



AWRS Multi Channel Simplex Radio Access Unit

Multi Channel Simplex Radio Access Unit (AWRS) is designated for coupling battlefield VHF radio communication network with the radio&wire communication system STORCZYK, what results in creation of integrated tactical communication field network.

AWRS unit provides audio and data transmission. It is intended for operations on the move and stationary. Operation may be provided round-the-clock.

The primary task of the AWRS is to provide the radio user with the same advantages as subscribers of stationary and field communication telephone networks.

AWRS-based radio access subsystem may constitute an autonomous communication system, which enables the operation independently of radio&wire communication system STORCZYK. This solution is especially useful during troops displacement and in the area of new deployment.

AWRS provides:

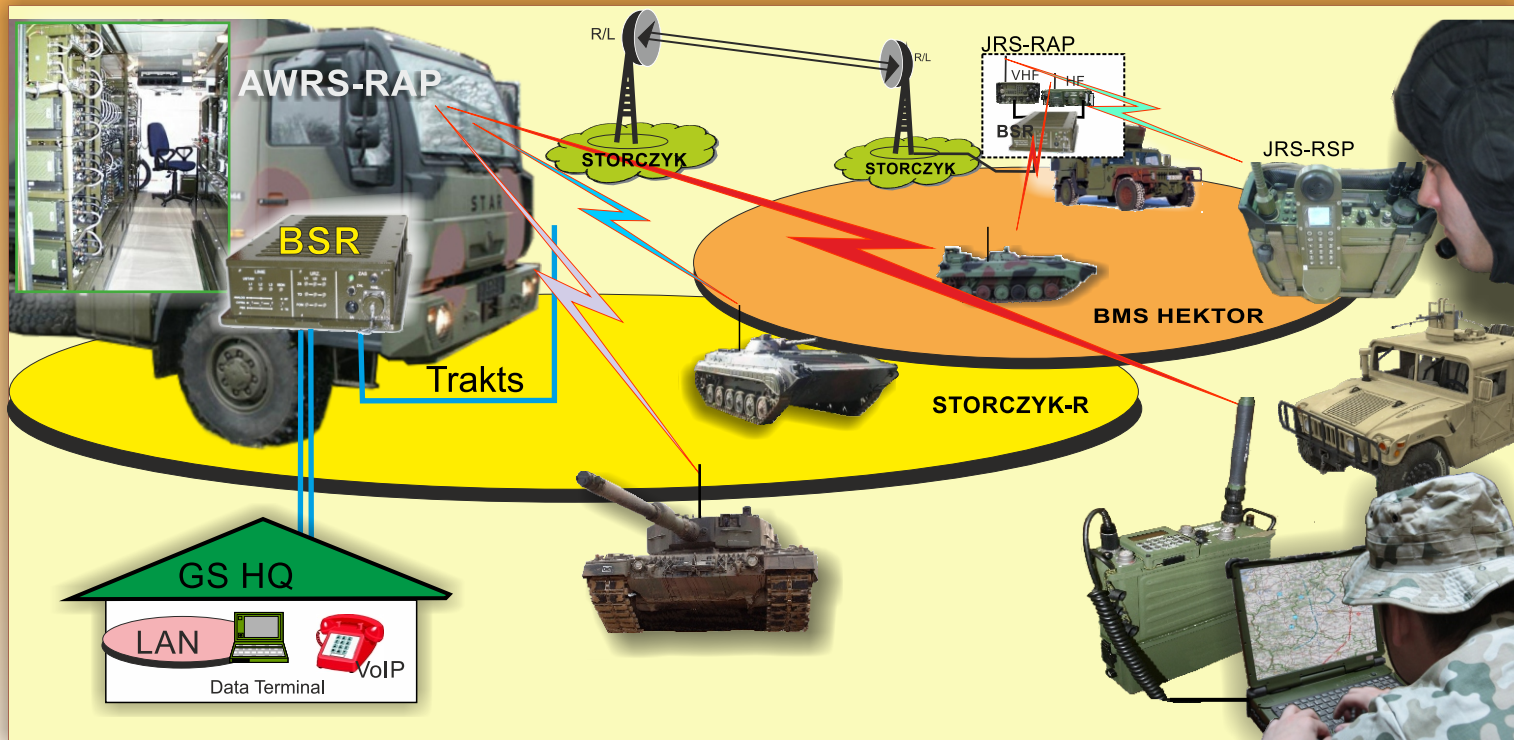
- Coupling of the VHF radio communication networks and radio&wire communication system with channels commuting (*STORCZYK*),
- Audio and data exchange between subscribers of radio and radio&wire communication networks,
- Preclusion of the radio access services from allocating the Radio Subscriber Point (*RSP*) to the specific radio network.

In addition, AWRS has the ability to take over direct control of remote Radio Access Points (*RAPs*) of the Single Channel Simplex HF/VHF Radio Access.

FEATURES

- Coupling of the VHF radio communication networks and radio&wire communication system (*STORCZYK*).
- Autonomous communication during troops displacement.
- Voice communication and data exchange.
- Services implemented regardless subscriber's location.
- Simultaneous implementation of eight connections.
- Remote control operation.
- Control of the operation of Radio Access Points (*RAPs*).





AWRS tasks

- Implementation of telecommunications services for the voice and data information exchange for Radio Subscriber Points (RSP).
- Implementation of the management and maintenance of the Multichannel Simplex Radio Access Subsystem.
- Remote control operation of the *ad hoc* created Radio Access Points of the Multichannel Simplex Radio Access.
- Remote control of the RAPs operation of the Single Channels Simplex Radio Access.

Subsystem basic components

- F@STNET radios - 8 units.
- Integrated driver for Radio Access Points (RAPs).
- Radio Access Unit - 4 pcs.
- Antenna coupler.
- On-board Computer.
- Digital radio relay (*line-of-sight*).

Telecommunication capabilities

- Log in and out of Radio Subscriber Point (RAP) of Multichannel Simplex Radio Access.
- Conference calls with radio&wire communication systems subscribers.
- Circular connection to the radio networks.
- Automatic re-dialing.
- Connections relay.
- Connections of Radio Subscriber Point (RAP) with radio&wire communication systems subscribers.
- Dispatch of packages, approved and unapproved.
- Voice mail and SMS services.
- Simultaneous implementation of eight connections with radio&wire communication systems subscribers.
- Connection between two RAPs belonging to different radio networks, but still Multichannel Simplex Radio Access System subscribers.

Interfaces

- Radio interface for Radio Access Point (RAP), allowing control of 8 F@stNET and PR4G radio.
- Wired interfaces :
 - ✓ 4 universal group tracts compliant with STANAG 4210, STANAG 4578, EUROCOM, ISDN PRI and STANAG 4206 standards,
 - ✓ 8 subscribers lines with capabilities to be use as CA analog or digital lines (16/32/64/128 kbit/s),
 - ✓ 1 X Ethernet 100 FX.

Satellite terminal for on-the-move operation may be installed along with the AWRS unit. GPS as a supporting for satellite terminal may be used for reading position and direction of the AWRS unit move.

AWRS was a result of cooperation of the following companies:

KenBIT Sp. j.: The development and manufacturing of AWRS components, software update
 Institute of Telecommunication, Military University of Technology, 2 Kaliskiego St., 00-908 Warszawa: design
 WZł Nr 2 S.A., 12 Fabryczna St., 55-003 Czernica: manufacturing