

The Concept of C2 Communication and Information Support

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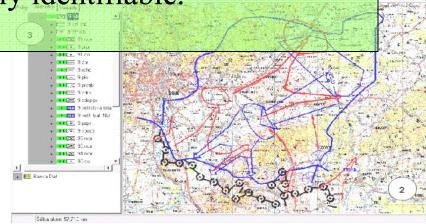
Reasons for CISu specification:

In the Czech Armed Forces, we have taken a new look at the communication and information systems function.

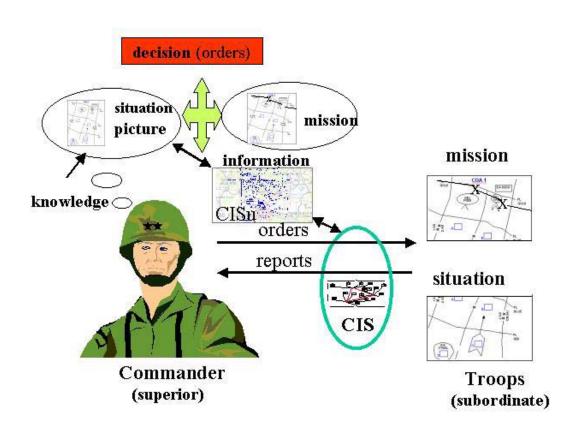
This new opinion and approach issue from integration of functions and downsizing of CIS equipment.

The CIS functions are mostly provided by SW applications.

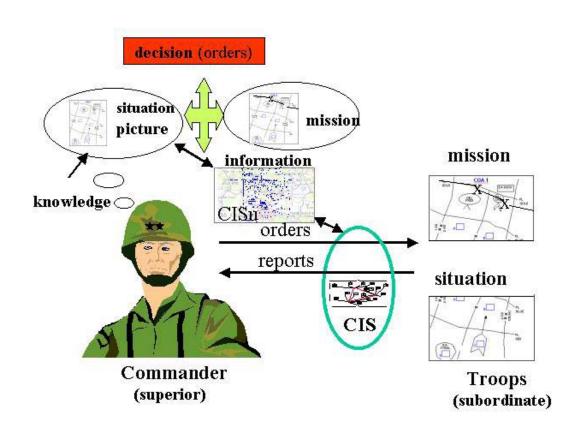
In many cases the border between an information system and a communication system is hardly identifiable.



Information is compared to glue that bonds organization into one unit stuck together to accomplish the object function.



CISu is a process (information activity) supporting command and control with information.



C2 Communications and Information Support

Process (information action) supporting command and control with information.

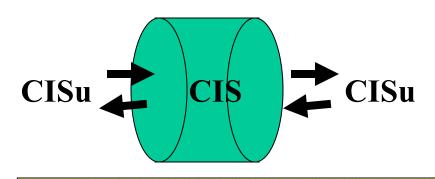
Integration of Communication Support and Information Support

Communication Support: information transmission

Information Support: information acquisition, processing, presentation

CISu requirements:

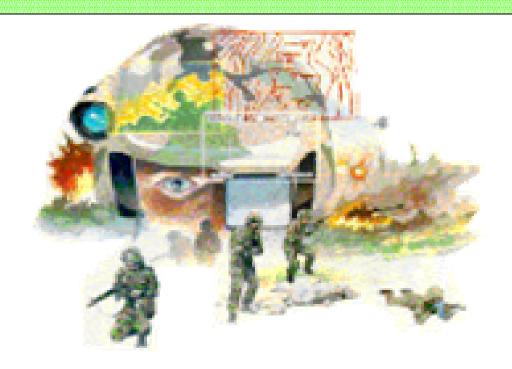
- complex,
- real,
- authentic,
- resistant,
- unified
- interoperable.



CIS = potential, its using depends on user abilities

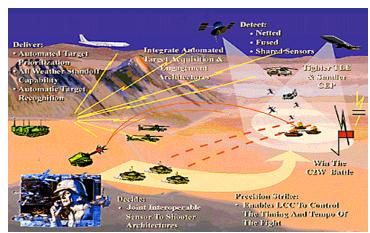
CISu determination rationale

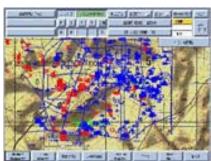
A reason of CISu determination, introduction of a new integrated view of CIS function, is the fast progress in ICT, digitization and miniaturization of assets and changing over for software applications of the communication and information functions. C2 information responsibility is another of the reasons for CISu definition.



ICT potential for possible CISu improvement

Potential of ICT rests mainly on the ability of creating and reproducing the picture of military important reality. The picture is exploitable for the purposes of command and control, decision-making support, planning, project control, or in favour of troops education and training.



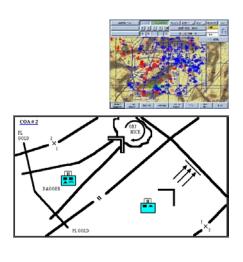




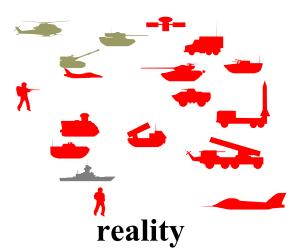
Visualization

The subordinate level receives the intent presentation file and can project it several times, note the mission key instants, realize the critical moments and better understand its role and contribution to the mission questioned.









Knowledge Support

ICT can make a substantial contribution with system knowledge support of the defense department personnel, readiness to accomplish tasks as assigned, building of "knowledge armed forces".



CISu development opportunities

The purpose of the communication and information support of command and control is creation of sufficient information potential to provide for the command and control process.

The defense research problems improving CISu:

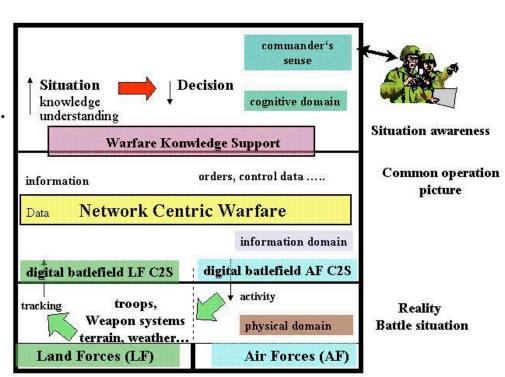
- Command and control processes and their information requirements,
- Synergic integrated concepts of C2-system,
- Military missions experience formulated in Military Operation Requirements,
- Operation architecture research (CISu in operations and actions),
- Support of information processing/retrieval by artificial intelligence,
- Visualization of actions, suitable forms of information presentation,
- Techniques of learning CIS users communication and information literacy,
- Sensors: technology and systematic development as a branch,
- Military prognosis research (combat models),
- Man machine interface.

CISu and the Synergic Integrated Concepts of C2 systems

The modern militaries have defined and developed synergic integrated concepts for the command and control systems to improve their logic, integration, systematization.

Concept examples:

- battlefield digitalization,
- Network Centric Warfare,
- Warfare Knowledge Support.



Conclusion



CISu is taken as an information action (process) to support C2 information domain. CISu is based on exploitation of CIS services. The specifications of synergic integrated concepts of the command and control systems is important for CISu. The concepts purpose in definitions of principles for sophisticated C2 systems building. The mission of the Signal Corps is, based on resources, to provide the users with CIS service as required, inform of capacities and run CISu for commanders and staff effort.