of two or more Military Departments operating in the same domain — air, land, sea, or space — or where there is a need to accomplish a distinct aspect of the assigned mission. In either case, designating the main effort will establish where or how a major portion of available friendly forces and assets are employed, often to attain the primary objective of a major operation or campaign.

The main effort can change during the course of the operation based on numerous factors, including changes in the operational environment and how the adversary reacts to friendly operations. When the main effort changes, support priorities must change to ensure success. Both horizontal and vertical coordination within the joint force and with multinational and interagency partners are essential when shifting the main effort. **Secondary efforts are important, but are ancillary to the main effort.** They normally are designed to complement or enhance the success of the main effort (for example, by diverting enemy resources). Only necessary secondary efforts, whose potential value offsets or exceeds the resources required, should be undertaken, because these efforts divert resources from the main effort. Secondary efforts normally lack the operational depth of the main effort and have fewer forces and capabilities, smaller reserves, and more limited objectives (JP 5-0, Joint Operation Planning, 26 December 2006).

JOPES provides specific guidance and procedures on the activities required for organizations to prepare required plans and concepts. It directs the typical types of activities that other organizations will accomplish as they plan for joint operations. For example, a combatant command which is preparing a crisis-related OPLAN at the President's direction will follow specific procedures and milestones in force planning, Time Phased Force Deployment Data (TPFDD) development, and shortfall identification.

As the concept is developed into a fully detailed plan, a number of activities are accomplished in a parallel, collaborative, and iterative fashion rather than in a sequential and time-consuming manner. Time is always a factor; conducting simultaneous, synchronized development at all levels will be critical to shortening the planning cycle and making best use of the limited time available. A number of activities are conducted simultaneously:

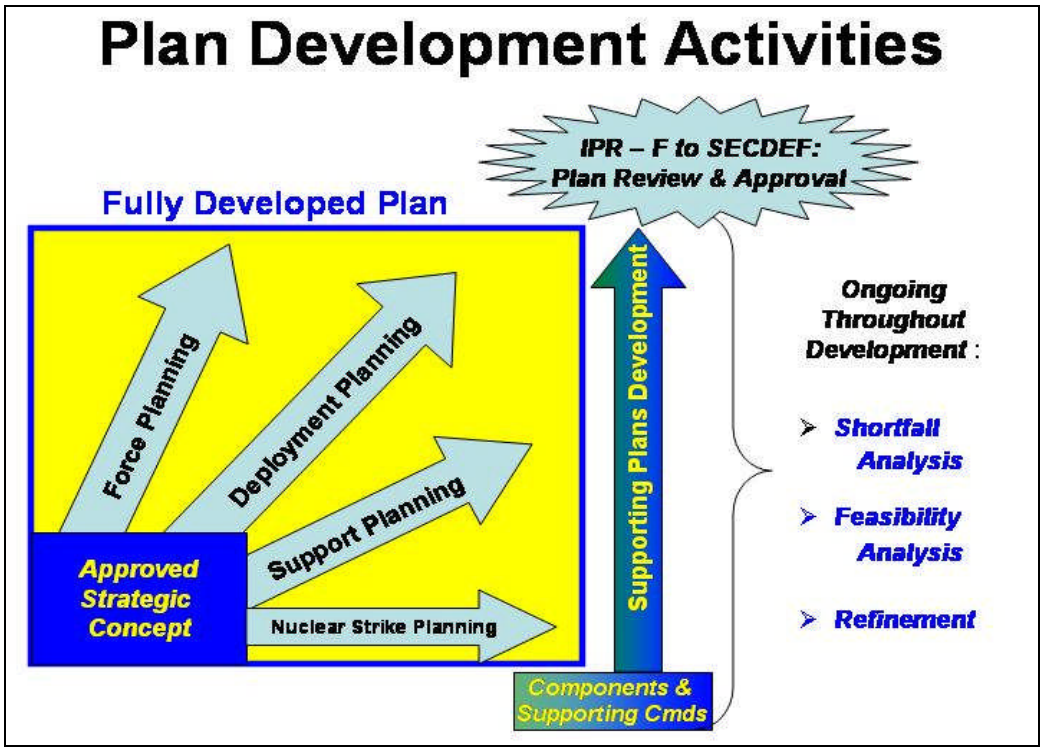

Figure 44 Plan Development Activities

Expanding the strategic concept into a full plan requires a number of supporting planning efforts. First, detailed **force planning** will conduct an analysis of the forces required to include the order and sequence for their deployment and employment throughout the campaign. In addition, the size and complexity of the joint force will required detailed **supporting planning** to ensure the force maintains operational superiority throughout the campaign while avoiding premature culmination. Third, the strategic and intra-theater movement of large, complex U.S. and multinational forces and resources from CONUS through final dispositions for employment in theater required detailed **deployment planning** to ensure success. Finally, while nuclear weapons may not be used, USSTRATCOM will support nuclear strike planning for possible use of nuclear weapons during the campaign.

Force Planning: The primary purposes of force planning are to -

- Influence COA development and selection based on force allocations, availability, and readiness
- Identify all forces needed to accomplish the supported component commanders' CONOPS with some rigor and
- Effectively phase the forces into the theater.

Force planning consists of determining the force requirements by operation phase, mission, mission priority, mission sequence, and operating area. It

includes force allocation review, major force phasing; integration planning; force list structure development (TPFDD); followed by force list development. Force planning is the responsibility of the CCDR, supported by component commanders in coordination with global force management (GFM) and USJFCOM force providers.

Force planning begins early during concept development and focuses on adaptability. The commander determines force requirements; develops a letter of instruction or time phasing and force planning; and designs force modules to align and time-phase the forces in accordance with the concept under development. Major forces and elements are selected from those apportioned or allocated for planning by operation phase, mission and mission priority; service components then collaboratively make tentative assessments of the specific sustainment capabilities required. After the actual forces are identified (sourced), the combatant command staff refines the force plan to ensure it supports the concept, provides force visibility, and enables flexibility. When reviewed and approved by the commander, he identifies, resolves or reports shortfalls with a risk assessment.

In CAP, force planning focuses on the actual units designated to participate in the planned operation and their readiness for deployment. The supported commander identifies force requirements as operational capabilities in the form of force packages to facilitate sourcing by the Services USJFCOM, USSOCOM, and other force providers' supporting commands. A force package is a list (group of force capabilities) of the various forces (force requirements) that the supported commander requires to conduct the operation described in the CONOPS. The supported commander typically describes required force requirements in the form of broad capability descriptions or unit type codes, depending on the circumstances. The supported commander submits the required force packages through the Joint Staff to the force providers for sourcing. Force providers review the readiness and deployability posture of their available units before deciding which units to allocate to the supported commander's force requirements. Services and their component commands also determine mobilization requirements and plan for the provision of non-unit sustainment. The supported commander will review the sourcing recommendations through the GFM process to ensure compatibility with capability requirements and concept of operations. (JP 5-0, Joint Operation Planning, 26 December 2006)

Support Planning: The purpose of support planning is to determine the sequence of the personnel, logistic, and other support required to provide distribution; maintenance; civil engineering, medical, and sustainment in accordance with the concept of operation. Support planning is conducted in parallel with other planning, and encompasses such essential factors as executive agent identification; assignment of responsibility for base operating support; airfield operations; management of non-unit replacements; health service support; personnel management; financial management; handling of prisoners of war and detainees; theater civil engineering policy; logistic related environmental

considerations; support of noncombatant evacuation operations and other retrograde operations; and nation assistance.

