



INTRODUCTION TO INFORMATION OPERATIONS

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The purpose of [information operations](#) (IO) is to affect adversary and potential adversary decision making with the intent to ultimately affect their behavior in ways that help achieve friendly objectives. Information operations is defined as “the integrated employment, during military operations, of information-related capabilities [IRCs] in concert with other lines of operation to influence, disrupt, corrupt, or usurp the decision making of adversaries and potential adversaries while protecting our own.”¹ Deliberate targeting of an adversary’s decision making process is enabled by understanding the cognitive factors related to that process, the information that they use, and how they receive and send information. IO is an integrating function, which means that it incorporates capabilities to plan, execute, and assess the information used by adversary decision makers, with the intent of influencing, disrupting, corrupting, or usurping that process. This is not the same as integrating non-lethal capabilities and activities, which may or may not have a behavior-related objective as their primary purpose.

The decision-making process can be modeled with a cycle of steps referred to as the observe, orient, decide, act (OODA) loop.² The steps of this model occur within the information environment and consist of three targetable dimensions: 1) informational, 2) physical, and 3) cognitive.

The information dimension represents the content of the information used by the decision maker. Once someone applies meaning to any data element, the data element is transduced into information. This distinction is subtle; but the impact is profound.

Not all data is transmitted by electronic means. A handwritten note or the sound of an explosion conveys data, but the predetermined meaning applied to either the data on the note, or acoustical data will cause the recipient to act or not to act.

The cognitive dimension is where the decision maker transforms the data from the physical dimension into meaningful information. While we can’t directly target the adversary’s cognitive processes, we can indirectly target them through the information

¹ Joint Publication (JP) 3-13, [Information Operations](#).

² Annex 3-0, [Operations and Planning](#).

and physical dimensions. This is accomplished by understanding the adversary's culture, organization, and individual psychology, which enables us to affect the adversary's OODA loop and ultimately their behavior.³

IO is fundamental to the overall military objective of influencing an adversary. IO involves synchronizing effects from all domains during all phases of war through the use of kinetic and non-kinetic actions to produce lethal and non-lethal effects. The planning and execution processes begin with the commander's operational design that guides planners as they coordinate, integrate, and synchronize the IRCs and other lines of operation. IO planning should be integrated into existing planning processes, such as the [joint operation planning process](#) (JOPP). IO planning is not a standalone process. In fact, JP 5-0 clearly identifies IO as a key output resulting from course of action development.

Additionally, IO is complementary to the practices, processes, and end goals of an [effects-based approach to operations](#). IO facilitates targeting development and intelligence requirements, and matches actions with intended messages. Through planning, execution, and assessment processes, IO provides the means to employ the right capabilities (kinetic and non-kinetic) to achieve the desired effects to meet the combatant commander's objectives while supporting the commander's communication synchronization strategy.

INFORMATION OPERATIONS DEFINITIONS AND DESCRIPTIONS

Commander's Communication Synchronization⁴: [Commander's communication synchronization](#) (CCS) is the Department of Defense's primary approach to implementing United States Government (USG) strategic communication guidance as it applies to military operations. The CCS is the joint force commander's (JFC's) approach for integrating all IRCs, in concert with other lines of effort and operation. It synchronizes themes, messages, images, and actions to support the JFC's objectives. Commander's intent should be reflected in every staff product. Air Force component commanders should similarly conduct their own commander's communication synchronization program. This component level communication synchronization coordinates themes, messages, images, and actions to support the commander, Air Force forces' objectives

Information Environment. The [information environment](#) is defined as "the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information."⁵ The information environment is comprised of the physical, informational, and cognitive dimensions. IO primarily focuses on affecting the cognitive dimension, where human decision making occurs, through the physical and information dimensions.

³ JP 3-13, [Information Operations](#).

⁴ Joint Doctrine Note 2-13, [Commander's Communication Synchronization](#).

⁵ JP 3-13, [Information Operations](#).

Information-Related Capabilities. IRCs are defined as “tools, techniques, or activities using data, information, or knowledge to create effects and operationally desirable conditions within the physical, informational, and cognitive dimensions of the information environment.”⁶ IRCs create both lethal and nonlethal effects. When IRCs are employed with the primary purpose of affecting the cognitive dimension, it is typically considered IO. IRCs may also include activities such as counterpropaganda, engagements, and shows-of-force, as well as techniques like having the host nation designated as the lead for night raids or not using dogs to search houses. IRCs can be employed individually or in combination to create lethal and non-lethal effects supporting a wide range of missions and objectives.

Informational Dimension. The informational dimension encompasses where and how information is collected, processed, stored, disseminated, and protected. It is the dimension where the command and control (C2) of military forces is exercised and where the commander’s intent is conveyed.

Physical Dimension. The physical dimension is composed of C2 systems, key decision makers, and supporting infrastructure that enable individuals and organizations to create effects. The physical dimension includes, but is not limited to, human beings, C2 facilities, newspapers, books, microwave towers, computer processing units, laptops, smart phones, tablet computers, and any other objects that are subject to empirical measurement. The physical dimension is not confined solely to military or nation-based systems and processes; it is a defused network connected across national, economic, and geographical boundaries.”

Cognitive Dimension. The cognitive dimension encompasses the minds of those who transmit, receive and respond to, or act on information. These elements are influenced by many factors, including individual and cultural beliefs, norms, vulnerabilities, motivations, emotions, experiences, morals, education, mental health, identities, and ideologies.

Target Audience. A [target audience](#) is defined as “an individual or group selected for influence.”⁷

⁶ JP 3-13, [Information Operations](#).

⁷ JP 3-13, [Information Operations](#).