Project Overview

The changing security environment, the use of diverse and innovative technologies, and the changes in the NATO Command Structure and NATO Force Structure are challenges that require NATO to modernize its Command and Control (C2) strategy, principles and procedures. As such, and in light of NATO’s C2 Vision 2030, Supreme Allied Commander Transformation (SACT) directed the HQ SACT Capability Development Command & Control, Deployability & Sustainability Division to develop the NATO C2 Capstone Concept to support the implementation of the C2 Vision 2030.

In this respect, SACT tasked the Joint Analysis and Lessons Learned Centre (JALLC) to analyse the Observations, Lessons, and Best Practices (OLBP) from key NATO activities in order to make recommendations that support development of the 12 Functional Concepts within the NATO C2 Capstone Concept.

The project team analysed NATO’s C2 Conceptual Model as presented in the NATO C2 Capstone Concept in light of the problem statements and objectives defined for the 12 proposed Functional Concepts and their potential similarities with other NATO concepts and initiatives. The analysis was based on a review of over 200 documents (Periodic Mission Reviews; Final Exercise Reports; Lessons Learned Reports; Lessons Identified Action Plans/Lessons Identified Action Lists; JALLC Analysis Reports; and concept development documents) which resulted in 1201 OLBP’s that were collated in a database. This database, which contains valuable information, not only for this project but also for the Alliance in general, was uploaded to the NATO Lessons Learned Portal,* NATO’s centralized hub for Lessons Learned related information, where it can be easily accessed for future use. In addition to the database, the project team sent a survey to the members of NATO’s Consultation, Command, and Control (C3) Board and representatives of non-NATO Nations in order to identify national efforts for C2 concept and/or capability adaptation.

“The development of the Functional Concepts will facilitate the implementation of the C2 Conceptual Model described in the NATO C2 Capstone Concept”

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* NATO Secret version
Conclusions
The overall conclusion of this study is that the OLBPs collected by the project team justify the various C2 features addressed through the Functional Concepts within the NATO C2 Capstone Concept. Moreover, the development of the Functional Concepts will facilitate the implementation of the C2 Conceptual Model described in the NATO C2 Capstone Concept.

However, improvement to the C2 Capstone Concept is still possible through the refinement of the Functional Concepts’ problem statements and objectives. Specifically, in the context of the four phases of the proposed C2 Conceptual Model: Connecting, Collecting, Decision Making, and Effecting.

Additional conclusions drawn from the study include that a significant number of OLBPs relating to different C2 aspects could not be associated with any of the 12 proposed Functional Concepts. In the context of further development of the C2 Capstone Concept, these Other C2 Aspects may either need to be addressed in the (existing or even new) Functional Concepts or covered in the phases of the C2 Conceptual Model.

Recommendations
From the analysis of the data, the project team were able to make a number of recommendations. Among these recommendations, perhaps the most significant is the recommendation to review the NATO C2 Capstone Concept with regard to the current stove-piped development of the FCs to cover a more transversal approach (depicted below) which may result in a better integrated, coherent, and comprehensive implementation of the NATO C2 Capstone Concept. In conjunction with this recommendation, the project team also suggested to simplify the structure of the model to just seven Functional Concepts (rather than 12) which better reflect what was found from analysing the OLBPs.

The project also suggested that the Functional Concepts should be clearly described and delineated with other NATO initiatives, such as the Strategic Awareness Concept, the Persistent Federated Approach, and the Capstone Concept for Comprehensive All-Domain Operations. However, it will be important to take into consideration that these Functional Concepts need to be continuously reviewed to reflect the challenges and opportunities resulting from changes in the upcoming operating environment.