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Research Report

Lessons Learned from the Afghan Mission Network

Developing a Coalition Contingency Network

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Summary

This report discusses key lessons learned from the development and evolution of the Afghanistan Mission Network (AMN) and the lessons born of this effort that are of relevance to the development of future coalition contingency networks. Increasingly, U.S. military operations depend on the support of coalition partners and the networks, like the AMN, that link them. The AMN, a coalition (NATO) funded, sustained, and maintained initiative, was implemented in 2010 and was created as a common network from a collection of national and NATO networks. The AMN is now the primary Coalition, Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C5ISR) network in the Afghanistan Combined Joint Operations Area (CJOA-A). By providing a common network[2] over which to share critical information, the AMN enabled a shift in information-sharing posture from "need to know" to "need to share," resulting in an increase in situational awareness (SA) among International Security Assistance Force (ISAF) partners. The end result of this effort has been greater situational understanding and serves as an object lesson in how to approach coalition networking. Although the AMN is not an end-state, it provides valuable concepts and processes for future similar efforts.

OEF, ISAF, and Timeline

The following timeline (Table S.1) shows the major events that shaped the evolution of the AMN. It is critical to analyze the AMN in the context of ISAF's progressively expanded mission. Our analysis fully takes this into account and evaluates the AMN from operational *and* technical perspectives. We determined that the AMN represents not only the physical communications network but also the operational context that drove network requirements and shaped the coalition's approach to developing the network. Each of these elements of the AMN's origin and evolution has important implications, discussed in subsequent chapters, on the development of future coalition networking efforts.

Methodology

The findings presented in this report are based upon the study team's literature review, multiple site visits (including visits to operations centers in Afghanistan), presentations and briefings generated by the agencies involved in creating and maintaining the AMN (including

[2] We define a "common mission network" as a federation of partially self-governing networks that share data and data storage and have agreed to follow pre-established interoperability standards allowing real-time exchanges of information supporting shared situational awareness.

Table S.1
OEF, ISAF, and AMN Timeline

Year	Key Operational Events	Key AMN Events
2001	• OEF commences • Taliban ousted • Republic of Afghanistan Established	
2003	• NATO assumes ISAF leadership • ISAF's mandate expanded beyond Kabul	
2004	• ISAF expands into Northern Afghanistan	
2006	• ISAF expands to Western Afghanistan • ISAF expands to Southern Afghanistan • ISAF expands to Eastern Afghanistan	• Mail exchange between US CENTRIXS GCTF and ISAF-S • UK Overtask interoperability initiative
2008	• GEN David McKiernan assumes ISAF leadership • U.S. forces increased by 4,500	• Genesis of federated AMN concept at Qatar NETOPS conference
2009	• U.S. forces increased by 17,000 • U.S. forces increased by 4,000 • GEN Stanley McChrystal assumes ISAF command • U.S. forces increased by 30,000	• GEN McKiernan endorses AMN concept
2010	• NATO launches Operation Moshtarek in Helmand	• GEN McChrystal orders coalition information sharing on single network • Stryker Brigade moved onto AMN prior to deployment • AMN Initial Operational Capability achieved • US CIAV receives USCENTCOM J2 funding
2011		• 48 NATO and Partner Nations operating on AMN

NOTE: This timeline is based upon information gleaned from various sources listed in Appendix A: OEF, ISAF, and AMN Timeline.

U.S. and NATO institutions), and information gleaned from interviews and discussions with numerous subject matter experts and organizations involved in the development of the AMN.

Overview of the Report

This report is divided into three chapters. Chapter One provides a short history of OEF (Afghanistan) and describes the formation of ISAF. Chapter Two provides a short history of and key milestones in the development of the AMN. Chapter Three presents our analysis of the evolution of the AMN and what we consider to be key takeaways when considering the development of future coalition contingency networks.