



Tactical Battle Management System

HEKTOR is a type of "Battlefield Management System" (BMS) consisting of transmission and IT parts. The transmission segment is based on the radio relay – wire system and VHF/HF radio subsystem (*together with the radio access*). IT segment performs the function of battle management. BMS HEKTOR is intuitive, easy to use and completely mobile management and command system at the tactical level (*operating in stationary and mobile conditions*), installed primarily in command vehicles. BMS Hector, forming an extensive network of data exchange, allows for operation at each level of tactical group command. It is intended for commanding persons and staff in order to ensure that they could command forces from the position of command post or any place of combat.

Features and scope of information handled within the system can be adjusted to any command level of the land forces tactical group.

The system allows to show positions of friend and foe troops on digital map and the processing of the supplied data creating so-called operational awareness situation, i.e. the image of the battlefield gathered from multiple data sources.

BMS HEKTOR system architecture provides for the possibility to embed applications on multiple operating systems, for example Windows, Linux, Solaris.

BMS Hector application consists of modules that allow for expansion and customization features to the requirements of the post at which to be used.

System modules support the MIP data exchange, NFFI protocol, ADatP-3 message handling, CanBUS and radio communications.

FEATURES

- Command support at the tactical level.
- IP Platform.
- Integration of radio, satellite, and wired communication media.
- Integration of services based on IP, VoIP, H.323.
- Open architecture.
- Compliance with all standardized information systems.





BMS HEKTOR hardware platform

BITcom On-board Communications System is the transmission segment of the HEKTOR System. The System provides a uniform, compact and consistent architecture of communication system for mobile objects (*combat or command vehicles*) with the possibilities of fulfilling the requirements for telecommunication services for serial combat or command objects. BITcom provides both the integration of local and long-distance telecommunication services for the vehicle crew - and practically any possibility of communication with communication, command and management systems which are in operation within the Polish Armed Forces.

NATO standards

- CADRG - raster map.
- DTED - elevation model of terrain.
- VMap, UVMaP - vector digital maps.
- STANAG 5500 (*ADatP-3*) - formalised command language.
- APP-6A - graphic visualization of combat situation.

- STANAG 2014 - formatted command documents.
- STANAG 5066 - data transmission in radio networks.

BMS HEKTOR software functions

- Information visualization on digital map.
- Authorized exchange of documents in combat.
- Tactical planning.
- Exchange of logistics information.
- Dynamic visualization of the tactical situation.
- Transferring of images.
- Cooperation with fire control automated systems, radio reconnaissance and electronic warfare systems and engineering reconnaissance.
- Transmission of alarms and critical information.

BITcom implementation is based on VoIP technology in standard compliant with H.323 recommendation. Basic components of the system are:

- Multifunction telephones KenTEL-1, which are VoIP terminals,

- System Integrator IS-1, Multifunctional Integrated Media Gateway CUT-2RI or IP Radio Access Point,
- Long-distance modem MD-1
- Field Operational Post WSP-1,
- PC terminals for commanding staff,
- Transmission means.

Hardware platform functions

- Intercom functions.
- Long-distance communication.
- HF/VHF radio access.
- Communication with STORCZYK system.
- Support of ISDN and VoIP (*H.323*) subscribers.
- Communication with dismounted soldiers and their localization.
- Deployment of field command post.
- Data exchange according to STANAG 5066 (*ADatP-3*).
- Tactical situation graphic visualization (*APP-6A*).
- Point-to-point encryption of data exchange.
- Alarm of alert situations.
- Vehicle diagnostic information.