

Improving Intelligence Support for Operations in the Information Environment

There has been a recent surge in interest in the information environment (IE) across the U.S. Department of Defense, accompanied by growing awareness of operations in the IE (OIE) and the effects they generate. Yet, there is still not sufficient appreciation across the joint force for what these operations can contribute. Defense intelligence organizations excel in providing detailed enemy orders of battle and other related and valuable products, but many of these products fail to encompass important aspects of the IE.

These shortfalls are compounded by a lack of coordination and understanding between the information operations (IO) and intelligence communities, hindering the ability to strategically plan and conduct OIE. In the meantime, near-peer competitors are actively engaged in the IE, investing in capabilities and waging information campaigns that threaten U.S. interests.

Both intelligence and information efforts have long been core components of U.S. military operations, and information is the essence of both communities. What distinguishes them is how each community compiles, sorts, analyzes, and uses information.

Numerous changes to policy and doctrine have emphasized the importance of leveraging the inherent informational aspects of military operations, illustrated by the elevation of information to the status of a joint function. But countering adversaries in the IE requires both a clear understanding of the environment and an

KEY FINDINGS

- The information operations community needs to increase understanding and awareness of operations in the information environment (OIE) within the intelligence community to bring about improvements in how these operations are planned and conducted.
- Challenges to meeting the intelligence needs of OIE fall into six categories: coordination and collaboration, division of labor, missing expertise, prioritization, gaps in concepts or doctrine, and intelligence authorities.
- Intelligence and information operations professionals need to work together to address these challenges.
- Potential solutions will require improving processes, prioritizing support for OIE and associated capability integration, expanding training and education opportunities for personnel involved with OIE, and allocating personnel appropriately.

ability to conduct operations in and through the IE. The first capability is the responsibility of intelligence practitioners and the second is the responsibility of IO practitioners.

Gaps in Awareness and Understanding of Roles and Responsibilities

There is friction between the intelligence and IO communities over whose responsibility it is to collect the information and conduct the analyses necessary to support OIE. A primary reason is a lack of shared processes, common lexicon, and understanding of what the other community does. For example, IO practitioners may have difficulty drafting actionable requests for intelligence, and intelligence personnel may have difficulty fulfilling these requests as a result.

To support IO practitioners, intelligence personnel must be familiar with the types of information that are relevant to OIE. Conversely, IO practitioners must be familiar with intelligence resources and processes for how information is collected, analyzed, and disseminated. Gaps in understanding impede close coordination between the two communities and lead to missed opportunities and reduced operational effectiveness.

Even when there is understanding and awareness of these communities' respective roles and responsibilities, commanders and staffs often do not fully consider or adequately integrate information activities, capabilities, and operations into military exercises or campaigns. Low levels of priority and support for OIE-related intelligence requirements have left these requirements unmet and have driven information professionals to gather needed information themselves from alternative sources, raising concerns about analytic quality and oversight.

A lack of shared processes is a significant barrier to effective coordination and collaboration between the intelligence and IO communities. To some extent, this is a symptom of a broader issue: Doctrine and policy are still catching up with the demands of operating in the IE, and they do not sufficiently address many of the challenges that U.S. forces will continue to face moving forward. Even when new doctrine and standardized processes are in place, they have not been broadly adopted across the joint force. Addressing these process shortfalls would improve intelligence support for OIE across the joint force, from intelligence collection and

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analysis to how intelligence products are requested, produced, and disseminated.

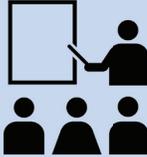
Both intelligence and IO professionals need training to effectively support and conduct OIE. Just as policy and doctrine are continually adjusted and updated, training and education must evolve as needs change if U.S. forces are to effectively engage in the IE. Currently, there are few opportunities for formal training and, as a result, few personnel with the expertise necessary to develop and respond to requests for intelligence support for OIE.

Challenges to Improving Intelligence Support for OIE

A review of guidance, doctrine, and documentation on the information requirements for OIE, along with interviews with subject-matter experts, highlighted 40 challenges to effective intelligence support for OIE, which fall into six general categories:

1. **Coordination and collaboration:** A lack of mutual understanding, underdeveloped or nonexistent relationships, and immature or absent shared processes hinder coordination and collaboration.
2. **Division of labor:** Challenges stem from tensions over who should be responsible for staffing

