

**Seminar on Crisis Management and Information Technology
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“Using Commercial Technology in Crisis Management, Case: Finnish Battalion CIS-system in KFOR”

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Ladies and Gentlemen,

<FIGURE 1>

It seems obvious that Communication and Information Systems (CIS) requirements in Crisis Management are constantly increasing. In Finland, this change has been identified with the operations in the Balkans and Afghanistan.

In the start of a Peace Support Operation emphasis is placed on tactical mobility and operational security. High level of interoperability is required to conduct multinational joint operations. Military expediency sets the requirements on the CIS.

As an operation becomes established military CIS systems must be able to meet a new challenge – close consultation and cooperation with civilian crisis management and local authorities.

How should this challenge be met? How to develop CIS roles and responsibilities between military and civilian crisis management? We should look for common solutions in which the possibilities offered by state-of-the-art technology are used. One solution is to move from tailored systems to commonly used systems.

<FIGURE 2>

Originally the CIS systems of multinational forces have been developed from the starting point that a brigade or a division is the smallest national unit. Today the smallest unit in KFOR is a platoon or squad, which must be able to operate smoothly within a multinational force. Interoperability requirements in the first decade of the 21st century are on a completely different category than previously!

It is a fact that tactical CIS- systems developed for warfighting support warfighting tasks, but in PSO their expensive features and capacity are not, in all respects, used or the features are not essential in peace support.

Sustainment of complicated CIS-systems in long-term operations has proved to be problematic. MILSPECsed technology and systems are expensive not only to procure but also to maintain. Many highly skilled specialists are needed in theater to run the systems.

There is a clear demand for a shift from tactical CIS systems to more cost-effective COTS based military CIS.

<FIGURE 3>

It's typical of us Finns to take a pragmatic and cost-effective approach to challenges. Thus we have examined what national strengths and opportunities there are to respond to the described changes and challenges. A new concept had to be created.

The first strength is Finland's position as the leading country in telecommunications.

The second strength is the communications network for security authorities (SecNet). For instance, the Fire and Rescue Services, Police, Frontier Guard and the FDF are connected to this network.

The third strength is the COTS based CIS system for the regional signals units developed for the needs of the territorial defence.

These are the three pillars based on which the new CIS concept was created.

The final requirement to implement the concept arose when Finland was given the CIS framework nation role in the Nordic brigade.

The Finnish battalion in KFOR with a COTS-based CIS system must be seen as an pilot project when creating the NordBde CIS system by the year 2006.

<FIGURE 4>

The CIS-backbone built for the Finnish battalion in KFOR has been developed into mobile and transferable systems from fixed systems meant for national defence.

The Backbone offers extensive services both to fixed and mobile command posts – telecommunications services, Intranet, Internet.

The transfer capacity is no limitation as in the tactical system. But creating mobility and flexibility to COTS product based CIS backbone is a real challenge to the industry.

On the system level, the battalion has been connected to the local teleoperator in Kosovo, to teleoperators in Finland and the FDF CIS-backbone.

<FIGURE 5>

The traditional tactical combat radio net systems with data terminals, the primary mean for tactical C2, are partly in use and partly in the reserve. The most significant new entity is the RaaTE-NET system based on NOKIA TETRA technology.

The functionality and usability of TETRA terminal equipment give real additional value to the command and control in field operations.

It is possible to create radionets in real time according to operational requirements – a multinational search and rescue unit can be formed in minutes.

The TETRA terminal is at the same time both a telephone and a handheld radio – it is possible to call to a gsm in Finland or contact the closest neighbouring patrol in the field.

The TETRA terminals are very easy to use since all terminals have familiar features. I argue that this means a cost-effective future!

<FIGURE 6>

As to information systems, the situation is slightly different. Here the development has been slow – though the reasons seem clear: Most C2 functions take place at meetings, by telephone or with wireless systems. Today interoperability of Information Systems between different nations and actors is at the most on a satisfactory level.

In the future, we will need compatible and cost-effective information systems that can be easily introduced and be extended to military and civilians users alike. We expect that the ITCM project will give us some solutions that fulfil the needs of both us and other actors. It is vital to understand that the products will have real added value only when also others than the Finns start procuring the ITCM products.

In military systems, interoperability is developed by developing common procedures, harmonizing technical requirements and creating standard interfaces. It would be worth considering the same kind of mechanisms in developing civilian crisis management. ITCM/OMG could act as one possible course of action.

Information security (INFOSEC) solutions and concepts need to be addressed simultaneously. INFOSEC will be a show-stopper unless information security solutions that satisfy all in concern has been developed.

<FIGURE 7>

Military CIS systems will remain closed even in the future and cannot function as the frame of CIS system in civilian crisis management.

The Finnish Battalion in KFOR has today the capability to connect NORBN and SWEBN according to the NordBde CIS concept. But to expand it further is problematic as different TETRA suppliers have incompatible switches and base stations. This is a very awkward situation which the industry must take notice of.

Civilian actors will not have connectivity to the battalion network, since the information security solution is not yet ready and the civilian actors do not have the proper equipment. Connectivity to civilian actors is done by issuing battalion equipment for a fixed period and task.

ITCM is creating information systems package focusing on the needs of the civilian crisis management. We see that ITCM products cannot be utilised to the full unless a CIS-backbone concept has been created and implemented. There is a clear and present need for a international Crisis Management Operator.

<FIGURE 8>

I started describing the shift in Military CIS. The aim of the shift is to secure an expedient, cost-effective and interoperable CIS system for the needs of crisis management. The most vital CIS criteria are listed in the figure.

In Finland, all CIS systems need to meet both national and international interoperability requirements – this requirement is steadfast! Interoperability must be created cost-effectively.

The Finnish Battalion CIS-system in Kosovo represents one way of approaching the issue, and in which COTS products play a central role.

Development of capabilities requires (1) harmonization of requirements, (2) readiness to compromise and (3) active participation of all actors. Mechanisms to do this exist already in the military. As to civilian crisis management, mechanisms are in the process of being created.

To be a player in this Game, you need to be a Team Player and to be able to communicate as required by the Team! The Game is played in real-time!

I will conclude by stating that common challenges require common solutions.