

Mimer SoftRadio



Network Controlled Radio, Part 1

LS Elektronik AB

Voice over IP / Radio over IP

VoIP / RoIP

All audio is digitized and sent over the network as packet data, together with control signals for the radio.



What do you need?



Standard office-PC

+



Audiocard, microphone and
Speakers or headset

+



Radio Unit

+



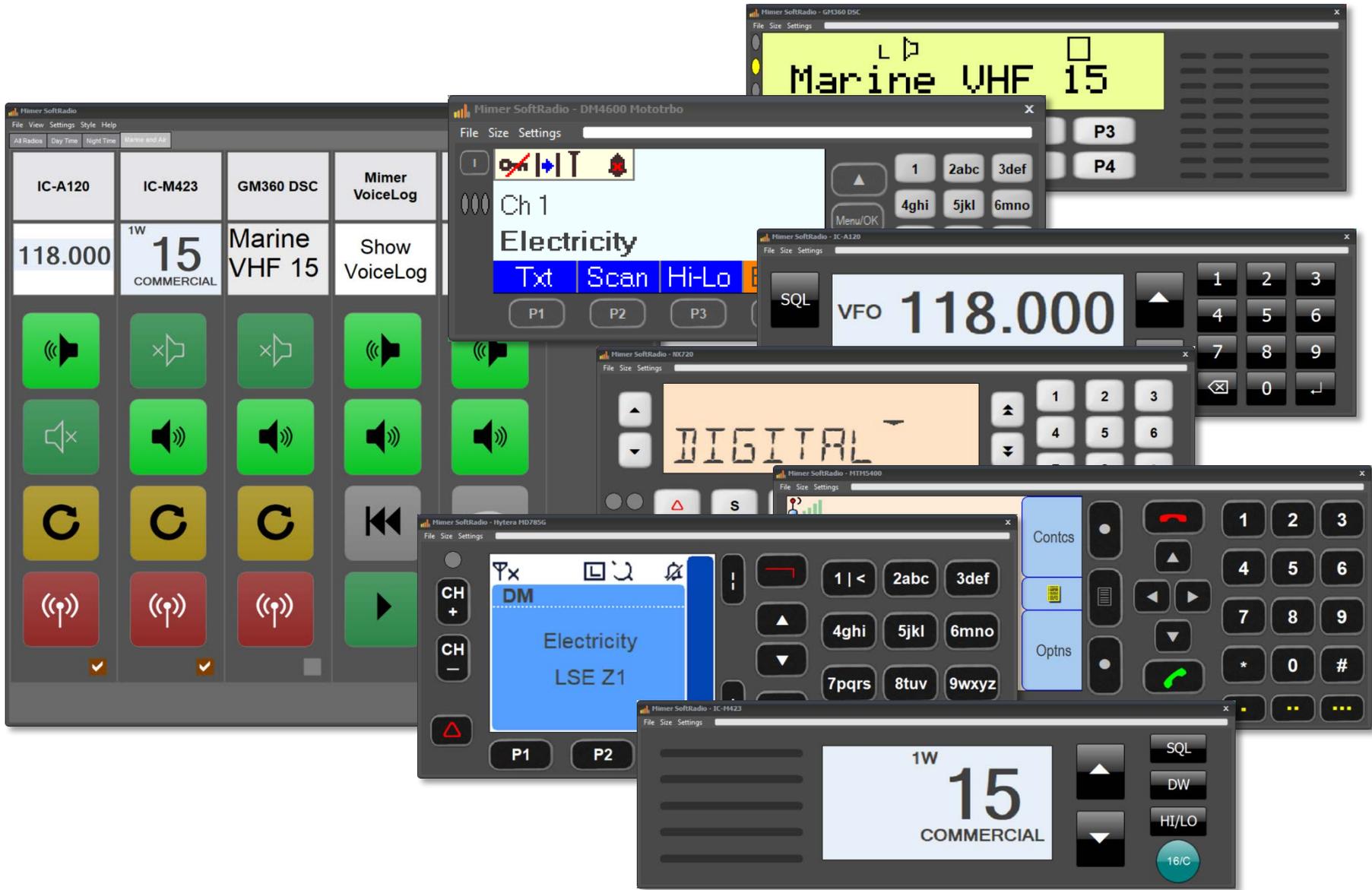
Network Interface

+



The Software;
Mimer SoftRadio

What will you see on your PC?