Four Approaches to Better Integrating Intelligence and IO Activities

Improve processes	Prioritize support	Train and educate	Allocate personnel
 <p>26 unique solutions</p> <p>Process solutions address shortcomings or deficiencies in existing processes in the intelligence and IO communities.</p> <p>Overview of solutions</p> <p>Improve support for OIE by increasing mutual awareness of processes and practices across the two communities.</p>	 <p>16 unique solutions</p> <p>Prioritization solutions address gaps in support for OIE due to low priority or competition for resources and attention at all levels.</p> <p>Overview of solutions</p> <p>Ensure that intelligence requests are vetted for importance and clarity, prioritize analytic support for OIE, and ensure that intelligence products are relevant and useful.</p>	 <p>13 unique solutions</p> <p>Training and education solutions address gaps in expertise and understanding of intelligence requirements for OIE.</p> <p>Overview of solutions</p> <p>Promote a common lexicon, provide OIE-specific training to intelligence professionals, and educate IO professionals about the targeting process and the production of intelligence estimates and assessments.</p>	 <p>12 unique solutions</p> <p>Personnel solutions address manpower shortages in the near term. There is also a need for a longer-term effort to create a body of intelligence professionals dedicated to OIE.</p> <p>Overview of solutions</p> <p>Dedicate personnel to IE-related intelligence requirements, designate a liaison to improve coordination, create cross-functional teams, and clearly assign responsibilities.</p>

decisions and information fusion, as well as expectations regarding analytic rigor.

3. **Missing expertise:** Gaps in the skills and knowledge necessary for effective analysis of the IE are largely the result of shortfalls in training and education.
4. **Prioritization:** Challenges stem from a failure to sufficiently prioritize intelligence and IO integration or the IE. Requirements could be met but are not because scarce resources are allocated elsewhere.
5. **Gaps in concepts or doctrine:** New concepts have been disseminated at both the joint and service levels, and accompanying doctrine is being written. When doctrine and concepts are in a state of flux, practice inevitably lags.
6. **Intelligence authorities:** Rules and oversight mechanisms that apply to the intelligence community (e.g., limiting the ability to collect information on U.S. persons) may have implications for open-source intelligence collection in support of OIE.

Solutions to Address Challenges and Improve Support for OIE

RAND researchers identified four approaches—spanning 67 unique solutions—for improving how the joint force organizes for, invests in, conducts, and promotes intelligence support to OIE. Between one and five solutions apply to each of the 40 challenges. Responsibility for implementing the solutions will vary but will require effort on the part of intelligence organizations, IO organizations, and other key stakeholders, such as command-level staffs and the wider U.S. intelligence community.

Joint operations rely on the integration and synchronization of all joint functions. Successfully integrating intelligence and IO capabilities in support of OIE presents additional opportunities to strengthen relationships with other functional areas, such as command and control, maneuver, fires, force protection, and sustainment. Doing so would enhance awareness and appreciation for OIE and the critical role of IO and intelligence capabilities across the spectrum of military operations.

Recommendations for IO Organizations

IO organizations must be champions for OIE within the joint force. That includes a responsibility for raising awareness of the important contributions of information activities, capabilities, and operations in the context of all military activities and operations.

- Promote greater understanding and awareness of OIE and the importance of capability integration, particularly among intelligence personnel and commanders.
- Ensure that IO personnel work with intelligence personnel to improve coordination and establish and routinize processes.
- Assign IO liaison officers to intelligence organizations to establish better communication, build shared understanding, help educate intelligence personnel, and create intelligence products that are more focused on the IE.
- Leverage the targeting expertise of intelligence personnel to train IO personnel on the targeting process, and ensure that the nonlethal effects of targeting (the focus of OIE) receive the same priority as lethal effects.

Recommendations for Intelligence Organizations

Intelligence organizations also have a part to play if the joint force is to get better at OIE. These organizations already have well-developed doctrine and analytic processes, but they need greater awareness of the requirements for OIE or they will not be able to provide adequate support for these operations in the form of data collection, analysis, and intelligence products focused on the IE.

- Formalize and expand training, particularly for personnel who will be working alongside their IO peers at combatant commands.
- Designate an organization to be responsible for IE-related intelligence analysis. This will raise awareness of current shortfalls in support, help align resources, and, potentially, lead to the creation of an IE specialization for intelligence personnel.
- Create cross-functional analytic teams to better integrate intelligence functions and increase attention to the IE.

This brief describes work done in the RAND National Security Research Division and documented in *Intelligence Support to Operations in the Information Environment: Dividing Roles and Responsibilities Between Intelligence and Information Professionals*, by Michael Schuille, Anthony Adler, Jonathan Welch, Christopher Paul, and Richard C. Baffa, RR-3161-EUCOM, 2020 (available at www.rand.org/t/RR3161). To view this brief online, visit www.rand.org/t/RB10134. The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.

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