Support planning is primarily the responsibility of the Service component commanders and begins during COA development. Service component commanders identify and update support requirements in coordination with the Services, the Defense Logistics Agency, and USTRANSCOM. They initiate the procurement of critical and low-density inventory items; determine host nation support (HNS) availability; develop plans for total asset visibility; and establish phased delivery plans for sustainment in line with the phases and priorities of the concept. They develop and train for battle damage repair; develop reparable retrograde plans; develop container management plans; develop force and line of communications protection plans; develop supporting phased transportation and support plans aligned to the strategic concept and report movement support requirements. Service component commanders continue to refine their sustainment and transportation requirements as the force providers identify and source force requirements.

During distribution planning, the supported CCDR and USTRANSCOM resolve gross distribution feasibility questions impacting inter-theater and intra-theater movement and sustainment delivery. USTRANSCOM and other transportation providers identify air, land, and sea transportation resources to support the approved CONOPS. These resources may include apportioned inter-theater transportation, GCC-controlled theater transportation, and transportation organic to the subordinate commands. USTRANSCOM and other transportation providers develop transportation schedules for movement requirements identified by the supported commander. A transportation schedule does not necessarily mean that the supported commander's CONOPS is transportation feasible; rather, the schedules provide the most effective and realistic use of available transportation resources in relation to the phased CONOPS.

Support refinement is conducted to confirm the sourcing of logistic requirements in accordance with strategic guidance and to assess the adequacy of resources provided through support planning. This refinement ensures support is phased in accordance with the CONOPS; refines support C2 planning; and integrates support plans across the supporting commands, Service components, and agencies. It ensures an effective but minimum logistics foot-print for each phase of the CONOPS.

Transportation refinement simulates the planned movement of resources that require lift support to ensure that the plan is transportation feasible. The supported commander evaluates and adjusts the concept of operation to achieve end-to-end transportation feasibility if possible, or requests additional resources if the level of risk is unacceptable. Transportation plans must be consistent and deconflicted with plans and timelines required by providers of Service-unique combat and support aircraft to the supported CCDR. Planning also must

consider requirements of international law; commonly understood customs and practices; and agreements or arrangements with foreign nations with which the U.S. requires permission for overflight, access, and diplomatic clearance. If significant changes are made to the CONOPS, it should be assessed for feasibility and refined to ensure it is acceptable.

Deployment Planning : Deployment planning is conducted on a continuous basis for all approved contingency plans and as required for specific crisis-action plans. In all cases, mission requirements of a specific operation define the scope, duration, and scale of both deployment and redeployment operation planning. Unity of effort is paramount, since both deployment and redeployment operations involve numerous commands, agencies, and functional processes. Because the ability to adapt to unforeseen conditions is essential, supported CCDRs must ensure their deployment plans for each contingency or crisis-action plan support global force visibility requirements.

For a given plan, deployment planning decisions **are based on the anticipated operational environment**, which may be permissive, uncertain, or hostile. The anticipated operational environment dictates the type of entry operations, deployment concept, mobility options, predeployment training, and force integration requirements. Normally, supported CCDRs, their subordinate commanders, and their Service components are responsible for providing detailed situation information; mission statements by operation phase; theater support parameters; strategic and operational lift allocations by phase (for both force movements and sustainment); HNS information and environmental standards; and pre-positioned equipment planning guidance.

Key elements and details of deployment planning include:

1. **Deployment Concept**. Supported CCDRs must develop a deployment concept and identify specific predeployment standards necessary to meet mission requirements. Supporting CCDRs provide trained and mission ready forces to the supported combatant command deployment concept and predeployment standard. Services recruit, organize, train, and equip interoperable forces. The Services' predeployment planning and coordination with the supporting combatant command must ensure that predeployment standards specified by the supported CCDR are achieved, supporting personnel and forces arrive in the supported theater fully prepared to perform their mission, and deployment delays caused by duplication of predeployment efforts are eliminated. The Services and supporting CCDRs must ensure unit OPLANs are prepared; forces are tailored and echeloned; personnel and equipment movement plans are complete and accurate; command relationship and integration requirements are identified; mission-essential tasks are rehearsed; mission specific training is conducted; force protection is planned and resourced; and sustainment requirements are identified. Careful and detailed planning ensures that only required personnel, equipment, and

materiel deploy; unit training is exacting; missions are fully understood; deployment changes are minimized during execution; and the flow of personnel, equipment; and movement of materiel into theater aligns with the concept of operation.

2. **Movement Planning**. Movement planning integrates the activities and requirements of units with partial or complete self-deployment capability, activities of units that require lift support, and the transportation of sustainment and retrogrades. Movement planning is highly collaborative and is enhanced by coordinated use of simulation and analysis tools.

   The **supported command is responsible for movement control**, including sequence of arrival, and exercises this authority through the TPFDD and the JOPES validation process. The supported commander will use the organic lift and non-organic, common-user, strategic lift resources made available for planning by the CJCS. Competing requirements for limited strategic lift resources, support facilities, and intra-theater transportation assets will be assessed in terms of impact on mission accomplishment. If additional resources are required, the supported command will identify the requirements and provide rationale for those requirements.

   The supported commander's operational priorities and any movement constraints (e.g., assumptions concerning the potential use of WMD) are used to prepare a movement plan. The plan will consider enroute staging locations to support the scheduled activity. This information, together with an estimate of required site augmentation, will be communicated to appropriate supporting commanders. The global force manager and USTRANSCOM use the Joint Flow Analysis and Sustainment for Transportation model to assess transportation feasibility and develop recommendations on final port of embarkation selections for those units without organic lift capability. Movement feasibility requires current analysis and assessment of movement C2 structures and systems; available organic, strategic and theater lift assets; transportation infrastructure; and competing demands and restrictions.

   After coordinated review of the movement analysis by USTRANSCOM, the supported command, and the global force provider may adjust the concept of operation to improve movement feasibility where operational requirements remain satisfied. Commander USTRANSCOM should adjust or reprioritize transportation assets to meet the supported commander's operational requirements (fort to foxhole). If this is not an option due to requirements from other commanders, then the supported commander adjusts TPFDD requirements or is provided additional strategic and theater lift capabilities using (but not limited to) Civil Reserve Air Fleet and/or Voluntary Intermodal Sealift Agreement capabilities as necessary to achieve end-to-end transportation feasibility.

Operational requirements may cause the supported commander and/or subordinate commanders to alter their plans, potentially impacting the deployment priorities or TPFDD requirements. Planners must understand and anticipate the impact of change. There is a high potential for a sequential pattern of disruption when changes are made to the TPFDD. A unit displaced by a change might not simply move on the next available lift, but may require reprogramming for movement at a later time. This may not only disrupt the flow, but may also interrupt the operation. Time is also a factor in TPFDD changes. Airlift can respond to short-notice changes, but at a cost in efficiency. Sealift, on the other hand, requires longer lead times, and cannot respond to change in a short period. These plan changes and the resulting modifications to the TPFDDs must be handled during the planning cycles.

3. **Joint Reception, Staging, Onward Movement, and Integration Planning.** JRSOI planning is conducted to ensure an integrated joint force arrives and becomes operational in the OA as scheduled. Effective integration of the force into the joint operation is the primary objective of the deployment phase.