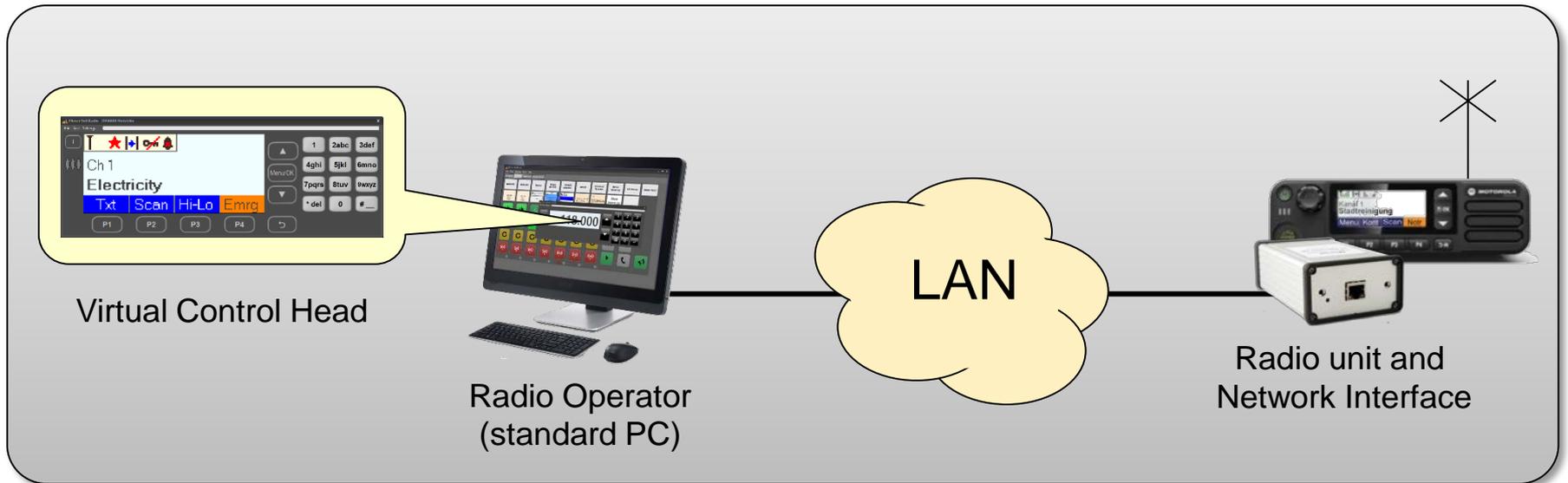
What does it mean?



No consoles or radios on the desktop !

