



Considerations for Multi-Domain Operation Success

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This primer proffers a consideration for the identification of a functional combatant command as the lead DOD entity to integrate, synchronize, and coordinate multi-domain operations (MDO) across the United States Government (USG). This primer also includes planning considerations for commanders to employ MDO.

Key Take-away

1. Successful employment of MDO is predicated on understanding an adversary's center of gravity (COG) and supplemental critical capabilities (CC), critical requirements (CR), and critical vulnerabilities (CV).
2. MDO must be continuously evaluated through an array of sensors to ensure windows of advantage are maintained.
3. Desired endstate of MDO is competition continuum – if that fails, transition to state of conflict till competition is a viable option.
4. MDO requires coordination, integration, and synchronization across the whole-of-government to achieve synergistic effects.

Employ fast, early, and often. Mission success in large-scale ground combat operations requires integrated and synchronized MDO; or the cumulative effect of achieving superiority in multiple domains (air, land, maritime, cyberspace, and space), functions and environments. MDO permits the conduct of joint operations without effective opposition or prohibitive interference. Commanders must seek superiority throughout the operating environment to accomplish the mission as rapidly as possible. The commander may have to initially focus all available joint forces on seizing the initiative. A delay at the outset of combat may damage U.S. credibility, lessen coalition support, and provide incentives for other adversary's to begin conflicts elsewhere.

Breaking the traditional model. The operating environment, threats, and problems envisioned in MDO demand a framework that brings order to the complexities of a multi-domain environment. Because near-peer competitors contest and can deny all domains at extended distances, the current definitions of Deep, Close, and Support Areas are no longer adequate. Also, the sequential structure of the joint operational framework needs to align with the transient nature of MDO ability to flow in and out of phases and between periods of competition and conflict. Nations are in a constant state of competition when not in conflict, Figure 1 outlines the transitional state of completion and conflict nested with Joint and Army operational frameworks.

The concept of a linear framework needs to be redefined as MDO can conceptually shift forward or backwards along a traditional operational framework.

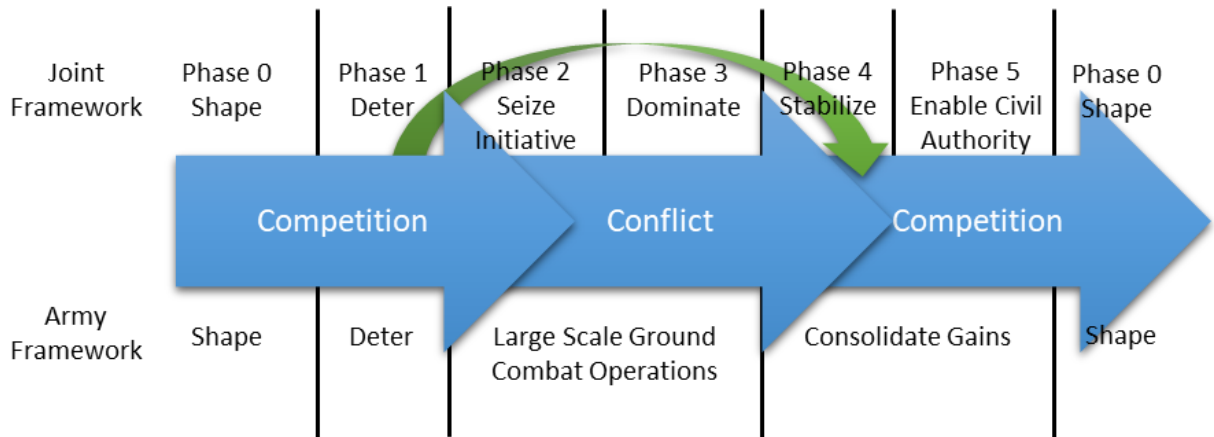


Figure 1. Transitional period of competition vs. conflict nested with Joint and Army operational frameworks

COG facilitates entry into A2AD. Successful execution of MDO will rely on understanding State or non-State actor's COG and supplemental CC, CR, and CV. This fundamental will allow commanders to visualize and target domains with organic assets and gain synergy with external resources to target multiple domains simultaneously (or near-simultaneously). Contesting an actor immediately in all domains degrades his CC and systems at the onset of conflict. This singularity could capitulate additional adversarial actions causing a transitional shift from conflict back to competition (thus maintaining a competition continuum, see Figure 2). Transition from competition to conflict is not an all-or-not-response, the desired endstate of