4. **TPFDD Letter of Instruction (LOI).** The supported commander publishes supplemental instructions for time phasing force deployment data development in the TPFDD LOI. The LOI provides operation specific guidance for utilizing the JOPES processes and systems to provide force visibility and tracking; force mobility; and operational agility through the TPFDD and the validation process. It provides procedures for the deployment, redeployment, and rotations of the operation's forces. The LOI provides instructions on force planning sourcing, reporting, and validation. It defines planning and execution milestones and details movement control procedures and lift allocations to the commander's components, supporting commanders, and other members of the JPEC. A TPFDD must ensure force visibility, be tailored to the phases of the concept of operation, and be execution feasible.
5. **Deployment and JRSOI Refinement**. Deployment and JRSOI refinement is conducted by the supported command in coordination with Joint Staff, USJFCOM, USTRANSCOM, the Services, and supporting commands. The purpose of the deployment and JRSOI refinement is to ensure the force deployment plan maintains force mobility throughout any movements, provides for force visibility and tracking at all times, provides for effective force preparation, and fully integrates forces into a joint operation while enabling unity of effort. This refinement conference examines planned missions, the priority of the missions within the operation phases and the forces assigned to those missions. By mission, the refinement conference examines force capabilities, force size, support requirements, mission preparation, force positioning/basing, weapon systems, major equipment, force protection and sustainment

requirements. It should assess the feasibility of force closure by the commander's required delivery date and the feasibility of successful mission execution within the time frame established by the commander under the deployment concept. This refinement conference should assess potential success of all force integration requirements. Transition criteria for all phases should be evaluated for force redeployment or rotation requirements.

For lesser-priority plans that may be executed simultaneously with higher-priority plans or on-going operations, combatant command and USTRANSCOM planners may develop several different deployment scenarios to provide the CCDR a range of possible transportation conditions under which the plan may have to be executed based on risk to this plan and the other ongoing operations. This will help both the supported and supporting CCDRs identify risk associated with having to execute multiple operations in a transportation-constrained environment.

Nuclear Strike Planning: Commanders must assess the military as well as political impact a nuclear strike would have on their operations. Nuclear planning guidance issued at the combatant commander level is based on national-level political considerations and is influenced by the military mission. Although USSTRATCOM conducts nuclear planning in coordination with the supported GCC and certain allied commanders, the supported commander does not effectively control the decision to use nuclear weapons.

Concurrent with development of additional details, the staff and subordinate/supporting commands will ensure conduct a running analysis and appraisal of the plans being developed. These activities include:

- **Shortfall Identification:** Along with hazard and threat analysis, shortfall identification is performed throughout the plan development process. The supported commander continuously identifies limiting factors and capabilities shortfalls and associated risks as plan development progresses. Where possible, the supported commander resolves the shortfalls and required controls and countermeasures through planning adjustments and coordination with supporting and subordinate commanders. If the shortfalls and necessary controls and countermeasures cannot be reconciled or the resources provided are inadequate to perform the assigned task, the supported commander reports these limiting factors and assessment of the associated risk to the CJCS. The CJCS and the Service Chiefs consider shortfalls and limiting factors reported by the supported commander and coordinate resolution. However, the completion of assigned plans is not delayed pending the resolution of shortfalls. If shortfalls cannot be resolved within the JSCP time frame, the completed plan will include a consolidated summary and impact assessment of unresolved shortfalls and associated risks.

- **Feasibility Analysis:** This step in plan or order development is similar to determining the feasibility of a course of action, except that it typically does not involve simulation-based wargaming. The focus in this step is on ensuring the assigned mission can be accomplished using available resources within the time contemplated by the plan. The results of force planning, support planning, deployment planning, and shortfall identification will affect OPLAN or OPORD feasibility. The primary factors considered are whether the apportioned or allocated resources can be deployed to the joint operations area (JOA) when required, sustained throughout the operation, and employed effectively, or whether the scope of the plan exceeds the apportioned resources and supporting capabilities. Measures to enhance feasibility include adjusting the CONOPS, ensuring sufficiency of resources and capabilities, and maintaining options and reserves.

- **Refinement:** During Contingency Planning, plan refinement typically is an orderly process that follows plan development and is associated with plan assessment (see below). Refinement then continues on a regular basis as circumstances related to the potential contingency change. In CAP, refinement is almost continuous throughout OPLAN or OPORD development. Planners frequently adjust the plan or order based on results of force planning, support planning, deployment planning, shortfall identification, revised JIPOE, and changes to strategic guidance. Refinement continues even after execution begins, with changes typically transmitted in the form of FRAGORDs rather than revised copies of the plan or order.

- **Documentation:** When the TPFDD is complete and end-to-to end transportation feasibility has been achieved and is acceptable to the commander, the supported commander completes the documentation of the final, transportation-feasible OPLAN or OPORD and coordinates distribution of the TPFDD within the JOPES network as appropriate.

Plan Review and Approval:

When the final OPLAN or OPORD is complete, the supported commander then submits it with the associated TPFDD file to the CJCS and SecDef for review, approval, or modification. The JPEC reviews the supported commander's OPLAN or OPORD and provides the results of the review to the CJCS. The CJCS reviews and recommends approval or disapproval of the OPLAN or OPORD to the SecDef. After the CJCS's review, the SecDef or President will review, approve, or modify the plan. The SecDef may delegate the approval of contingency plans to the CJCS. The President is the final approval authority for OPORDs. Plan review criteria are common to Contingency Planning and CAP, as shown below.

PLAN REVIEW CRITERIA

Adequacy

■ *The scope and concept of planned operations can accomplish the assigned mission and comply with the planning guidance provided.* Are the assumptions valid and do they comply with strategic guidance. Planning assumptions must be reasonable and consistent with planning guidance.

Feasibility

■ *The assigned mission can be accomplished using available resources within the time contemplated by the plan.* Can the apportioned or allocated resources be used effectively or does the scope of the plan exceed available resources? Measures to enhance feasibility include crafting effective employment schemes, ensuring sufficiency of resources and capabilities, and maintaining options and reserves.

Acceptability

■ *The plan is proportional and worth the expected costs.* Used with the criterion of feasibility to ensure that the mission can be accomplished with available resources. Can the plan be accomplished without incurring excessive losses in personnel, equipment, materiel, time, or position? *Risk management* procedures can identify, assess, and control hazards and threats associated with possible accidental losses.

Completeness

■ *The plan incorporates all tasks to be accomplished.* It includes forces required, deployment concept, employment concept, sustainment concept, time estimates for achieving objectives, mission success criteria, and military end state.

Compliance with Joint Doctrine

■ *The plan complies with joint doctrine to the maximum extent possible.* Approved joint doctrine provides a baseline that facilitates both planning and execution. The exception to this requirement is the development of multinational plans, which are the product of bilateral or multinational negotiations. These plans should adhere to applicable joint doctrine as closely as possible, but other nations and multinational organizations are not bound by US joint doctrine.

Figure 45 Plan Review Criteria

Supporting Plan Development:

The combatant commander, service component commanders, functional component commanders, and subordinate JFCs must develop requirements that are integrated, vertically and horizontally into supporting plans for theater and subordinate campaigns or major operations. The combatant commander and subordinate commanders, and their staffs develop these plans based on unified support that can be provided from national-level assets, supporting combatant commanders, Service and functional components, alliance or coalition partners, other government agencies, non-government or private agencies, international agencies, United Nations efforts, and host nations.

Supporting plans may address tasks and support requirements during mobilization, pre-deployment, deployment, force projection operations, employment, post-conflict operations, redeployment, and demobilization. They address requirements for political, informational, as well as economic coordination, and military support. Supporting commanders synchronize their plans with the theater campaign plan. They identify resources and necessary liaison requirements early, as the plan is being developed.

Supporting and subordinate commanders, and supporting U.S. departments and agencies, use the combatant commander's strategic concept of operations and tasks for subordinates as the basis for determining the necessary support for each phase of the campaign plan. Supporting and subordinate commanders respond to the identified tasks by preparing supporting plans and submitting them for approval to the supported combatant commander.

