

DISTINGUISHING ACTS OF WAR IN CYBERSPACE: ASSESSMENT CRITERIA, POLICY CONSIDERATIONS, AND RESPONSE IMPLICATIONS

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Currently, there is no internationally accepted definition of when hostile actions in cyberspace are recognized as attacks, let alone acts of war. The goal of this monograph is to provide senior policymakers, decisionmakers, military leaders, and their respective staffs with essential background on this topic, as well as to introduce an analytical framework for them to utilize according to their needs. The scope of discussion focuses on Department of Defense actions presented in the context of other U.S. Government organizational dynamics as well as key international considerations. It is limited to issues in a contemporary time frame vice any future projections. While the primary emphasis is on analyzing cyberspace incidents to support decisionmakers, it is necessary to provide insight into the consequences of the assessment by examining the appropriate types of responses; it is not intended to prescribe how to select these courses of action.

The monograph has four main sections:

- **Characterization.** This section provides the notional foundation necessary to avoid any devolution of the analysis to mere semantic arguments. It presents how cyberspace is defined and characterized for this discussion, as well as how this compares to existing concepts of the traditional domains of land, sea, air, and space. Also, it identifies some of the unique technical challenges that the cyberspace domain may introduce into the process of distinguishing acts of war.
- **Assessment Criteria.** This section explores the *de jure* and the *de facto* issues involved with assaying cyber incidents to determine if they represent aggression and possible use of force; and, if so, to what degree? It reviews the

traditional legal frameworks surrounding military action to include the United Nations (UN) Charter and the Law of Armed Conflict. It also examines how these compare to the recently published Tallinn Manual on the International Law Applicable to Cyber Warfare. From these sources, it proposes a cyberspace incident assessment methodology.

- **Policy Considerations.** Having identified viable criteria to aid with the assessment of cyberspace incidents, this section looks at the policy considerations associated with applying such principles. First, it examines the relevant U.S. strategies; next, it investigates the strategies of other key countries and international organizations and how they compare to U.S. tenets; and finally, it evaluates how nonstate actors may affect U.S. deliberations.
- **Courses of Action.** This section examines the influences that course of action development and implementation may have on the assessment of cyberspace incidents. It first looks at the President's role as the primary decisionmaker in U.S. national matters regarding cyberspace. It then surveys key influences affecting subordinate decisionmakers and their staffs that may be advising the commander in chief: reliable situational awareness, global and domestic environment considerations, and options and their related risks and potential consequences.

Any reader expecting a perfect solution for this conundrum will be disappointed, as the examination is more about the journey than the destination. In the

end, many of the challenges with this issue are common with those of the traditional domains; however, the complex and dynamic character of the cyberspace domain introduces unique vexations for senior policymakers and decisionmakers.

The conclusion of this monograph includes recommendations that the author hopes will aid in the positive evolution toward a better understanding and mitigation of the fog and friction surrounding the distinction of acts of war in cyberspace.

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