

Supporting the JWC's Communications Infrastructure

Communications and information systems (CIS) are the backbone of all that we do at the Joint Warfare Centre. Much as all of modern life relies heavily on computers and personal electronic devices, NATO's operational-level training hinges on technology.

By Lieutenant Colonel Benjamin White

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NATO has a large and diverse CIS infrastructure and is moving towards an enterprise approach of common and shared systems. The considerable promises of these future developments are not without challenges in implementation, and the Joint Warfare Centre (JWC) has a number of unique requirements. For its mission of training other organizations through demanding exercises, the JWC has developed a number of highly technical networks and processes for the simulation and global coordination of exercise activity. As the challenges facing NATO continue to diversify in the 21st century, it is necessary to continue to develop these tools. This generates its own challenges for CIS, as the speed and complexity of exercise activity must be supported by ever more capable equipment and networks. These core NATO networks and unique JWC networks are all directly supported by the NATO Communications and Information (NCI) Agency and the local CIS Support Unit in Stavanger (CSU Stavanger).

The JWC's CIS Branch was created in 2015 to work with the NCI Agency as its customer. The idea is to provide a more detailed focus on budget matters and to look at a longer planning horizon. This separation is also to permit a detailed focus on the annual service level agreement (SLA) negotiations with the NCI Agency, which will deliver these requirements.

The SLA process is lengthy and time-consuming, requiring careful forecasting, as every service or item provided to the JWC staff and exercising



CIS Planning

The focus of CIS planning is to get the proper user requirements, to understand the training concepts and to overcome resource limitations. The aim is to provide the JWC's Advisory Team (wherever they may be deployed) with the best possible CIS service support, often in highly demanding distributed exercise environments, spanning different network classifications and information domains.

personnel (from the number of monitors and software licenses through to printers and hours of helpdesk support) has to be captured and costed. To accomplish this, the CIS team, made up of two civilian and six military staff members, handles all change proposals using established information technology processes for service management. More specifically, the team ensures that any proposed changes to our networks and equipment are captured, reviewed, and endorsed before implementation. The aim is to ensure the NCI Agency can maintain the networks and protect our information correctly. This also helps maintain control of the financial aspects of changes to ensure the SLA is updated as required.

The CIS points of contact at the JWC are staff members in other branches appointed as “first contact” for staff who have a new requirement for CIS assistance. CIS then reviews the technical and financial implications of changes with the CSU and works towards procuring or solving this new requirement.

In addition to helping to plan and account for current NCI support to the JWC, the CIS Branch also looks forward in order to forecast future requirements. This will be informed by an understanding of the work of the exercise planning teams and the guidance from NATO Headquarters on the scale and complexity of exercises. Development of our unique exercise simulation networks will then be costed and budgeted to ensure exercises have the correct quality for training audiences undergoing training.

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BELOW

CIS staff at the
JWC Data Centre





ABOVE
Staff members from
NATO Communications
and Information (NCI)
Agency CIS Support
Unit in Stavanger
(CSU Stavanger)

This has to be done in an environment where technology and user expectations are changing rapidly, though some of our equipment and networks are naturally funded and upgraded on more traditional timelines.

Apart from the main CIS duties, there is also a continuous requirement to assist with infrastructure planning and other developments at the JWC site. With great support from our host nation Norway, the JWC has a number of major building projects and refurbishments underway, and the CIS Branch will play a role in ensuring that they are fitted with the necessary communications infrastructure in line with NATO standards. This will permit NATO networks to be installed and used correctly.

As the JWC staff requirements evolves, CIS Branch seeks to support these changes with new services and equipment. With the recent drive for distributed and remote working options, there has naturally been a greater focus on laptops and other mobile devices to make online collaborative working more effective. The importance of maintaining the confidentiality and integrity of NATO's information remains critical and a great challenge as communication networks and equipment develop. CIS has a role in considering the implications of every change and service to help ensure that NATO's information is protected. ✦

Lieutenant Colonel Benjamin White

is the CIS Branch Head since 2020. He has been deeply involved with the implications of NATO's IT modernization on the JWC, making use of his prior experience with contracting and static networks in the United Kingdom.