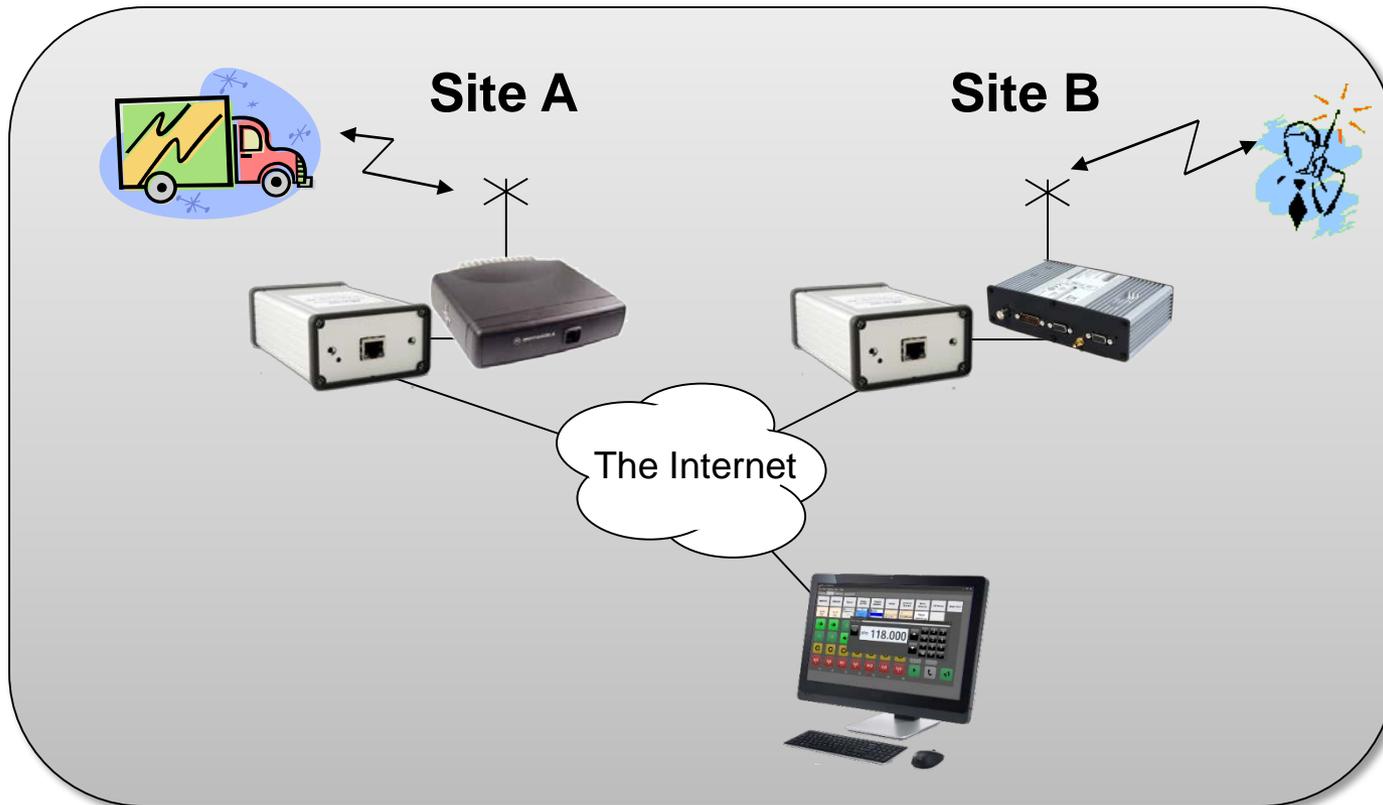
No costs for leased lines

Local Control



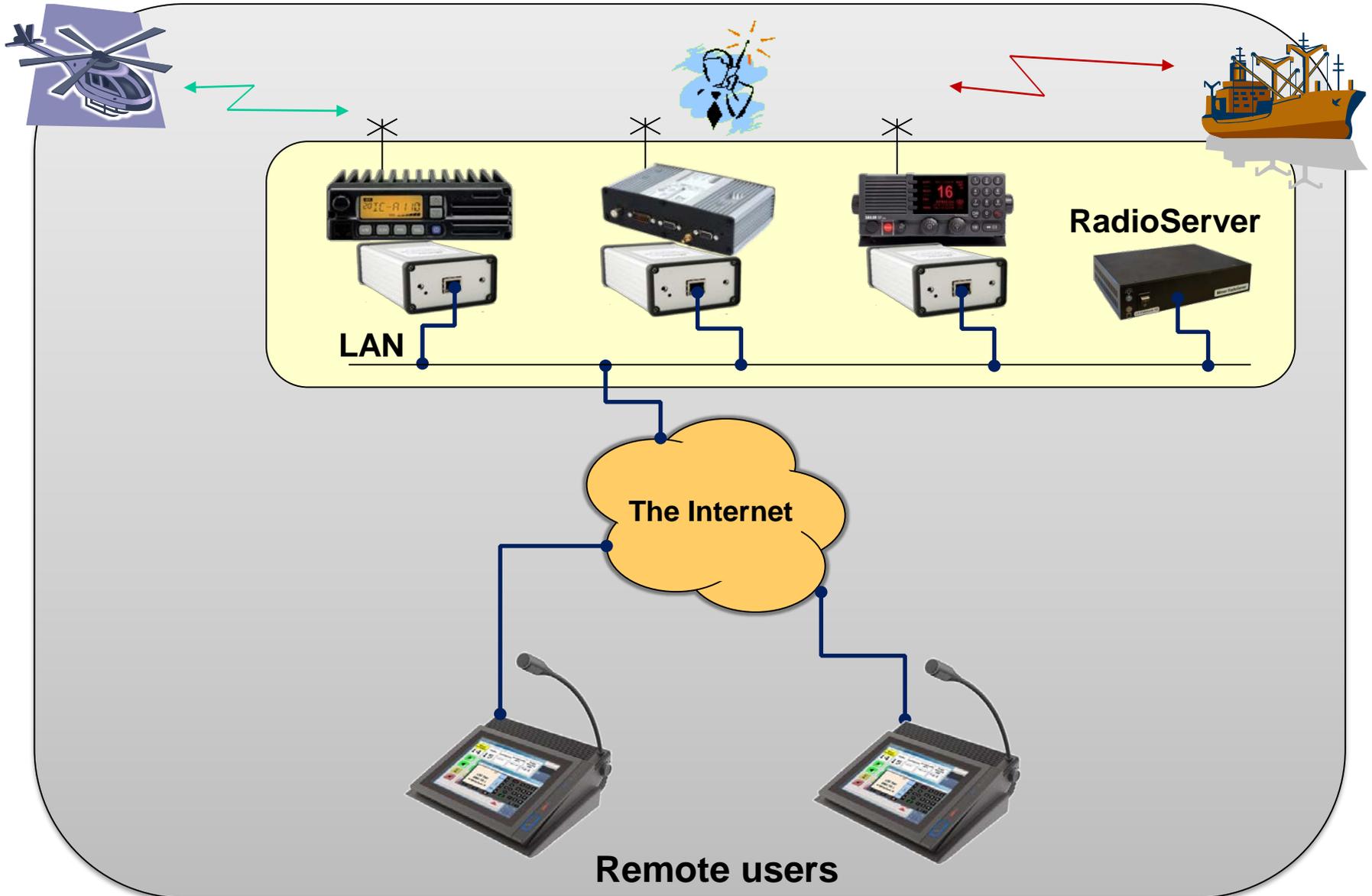