The following are considerations for developing supporting plans:

- The geographic/supported combatant commander identifies Combat Support Agency (e.g. NSA, DIA, NGA) support requirements for the campaign through the development or revalidation of a supporting space and/or intelligence plan. This plan will identify requirements for national-level support from the DoD intelligence agencies, NRO, NGA, USSTRATCOM, and the military Services.

- Through the development of a mobility plan and a civil engineering support plan, the combatant commander identifies engineer requirements for strategic and operational mobility, construction, and infrastructure for the campaign. These plans will identify requirements for national-level support from non-DoD government agencies and the Services.

- Strategic Command and Special Operations Command may prepare supporting plans for the employment of unique forces from their commands in support of a theater campaign plan.

Functional supporting operations plans may also be developed. JP 3-30 describes the Joint Air Operations Plan (JAOP) as the functional plan required to be prepared by the JFACC. Similarly, Naval Doctrine Publication (NDP) 5 refers to a Naval Operations Plan to be prepared by a Naval Component Commander. By analogy, the JFLCC and the JFSOCC should prepare Joint Land Operations Plans and Joint Special Operations Plans respectively.

Transition:

Transition is critical to the overall planning process. It is an orderly turnover of a plan or order as it is passed to those tasked with execution of the operation. It provides information, direction and guidance relative to the plan or order that will help to facilitate situational awareness. Additionally, it provides an understanding of the rationale for key decisions necessary to ensure there is a coherent shift from planning to execution. These factors coupled together are intended to maintain the intent of the concept of operations, promote unity of effort and generate tempo. Successful transition ensures that those charged with executing an order have a full understanding of the plan. Regardless of the level of command, such a transition ensures that those who execute the order understand the commander's intent and concept of operations. Transition may be internal or external in the form of briefs or drills. Internally, transition occurs

between future plans and future/current operations. Externally, transition occurs between the commander and subordinate commands.

Transition Brief. At higher levels of command, transition may include a formal transition brief to subordinate or adjacent commanders and to the staff supervising execution of the order. At lower levels, it might be less formal. The transition brief provides an overview of the mission, commander's intent, task organization, and enemy and friendly situation. It is given to ensure all actions necessary to implement the order are known and understood by those executing the order. The brief should include items from the order or plan such as: higher headquarters mission (tasks and intent), mission, commander's intent, CCIRs, task organization, situation (enemy and friendly), concept of operations, execution (including branches and sequels), and planning support tools (synchronization matrix, JIPOE products, etc.).

Confirmation Brief. A confirmation brief is given by a subordinate commander after receiving the order or plan. Subordinate commanders brief the higher commander on their understanding of commander's intent, their specific tasks and purpose, and the relationship between their unit's missions and the other units in the operation. The confirmation brief allows the higher commander to identify potential gaps in the plan, as well as discrepancies with subordinate plans. It also gives the commander insights into how subordinate commanders intend to accomplish their missions.

Transition Drills. Transition drills increase the situational awareness of subordinate commanders and the staff and instill confidence and familiarity with the plan. Sand tables, map exercises, rehearsals of concept (ROC) and rehearsals are examples of transition drills.

Multinational/Coalition Integration:

Planning for multinational operations is accomplished in national and international channels. Collective security goals, strategies, and combined OPLANs are developed in accordance with individual treaty or alliance procedures. Deliberate joint operation planning for multinational operations is performed through national channels, in accordance with US doctrine and procedures. Therefore, much of the information and guidance provided for joint operations is conceptually applicable to alliance and coalition multinational problems as well. The fundamental issues are much the same for both situations

Through national planning channels, HNS and mutual support agreements are developed to facilitate joint operations. Coordination of these separate planning channels is accomplished at the national level through established coalition bodies, and at the theater and operational levels by combatant commanders or other subordinate joint US commands, who are charged within both channels for operational planning matters.

Appendix A:
Joint Planning Group (JPG)

A Joint Planning Group (JPG) is analogous to a “battlestaff” that is found at the tactical level. JPGs may be created to address particular planning requirements, crises, or other projects and may be tailored to fit unique circumstances. JPG representatives generally come from the command’s staff, but may include LNOs from subordinate commands, supporting commands, coalition partners, or other agencies.

The JPG concept is applicable whether a staff is organized along traditional lines (e.g., J-1, J-2, J-3, J-4, J-5, J-6) or in accordance with the Standing Joint Force Headquarters structure (Operations, Plans, Information Operations, Knowledge Management). For contingency planning, the staff’s Plans Division is normally responsible for directing the JPG; however, other divisions may manage JPG’s that address issues within their proponency.

Chief of Plans or Future Operations	(J-5/J35)
Contingency Plans Officer	(J-5/J35)
Force Planner	(J-5)
Information Operations Planner	(J-3)
Chief, Net Assessment	(J-3)
Effects Planner	(J-3)
Intelligence Planner	(J-2)
Engineer Planner	(Eng)
Logistics Planner	(J-4)
Medical Planner	(Surgeon)
Civil Affairs Planner	(J-5)
Policy Analyst	(J-5)
Land Component Command or ARFOR LNO	
Air Component Command or AFFOR LNO	
Maritime Component Command or NAVFOR LNO	
Marine Forces or MARFOR LNO	
Special Operations Component LNO	
Joint Interagency Coordination Group	(DOS, DOJ, DOT, CIA, etc)
Legal Advisor	(SJA)
Public Affairs	(PAO)
Network and Communications Planner	(J-6)
STRATCOM LNO	(STRATCOM)
TRANSCOM LNO	(TRANSCOM)
Adjacent Combatant Command LNO	
Defense Threat Reduction Agency LNO	(DTRA)

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Appendix B:
Planning Times and Dates

Times — (**C-, D-, M-days** end at 2400 hours Universal Time (Zulu time) and are assumed to be 24 hours long for planning.) The Chairman of the Joint Chiefs of Staff normally coordinates the proposed date with the commanders of the appropriate unified and specified commands, as well as any recommended changes to C-day. **L-hour** will be established per plan, crisis, or theater of operations and will apply to both air and surface movements. Normally, L hour will be established to allow C-day to be a 24-hour day.

C-day. The unnamed day on which a deployment operation commences or is to commence. The deployment may be movement of troops, cargo, weapon systems, or a combination of these elements using any or all types of transport. The letter "C" will be the only one used to denote the above. The highest command or headquarters responsible for coordinating the planning will specify the exact meaning of C-day within the aforementioned definition. The command or headquarters directly responsible for the execution of the operation, if other than the one coordinating the planning, will do so in light of the meaning specified by the highest command or headquarters coordinating the planning.

D-day. The unnamed day on which a particular operation commences or is to commence.

F-hour. The effective time of announcement by the Secretary of Defense to the Military Departments of a decision to mobilize Reserve units.

H-hour. The specific hour on D-day at which a particular operation commences.

- For **amphibious operations**, the time the first assault elements are scheduled to touch down on the beach, or a landing zone, and in some cases the commencement of countermine breaching operations.

I-day. (CJCSM 3110.01A/JSCP) The day on which the Intelligence Community determines that within a potential crisis situation, a development occurs that may signal a heightened threat to U.S. interests. Although the scope and direction of the threat is ambiguous, the Intelligence Community responds by focusing collection and other resources to monitor and report on the situation as it evolves.

L-hour. The specific hour on C-day at which a deployment operation commences or is to commence.

- In **amphibious operations**, the time at which the first helicopter of the helicopter-borne assault wave touches down in the landing zone.

M-day. The term used to designate the unnamed day on which full mobilization commences or is due to commence.

N-day. The unnamed day an active duty unit is notified for deployment or redeployment.

R-day. Redeployment day. The day on which redeployment of major combat, combat support, and combat service support forces begins in an operation.