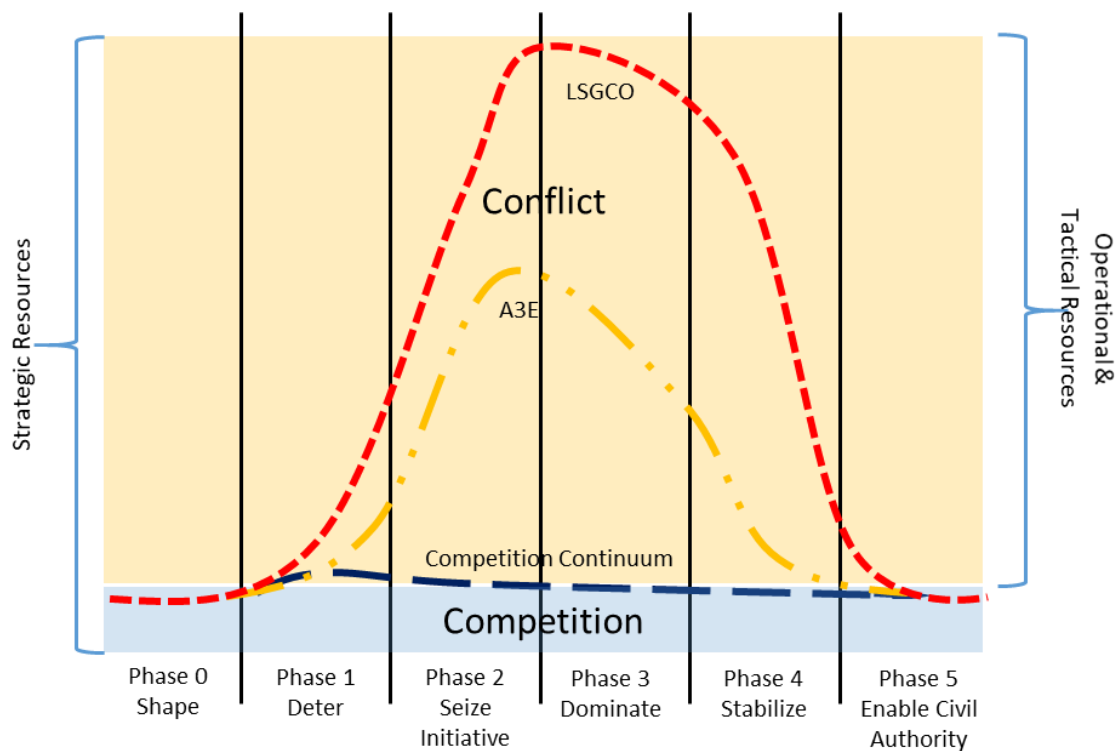


Figure 2: MDO resources across phases by conflict type

MDO is to achieve balance through the competition continuum. If that status is unobtainable then periods of conflict will prevail only long enough to achieve the desired effects on an adversary COG. The Commanders must continuously examine an actor's COG and the associated effects employed from MDO to achieve freedom of maneuver inside an adversary's anti-access/area denial (A2AD) bubble.

Faster decision cycle. Future warfare that employs elements across the multiple domains will change the operational tempo (OPTEMPO) and character of warfare. Commanders will need to rely on a suite of complex sensors integrated across multiple domains allowing for greater fidelity establishing a common operating picture (COP) allowing commanders to make decisions at the speed of war.

When operating in a contested electromagnetic environment, (near-peer) sensors that rely on Clear Access (C/A) GPS could result in technology being more susceptible to spoofing or degradation. Also, networks will be more susceptible to offensive cyber operations ranging from basic spear-phishing attacks to complex Advanced Persistent Threats. Finally, when conducting advise, assist, accompany, and enable (A3E) missions, commanders must understand that indigenous security forces with rudimentary network and cellular communications systems will be susceptible to network attacks. Whether it comes from exploiting known zero-day vulnerabilities of computer operating systems or known vulnerabilities of outdated software/equipment, near-peers will successfully attack vulnerable systems. If these systems also feed personnel location information (PLI) or other information into a COP, there is the potential that malicious actors will populate false data, or potentially infect a friendly COP. These impediments would impact the commander's decision making cycle.

First among equals. While MDO is being conceptualized by the U.S. Army, the responsibility to coordinate, integrate, and synchronize MDO across the United States Government (USG)¹ should reside at the functional combatant command (FCC) level. FCCs operate worldwide across geographic boundaries and provide unique capabilities to geographic combatant commands (GCCs) and Services while GCCs operate in clearly delineated areas of operations and have a distinctive regional military focus. The FCC needs to be identified with responsibilities codified in the Unified Command Plan (UCP) providing operational instructions, and command and

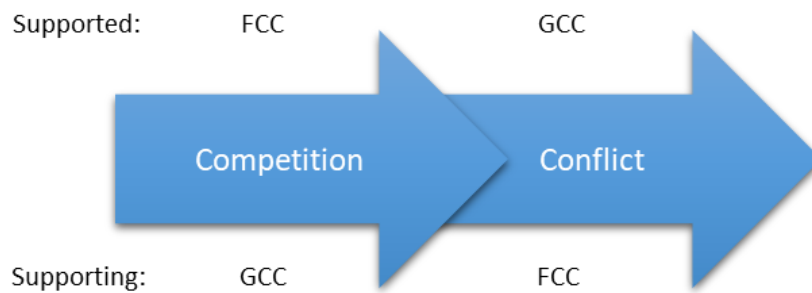


Figure 3: MDO Supported vs. Supporting CMD Relationship

¹ Implied task would provide the authority and responsibility of DOD to coordinate and task across the interagency community.

control (see Figure 3) to the Armed Forces, and address organization, training, and resourcing. To achieve unity of effort across the USG, requirements, resources, and detailed planning considerations need to be codified in a concept plan (CONPLAN) for the GLOBAL CAMPAIGN TO COUNTER DOMAIN SUPERIORITY (or achievement of full-spectrum superiority, Joint Publication 3-0, Joint Operations). The multi-faceted and resource-intensive nature of conducting MDO against a near-peer adversary extends beyond the reach of a Multi-Domain Task Force (MDTF) Commander. Whereas a FCC commander has the insight to look across the various lenses of MDO and possesses the resources and knowledge base to understand when and from whom to rapidly bring resources online.

A transition to conflict with a near-peer competitor may lead to LSGCO, but to achieve the competition continuum the USG must synergistically employ all domains to obtain full-spectrum superiority. To accomplish this the DOD must identify a FCC to coordinate, integrate, and synchronize MDO across the USG. The challenges ahead will need to address the capabilities required and identify the appropriate Service to accomplish a given function within MDO to eliminate stovepipe solutions. Future warfare will truncate the decision-making timeline as information from an array of sensors across multiple domains floods the COP. Ultimately, MDO is a means to an end which begins with understanding a competitor's COG.