Example with one radio and one operator

Remote control over the Internet

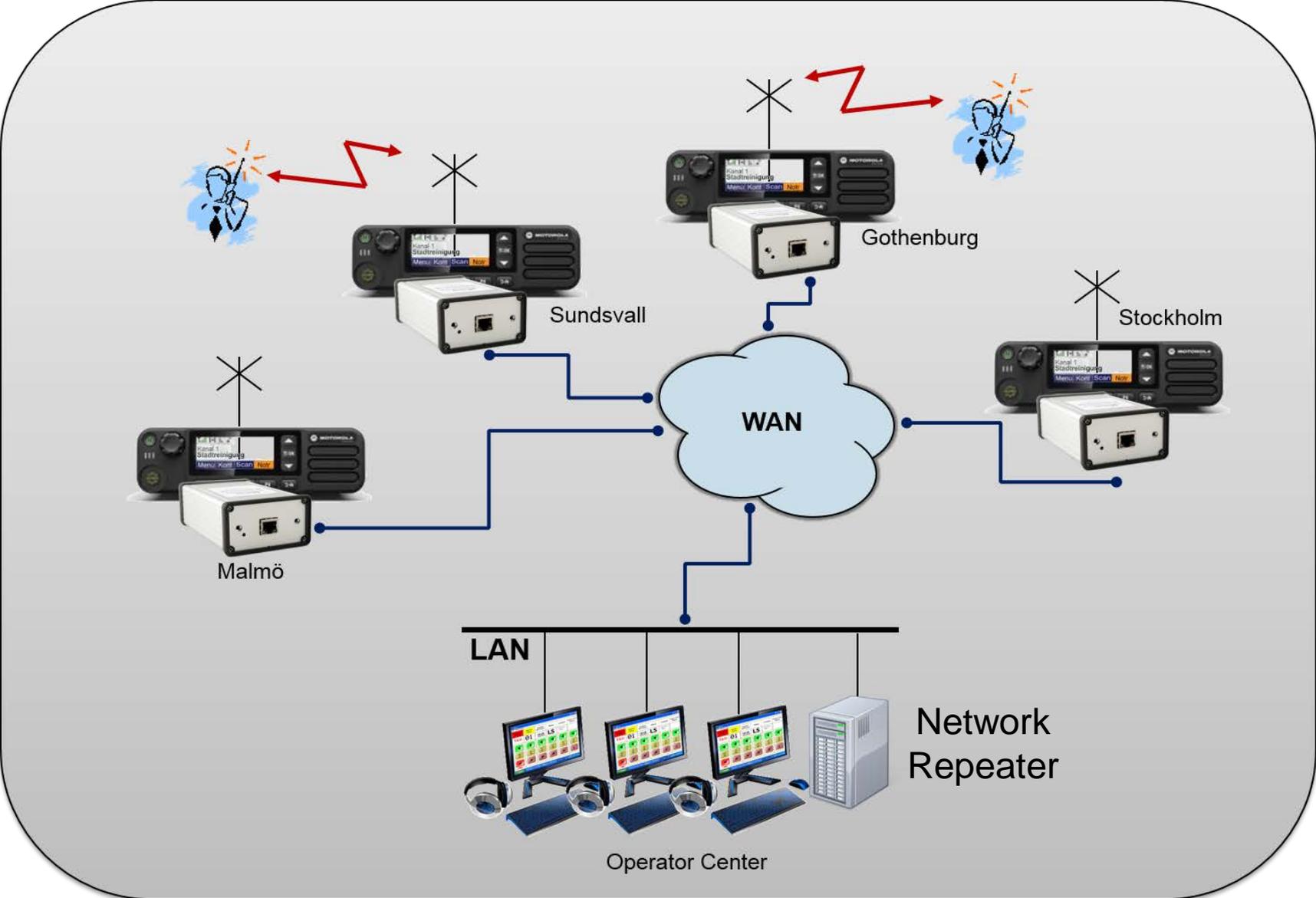


Example with two radios and one operator