S-day. The day the President authorizes Selective Reserve call up (not more than 200,000).

T-day. The effective day coincident with Presidential declaration of national emergency and authorization of partial mobilization (not more than 1,000,000 personnel exclusive of the 200,000 call up).

W-day. Declared by the President, W-day is associated with an adversary decision to prepare for war (unambiguous strategic warning).

Indications and Warning (I&W) — Those intelligence activities intended to detect and report time sensitive intelligence on foreign developments that could involve a threat to the United States or allied and/or coalition military, political, or economic interests or to US citizens abroad. It includes forewarning of enemy actions or intentions; the imminence of hostilities; insurgency; nuclear/non-nuclear attack on the United States, its overseas forces, or allied and/or coalition nations; hostile reactions to US reconnaissance activities; terrorists' attacks; and other similar events.

Appendix C:
Command Structures

Service Components:

All joint forces include Service components that provide administrative and logistics support. Conducting operations through Service components has certain advantages, which include:

- clear and uncomplicated command lines.
- established staffs, familiar with each other.
- common Standard Operating Procedures.

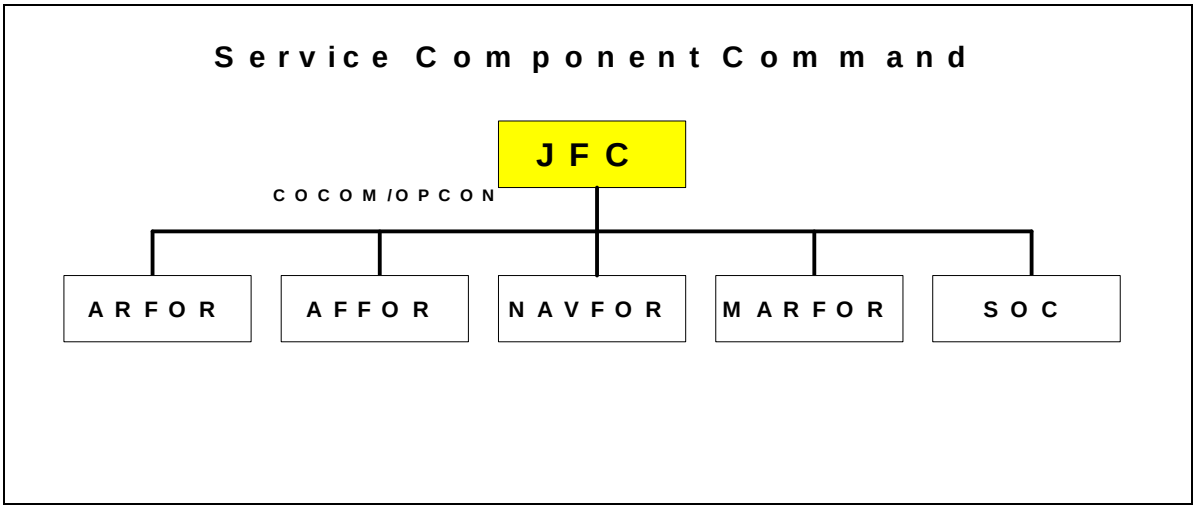

Figure 46 Command Organized Along Service Components

However, keep in mind that operations conducted by services will inherently have seams between the forces of the adjacent services. To ensure success, coordination along these seams is an absolute requirement. However, non-uniform procedures and lack of interoperability in the past have made this coordination extremely challenging. As our Services become more joint regarding procedures and equipment, organizing unified operations along service lines will become rarer. Organizing unified operations along Service component lines should however still be considered when the components have disparate objectives, don't share the same operational environment, or no time is available to form and train subordinate joint or functional headquarters. A unified command organized along Service component lines is illustrated in Figure C-1.

Functional Components:

JFCs may establish functional components to provide centralized direction and control of certain functions and types of operations. The figure below portrays a unified command organized along functional component lines. The advantages of conducting operations through functional components are:

- the arrangement allows for forces of two different services to operate together in the same medium.
- takes advantage of the synergy that can be gained between complimentary joint forces.

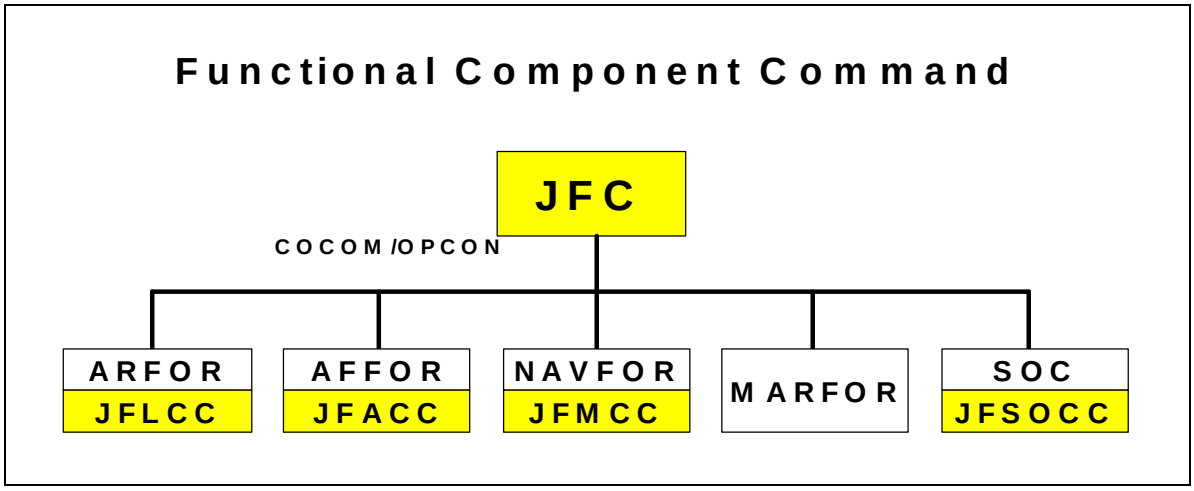

Figure 47 Command Organized Along Functional Components

The cost of establishing these types of relationships is the ad hoc nature of staff formation. Ad hoc staffs need time to work out effective operating procedures. Combatant commanders are now consistently using exercises and standing orders to reduce the ad hoc nature of these organizations. Examples of functional components are the Joint Force Land Component Commander (JFLCC), Joint Force Air Component Commander (JFACC), Joint Force Special Operations Commander (JFSOCC), and Joint Force Maritime Component Commander (JFMCC). Note that establishing functional commands doesn't dissolve the Service component responsibilities. Normally, a Service component will be "dual-hatted" when designated as a functional component, but doesn't have to be. JFCs may establish separate functional and Service components in order to separate, for the purposes of better management, the warfighting tasks from the Title 10 "service" tasks. Additionally, Service components are normally selected for functional command based upon the weight of their contribution to the effort. Due to its ability to sustain a theater operation, the Army, more often than not, will perform the JFLCC role. For most conflicts, the Air Force will normally draw the JFACC role, however, the sea services could be JFACCs in smaller scale contingencies when access to host nation basing is an issue. For the same reasons, the Navy will normally be the JFMCC. Special Operations Commands (SOC) are inherently joint – they have no single Service component. Title 10 responsibilities to support the SOCs are met by both the individual Services and Special Operations Command (SOCOM).

