

Abstract Submitted for the 12<sup>th</sup> ICCRTS

**Whole of Government Operations,  
Networking, and Complexity**

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In the wake of coalition operations from Bosnia and Kosovo to Iraq and Afghanistan, there has been a growing focus on the social and cognitive aspects of the on-going competition and conflict between disparate complex adaptive systems of systems. This focus has been accompanied by a growing consensus that responses confined to combat operations are no longer enough and that comprehensive whole of government, whole of nation, or whole of coalition action are needed.

The social and cognitive focus demands that we take into account the vastly different perceptions of friends, foes, neutrals and domestic polities all of whom will be affected by any action we take as well as the coordination of our own diverse actions to achieve a unity of impact and to avoid effects fratricide. It also underlines a need to acquire, vet, analyze, understand, and use complex, internalized “expert” knowledge in a plethora of subject areas, a requirement that extends far beyond data and information sharing and far beyond any single agency, organization and even nation. Finally, it demands we take a new look at planning across the whole of a government or coalition and at the nature of coalitions, the edge of intra-coalition consensus, and the strengths that, as Ashby’s Law suggests, coalitions can bring to bear in competition with an asymmetric complex adaptive system.

However, such a comprehensive approach poses challenges for how we think about command and control and how we organize ourselves and to our understanding of networking and command and control. This paper proposes to assess the changes implied and their impact on whole of government/ nation/ coalition operations.