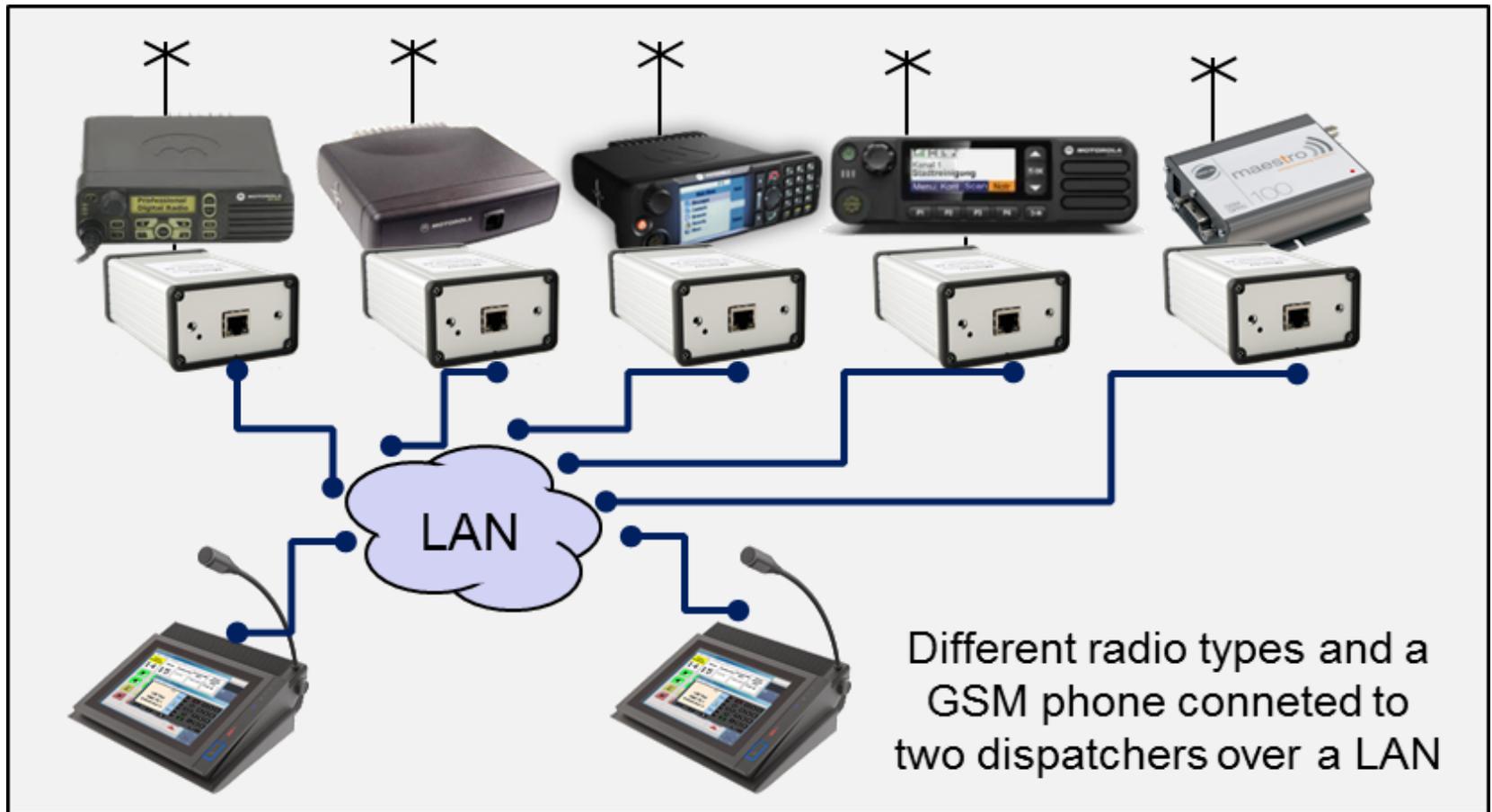
Remote control over the Internet



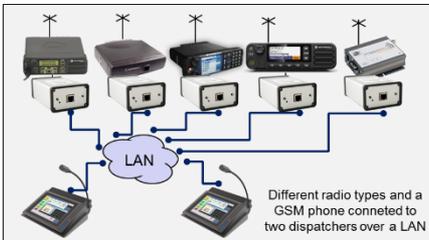
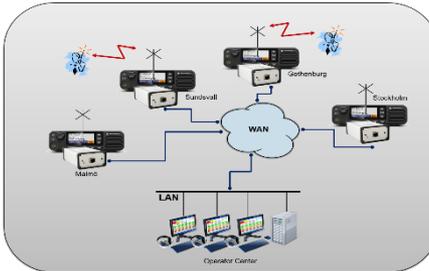
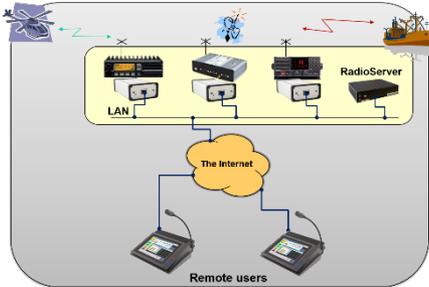
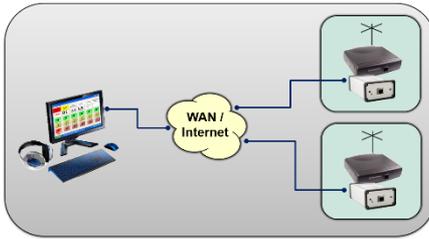
Remote control over the Internet