Subordinate Joint Commands:

Combatant Commanders may also establish subordinate joint task forces (JTF), especially in cases where the mission given such a commander requires a fully joint response, but doesn't require all the assets of a unified command to accomplish. Figure C-3 shows a unified command organized functionally with a JTF. Advantages of establishing a subordinate joint command are:

- takes advantage of the synergy that can be gained between the complimentary capabilities of a fully joint force.
- provides unity of command

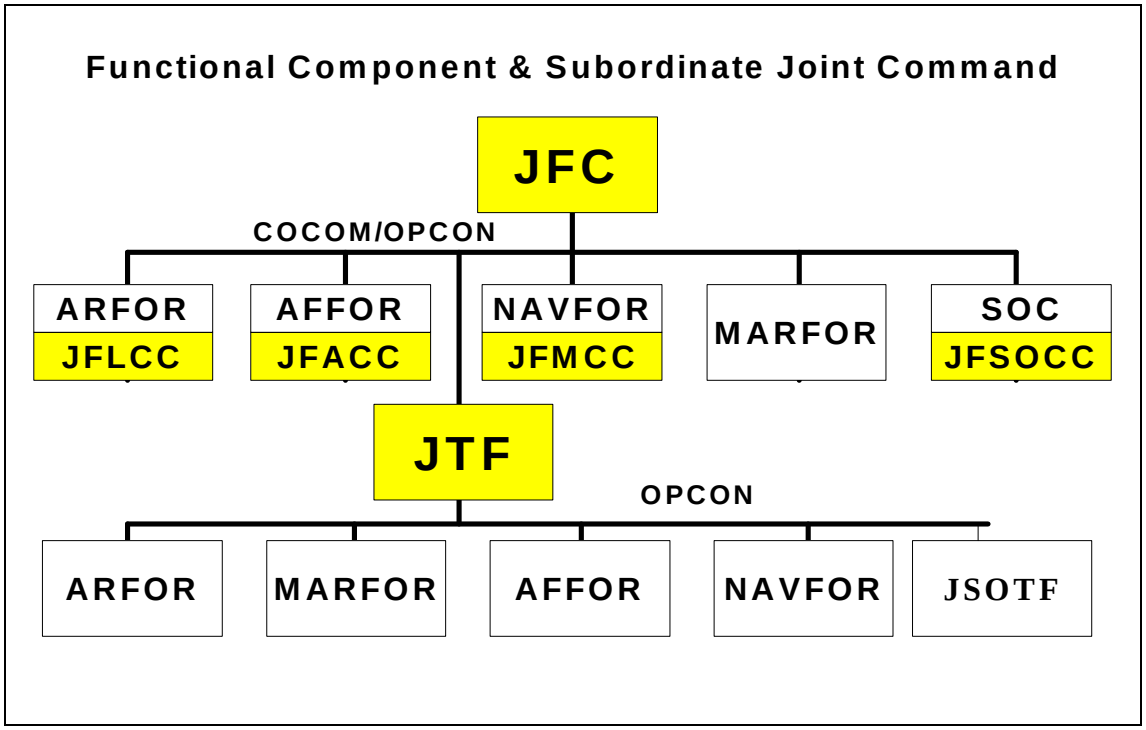

Figure 48 Command Organized Functionally with a JTF

The disadvantage, like functional commands, is that the staff may be formed ad hoc – without established SOPs and experience working together. Recent initiatives such as the Standing Joint Force Headquarters (SJFHQ) seek to reduce the potential ad hoc nature of JFC headquarters. Note that the JTF has its own Service forces, and may or may not have its own functional commands. A unified commander could have a mix of functional and subordinate joint commands when he's been given disparate geographic missions within his AOR. Such was the case during Operation IRAQI FREEDOM when the commander, USCENTCOM employed a functional arrangement to organize his unified command in the Iraq / Kuwait theater of operations, yet employed a subordinate joint command (JTF-180) to operate in Afghanistan in support of Operation ENDURING FREEDOM.

Combined Force Organization:

Fusing a coalition together is much more complex, therefore attaining unity of effort can be very challenging. There are essentially three types of combined C2 structures, *parallel*, *lead nation*, and *combination*.

Parallel Command Structures: When two or more nations combine to form a coalition, and none of the nations are designated to take the lead, a parallel structure must be formed (see figure below). The reasons why nations won't subordinate their forces to a foreign command are many, including political factors, national prestige, lack of Status of Forces Agreements (SOFA), lack of military interoperability, protection of intelligence sources, etc. By definition, a parallel command structure has two or more lead nations of equal influence.

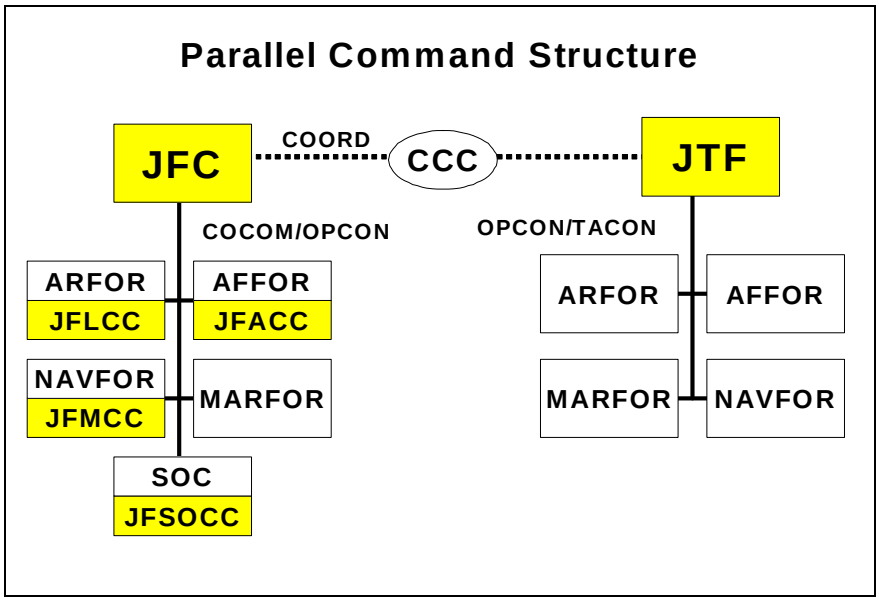

Figure 49 U.S. and Partner Coalition Command Structure

Therefore, parallel structures don't ensure unity of command; however, they can (with deliberate focus) achieve unity of effort. Establishing a Coalition Coordination Center (CCC) at the theater level in order to coordinate and synchronize combined operations throughout the theater campaign is one means to enhance unity of effort. Reasons to form a parallel structure as opposed to subordinating nations under the authority of one nation are:

- It's much easier to form the coalition this way; partners are more comfortable politically.
- It eases the ability to sustain the force because each nation supports itself.
- It's politically and militarily easier for a nation to withdraw from the coalition once the coalition's objectives diverge from those of a single nation.

- Greater staff effectiveness within each nations' militaries because the staffs of different nations remain non-integrated.

Alternatively, parallel command structures have seams that a wise adversary may exploit, and the lack of coalition integration may lead to pursuit of a course of action that sub-optimizes the capabilities of the combined force.

