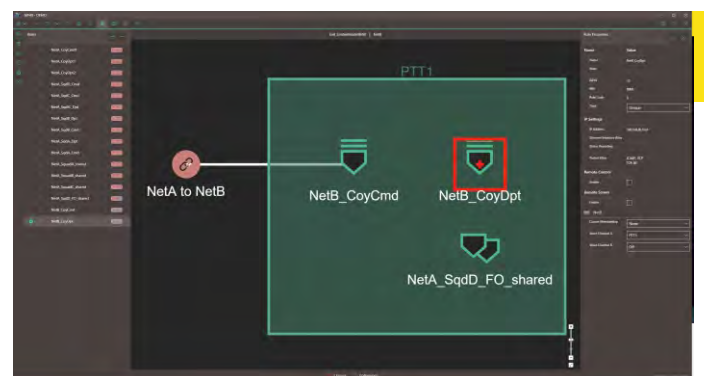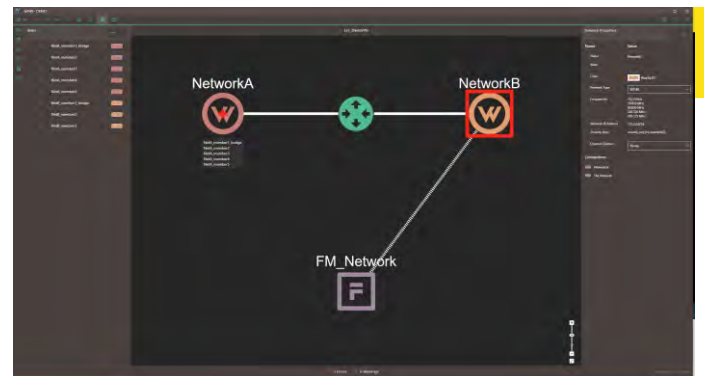# MP40
Mission Planner

The MP40 Mission Planner application is designed to configure and program the RF40 radio system based on current operational requirements. It is compatible with 32- and 64-bit Microsoft Windows operating systems.

MP40 simplifies radio configuration by eliminating nonessential technical details. The application automatically checks the specified parameters and displays warning or error messages if necessary. The user is then prompted to make the appropriate adjustments.

It allows to:

- Create operating missions
- Design various networks within those missions
- Set up roles of the individual radios in the mission and assign them to networks
- Manage cryptographic keys assigned to the mission
- Interconnect radio networks and connect external IP networks
- Create clusters for increasing the maximum number of network users
- Specify and connect varied accessories like headsets, power amplifiers, intercoms, etc.
- Export the created mission for direct upload to radios

Network Structure Diagrams

The following details can be configured:

Missions
- Mission name
- Mission access PIN
- Status Reporting ports
- IP Remote control ports

Networks
- Waveform type (FM, AM, WF40 MANET)
- Frequencies
- Over-the-Air Network IP address
- Assigned crypto keys
- Opened clusters (subnetworks allowing for theoretically unlimited number of network users)
- Assignment of roles to be used in the network
- Multicast groups

Roles
- Role name (e.g., SQ1_Commander or COY2_Member3) of the particular radio
- Role Access PIN (only authorized user can switch the radio to the role)
- IP address of the radio Ethernet interface
- Status Reporting address (DTE for fetching the PLI and network information data)
- Packet Filter (detailed specification of allowed ports and protocols to filter-out the unwanted IP traffic from the radio)
- Remote control enable/disable
- Remote screen enable/disable
- Cluster membership
- Function of PTT1 and PTT2 keys (Voice channels assigned)

Network interconnects
- Interconnect name
- Interconnect type (Direct / Routed)
- Traffic type (Voice / Data / Voice+Data)
- RTP ports for individual voice channels
- Router interfaces IP addresses

Accessories
- Accessory name
- Accessory audio profile
- Combination and assignment of accessories to roles

The mission configuration file generated by the MP40 Mission Planner can be uploaded to the radio using FG40 Fill Gun, Ethernet cable or USB Flash Drive.