Multi type system



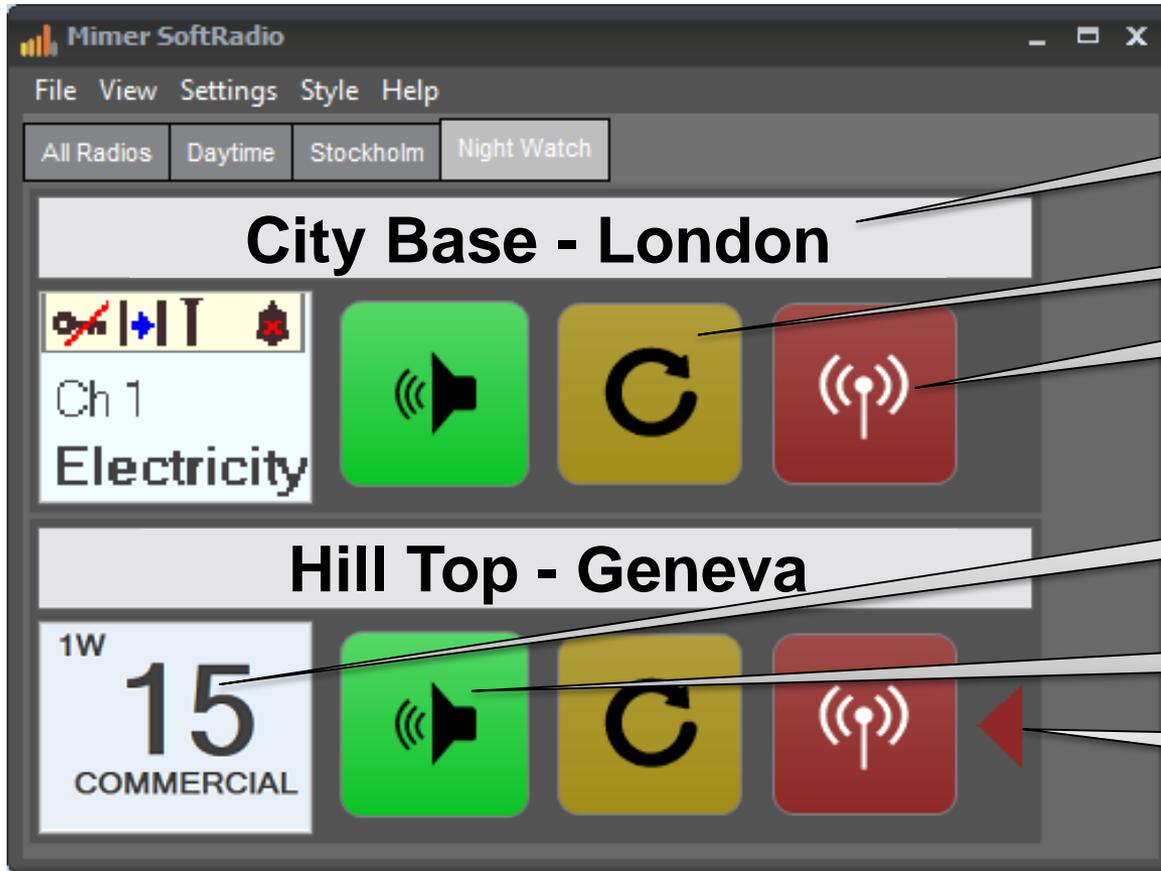
Reliability



The SoftRadio systems does not have a Central Controller. All intelligence is in the network interfaces and in the operator software.

The rest is standard IP!

Main Menu



Radio name

Resend Button

PTT Button

Part of radio display

Speaker open/close

Last transmitted on

The “Magic Box”



Network Interface for

- Radios that show a Virtual Control Head



The “Magic Box”