Lead Nation Command Structures:

Lead nation command structures are usually found in alliances, or in coalitions where other nations have an existing working relationship with the lead nation. An example is shown in the figure below:

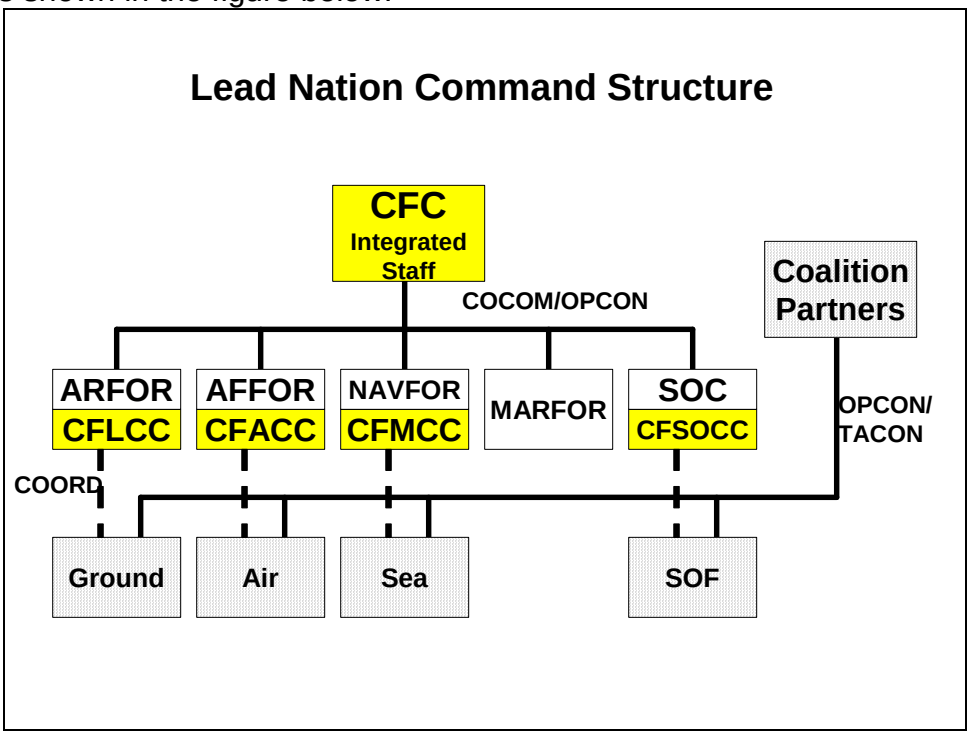

Figure 50 Lead Nation Command Structure

NATO will many times use a lead nation command structure. Unlike parallel structures, lead nation staffs are usually integrated if national disclosure policy issues, intelligence sharing, SOFAs, and interoperability problems can be worked out in advance. Lead nation structures are advantageous:

- Because the seams within the combined force can be minimized.
- Because it ensures unity of command.
- Because it will be harder to shatter due to the level of integration.

There are drawbacks however. Lead nation structures are not without political issues that can paralyze the Combined Force Commander (CFC). Because every nation has a "vote", decision-making can be slow and cumbersome. Finally, each nation will have to compromise on sovereignty issues to get along with one another.

Note the CFC's integrated staff. Depending upon the amount of time the coalition has to form, integration could take place down to the functional/ service component level. Coalition forces will normally support the lead nation either in an OPCON or TACON relationship.

Combination Command Structures:

Combination structures are a blend of parallel and lead nation structures as shown in the figure below. This normally happens in large coalitions where U.S. allies are willing to accede the lead to the U.S., but other non-allied partners are not. Such was the case in DESERT SHIELD/DESERT STORM. NATO allies were integrated into the U.S. structure, whereas Arab nations were integrated into the Saudi Structure. Both lead nations were fused by a coalition coordination center where plans were coordinated and synchronized. Note the allies subordinated their forces under U.S. control in either an OPCON or TACON relationship, whereas the other coalition partners were led by a parallel nation equal in stature to the U.S., and their forces only had a coordinating relationship with ours.

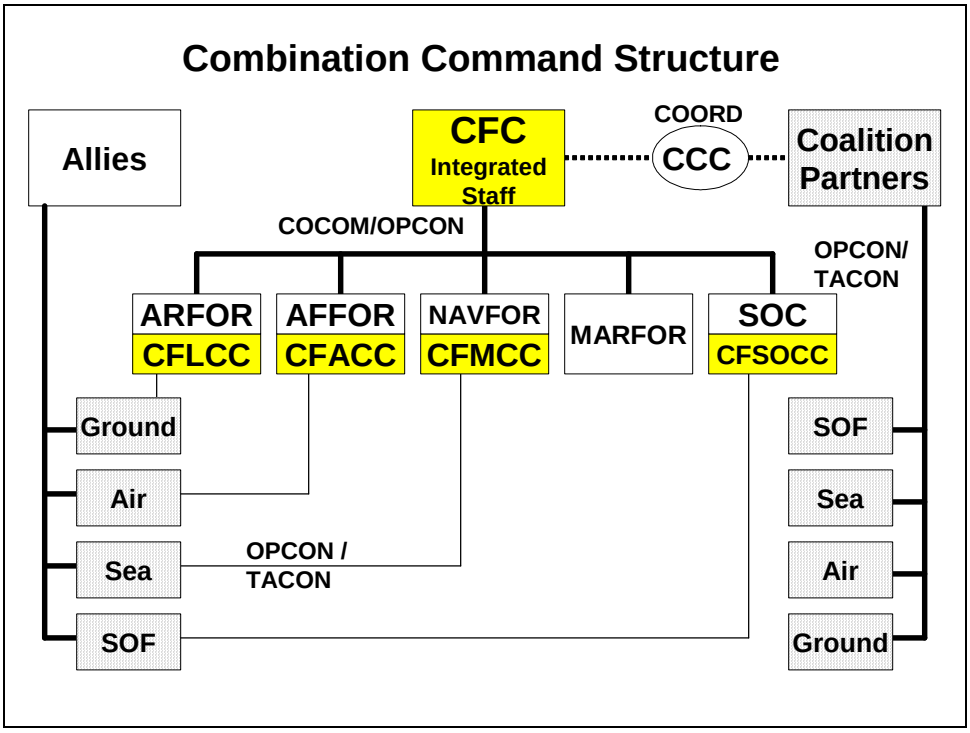

Figure 51 Combination Command Structure

Appendix D:
Flexible Deterrent Options (FDOs)

Flexible Deterrent Options (FDOs) are pre-planned, deterrence-oriented actions carefully tailored to send the right signal and influence an adversary's actions. They can be established to dissuade actions before a crisis arises or to deter further aggression during a crisis. FDOs are developed for each instrument of national power — diplomatic, informational, military, economic, and others — but they are most effective when used in combination with across instruments of national power.

a. FDOs facilitate early strategic decision-making, rapid de-escalation and crisis resolution by laying out a wide range of interrelated response paths. Key goals of FDOs are:

   (1) Deter aggression through communicating the strength of U.S. commitments to treaty obligations and peaceful development.

   (2) Confront the adversary with unacceptable costs for its possible aggression.

   (3) Isolate the adversary from regional neighbors and attempt to split the adversary coalition.

   (4) Rapidly improve the military balance of power in the OA.

b. FDOs Implementation. The use of FDOs must be consistent with U.S. national security strategy (i.e., the instruments of national power are normally used in combination with one another), therefore, continuous coordination with interagency partners is imperative. All operation plans have FDOs, and CCDRs are tasked by the JSCP to plan requests for appropriate options using all instruments of national power.

c. Military FDOs. Military FDOs underscore the importance of early response to a crisis. Deployment timelines, combined with the requirement for a rapid, early response, generally requires military FDO force packages to be light; however, military FDOs are not intended to place U.S. forces in jeopardy if deterrence fails (risk analysis should be an inherent step in determining which FDOs to use, and how and when to use them). Military FDOs are carefully tailored to avoid the classic "too much, too soon" or "too little, too late" responses. They rapidly improve the military balance of power in the operational area (OA), especially in terms of early warning, intelligence gathering, logistic infrastructure, air and maritime forces, information operations, and force protection assets, without precipitating armed response from the adversary. Military FDOs are most effective when used in concert

with the other instruments of power. They can be initiated before or after, and with or without ambiguous warning.

