

The Command & Control Support Centre

Royal Netherlands Army



Command and control is at the heart of military operations. Good command and control is not possible without the correct information. Being able to generate a complete overview of the actual situation or not makes during operations the difference between success and failure. Command and control, after all, is based on the picture of the current situation. There is, therefore, a great requirement for complete, current and accurate information services. In order to improve information services for commanders, the Royal Netherlands Army established the Command & Control Support Centre (C2SC) in 2001. The C2SC is responsible for developing, testing and implementing systems that support command and control. In addition, the C2SC has been charged with maintaining and supporting the information systems that have already been implemented.

Products

The package of products provided by the Command & Control Support Centre is multifaceted. In the first place, the C2SC provides situational awareness tools, including BMS, ISIS and C2WS, which can show images of the current situation during operations graphically. The package also includes the ICT infrastructure (TMS, TITAAN) needed to support those tools. In addition to data exchange, it also includes communication in the form of fax, voice and video between individuals and groups through teleconferencing. And it must all be possible in every area of operations that military units could potentially be committed. That includes, of course, areas where there is little or no basic infrastructure available. The fact that military units must be capable of being mobile presents specific challenges for the construction of such systems. As a final component, the Command & Control Support Centre provides the Advanced Fire Support Information System (AFSIS).

Developing and testing

The development of (new) systems is a costly and risky process. In order to take the many important factors into account, the C2SC develops its products in an evolutionary way. In this case, that means in manageable and controllable parts. The following principle applies:

Plan a little, build a little, field a little and learn a lot.

In practice, that means that far-ranging packages of requirements are not drawn up in advance, after which a turnkey product is built that is nearly obsolete by the time it is completed. Within the C2SC, products are designed in manageable, requirement-focussed parts (*Plan a little*). Components are then developed and tested step by step (*Build a little*). Prototypes are then tested in practice with users (*Field a little*). At each step, the product is looked at as critically as possible in order to discover new possibilities and limitations that will lead to improving the components and the total product can be developed further (*Learn a lot*). During the whole process, the specific requirements and wishes of the users are taken into consideration as much as possible. The requirements that a soldier in the field has for an information system is different, after all, from the requirements that a command post has. If only the format of the hardware.

Interoperability

Despite their modular construction, all of the products are strictly checked for compatibility with other systems that are important for command and control. That cooperation with other systems is ensured through the application of the principle "building under architecture". To that end, a project-spanning (global) architecture framework is used to link the planning of systems. By formulating starting principles, conditions, models and design frameworks, working within that architecture is monitored. The result is that all of the Command & Control Support Centre systems are inherently capable of exchanging information (interoperable). That is a primary requirement for implementing the concept of *Network-centric Warfare* (NCW), which is becoming increasingly important within the Royal Netherlands Army.

The concept of Network-centric Warfare is designed to improve military operations through the use of the potential of information and communication technology. Through the effective and transparent linking of command elements, sensors, weapon systems and information systems in a single network, operational information services are improved and operational processes and military doctrine can be optimised.

(For more information on Network-centric Warfare, see: Tom Garska, Network Centric Warfare)

The Command & Control Support Centre's systems are designed to provide as complete and up to date a picture of the area of operations as possible. It must be possible to exchange all relevant information among the units involved quickly and accurately. The resulting picture of the actual situation must be the same for everyone and capable of being interpreted simultaneously. Enabling the Royal Netherlands Army to perform better, both in combat and during peacekeeping, by providing a well-organised network of information. That is the mission of the Command and Control Support Centre.



The organisation of the Command and Control Support Centre

The Command and Control Support Centre consists of five sections headed by the command group.

Development Section

All products are produced virtually entirely in-house. As much use as possible is made of existing commercially available civilian hardware and software components. Following the principle of smart integration, these individual components are combined in military-specific systems.

The section is therefore required to keep up to date with technological developments and to investigate whether they present opportunities for application in C2 systems.

Policy support and architecture

The policy support and architecture section monitors the interoperability and manageability of the Command & Control systems. That lays the basis for innovative development. The section does that in three ways. Firstly, by carrying out studies and experiments. Secondly, by developing, describing and maintaining the Global architecture framework. And thirdly, by enforcing the application of the architecture within project development. In addition, this section provides support to the Army Staff in the area of operational information services and mobile ICT.

System Support and Testing Section

The System Support and Testing Section is responsible for testing and maintenance of the current and future operational command and control support systems. Through testing, the section determines the functional and technical suitability of new components and products for operational use. That includes providing general support to the organisation and testing of exercise and other environments. The latter is done in close cooperation with the Implementation Support section.

As the final important process, the section provides support to all operational systems. That support ranges from a help-desk function, where problems are gathered and identified, to the controlled implementation of changes to existing systems and components.

Implementation Support Section

The Implementation Support Section supports commanders and staffs in the optimisation of command and control. That is done by sharing expertise in and experiences with command & control and other systems and in assisting with the implementation of those systems. The transfer of expertise is done through workshops, training sessions, consultations, assistance and presentations. This is not limited to investigating the potential of the command & control systems, but goes as far as the organisation of the command & control process itself. The ultimate goal is the make command & control more effective and efficient.

Management Section

The Management Section supports the C2SC's activities through programme management, planning and progress control, procurement, facilities management and network administration. The head of the Management Section is also the deputy commander.

And finally, the Command Group is the staff that includes the commanding officer and the quality managers. The Management Team (MT) is the commanding officer's body for managing the organisation. The commanding officer heads up the MT, consisting of five section heads and the head of the Quality and Knowledge Management Office. The Quality & Knowledge Management Office concentrates on the awareness of the aspect of quality in all activities at all levels, which lead to the products that the clients want, expect and appreciate.

Contact:

Command and Control Support Centre

Postal address:
Elias Beeckman Barracks
MPC 41 A
P.O. Box 9012
6710 HC Ede
NETHERLANDS

Visiting address:
Elias Beeckman Barracks
Nieuwe Kazernelaan 10
Building: 21 Room: 13
6711 JC Ede
NETHERLANDS

Telephone: 0318-683226

Telephone MDTN: *06-678 83226