12th ICCRTS "Adapting C2 to the 21st Century"

COAT: Communications Systems Assessment for the Swedish Defence

Suggested topics: C2 Metrics and Assessment, C2 Technologies and Systems

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Abstract

The transformation of the Swedish Defence has substantially increased and changed the demands on the communication systems needed to support its future missions. Sweden focus on international missions and its role as framework nation for the Nordic Battle group further emphasize this. Increasing demands for interoperability, fast response, unknown mission areas and heterogeneous operating environments make the assessment of communications systems hard and complex. Our conclusion is that our traditional assessment methods no longer are satisfactory.

The COAT project aims to develop a user-centric, well-structured and traceable methodology for the assessment of communications systems. The development is focused on capabilities related to the technical parameters of the communications system, but the goal is to provide a method to express how these contribute to higher-level C2 capabilities and, ultimately, to tactical effects.

The methodology should, ideally, be applicable at any point in the life cycle of communications systems, from the study of evolving technologies, R&D, acquisition, operational use, to replacement and decommissioning.

This paper will discuss the ideas behind the development, our methodology and some implications for assessment of complex systems.