Examples of FDOs for each instrument of national power are listed in the below figures:

Figure 52 Diplomatic FDOs

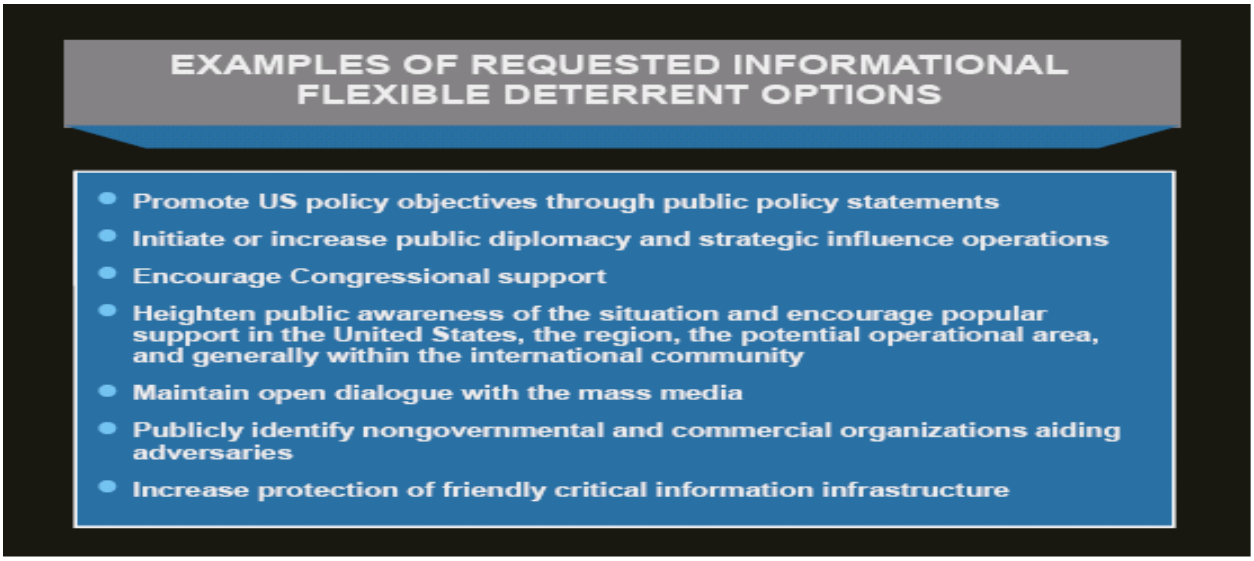

Figure 53 Informational FDOs

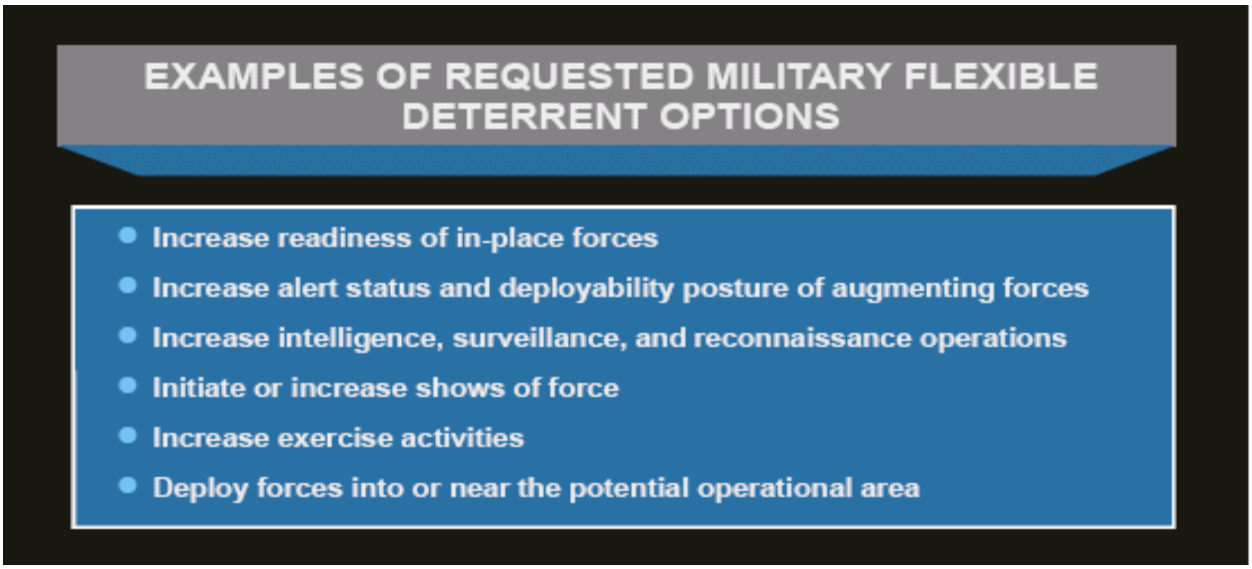

Figure 54 Military FDOs

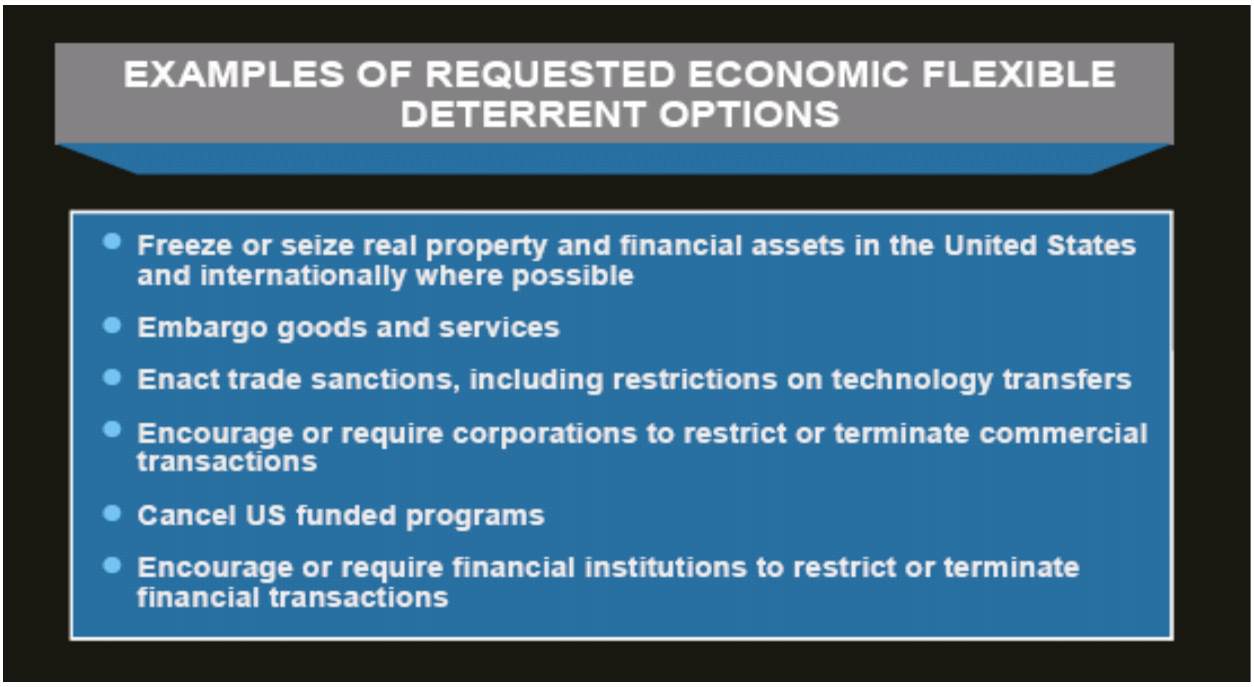

Figure 55 Economic FDOs

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Appendix E:
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