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*Capturing Commander’s Intent in User Interfaces for Network-Centric Operations*

Track 4: Cognitive and Social Issues

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## Capturing Commander's Intent in User Interfaces for Network-Centric Operations

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The network-centric concept of operations is predicated on increased availability of information at every node in the network. That information is the result of both efficient fusion of disparate sensor inputs into a coherent “picture,” and efficient sharing of situation awareness among operators supporting the combatant commander. A difficulty arises in that for both the sensors and the operators, increasing information availability is insufficient to assure either the coherency of the “picture,” or the common understanding of it. Experience and research have shown that interface concepts focused on Commander's Intent can provide an integrating function for both operators' shared understanding of the situation and the netted sensor assets. By basing both the logic employed in the netted sensors' management and the method of visualizing the shared “picture” around Commander's Intent, synergies anticipated from network centric operations may be reasonably achieved. This paper describes both a notional design framework for a common user interface for command and control operations, and also notional prioritization logic for sensor management. It is based on 25 years of combined experience operating, managing the development of, and researching human interfaces for, command and control technologies.