

USAF Scientific Advisory Board
2004 Summer Study
Networking to Enable Coalition Operations
Terms of Reference

Background

The US Air Force has begun migration toward a transformational network-enabled force. At the same time, collaboration with coalitions has become increasingly important in warfare for both political and access reasons. However new systems and technologies that enable networked operations are not always available or affordable to coalition partners. As a result, US Air Force and allied/coalition partner systems are diverging technologically. Instituting coalition net centric operations will require the mixing and matching of diverse systems to achieve desired capabilities. Network-enabled collaboration can be achieved through appropriate data links, proper allocation of tasks to coalition partners that best exploit the capabilities of their systems, the use of the network to compensate for inadequacies of participating systems, and the use of collaborative multi-level secure systems among coalition command centers. A networked collaborative force need to be designed to provide a more effective total coalition force in anticipation of future operations. Many important lessons from OEF and OIF were learned which must be incorporated.

Study Products

Briefing to SAF/OS & AF/CC in October 2004. Publish report in December 2004.

Charter

The study should identify and provide recommendations on the following issues:

- Operational Concept(s) for a networked coalition.
- A roadmap for integrating or federating US and ally/coalition partner systems into a Net Centric system-of-systems to enhance collaboration
- A set of high payoff opportunities for enhancing interoperability while maintaining a proper level of security among component systems. Suggest technology releasability guidelines for classes of potential coalition partners.

Scope Limitations

Because of the large number of potential coalition partners, and the unique capabilities of each partner, this study could easily exceed the bounds of what the SAB is capable of completing as a summer study. Therefore the study should not attempt to address all possible coalition partners, but only a small representative set of specific countries.