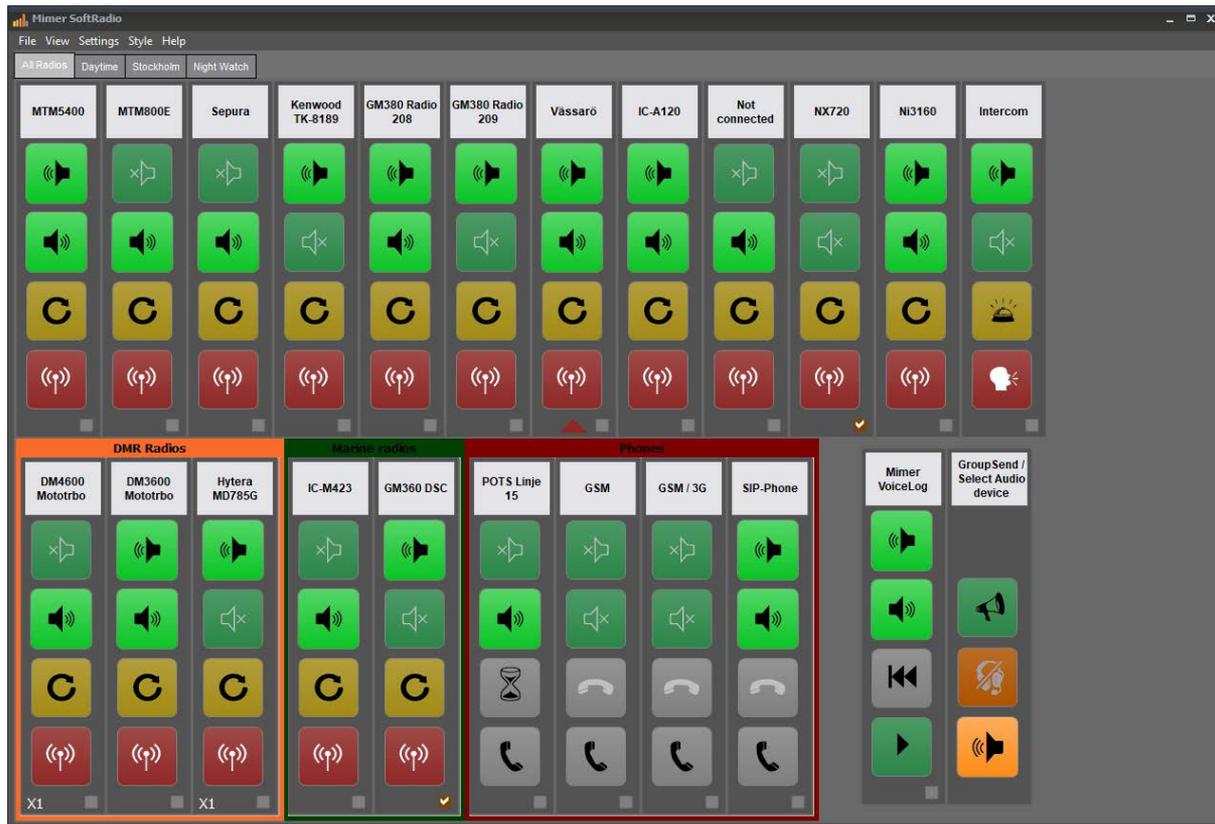


Network Interface LE for

- Radios with only audio and PTT access
 - Base stations
 - One channel radios
 - HF radios
- PA / PAGA Systems

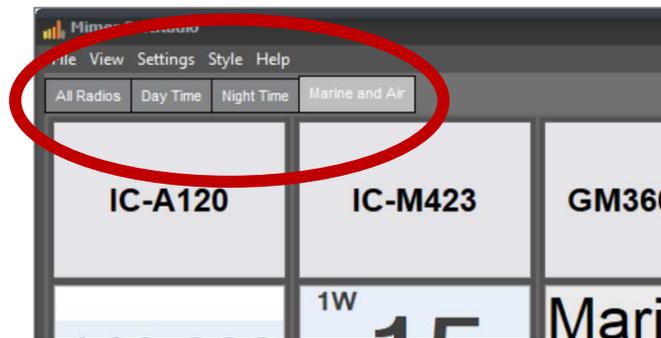
SoftRadio Standard & XL

Standard supports up to 8 devices,
XL supports up to 30 devices



Option: SoftRadio XL

With SoftRadio XL you can organise your devices in tabs.



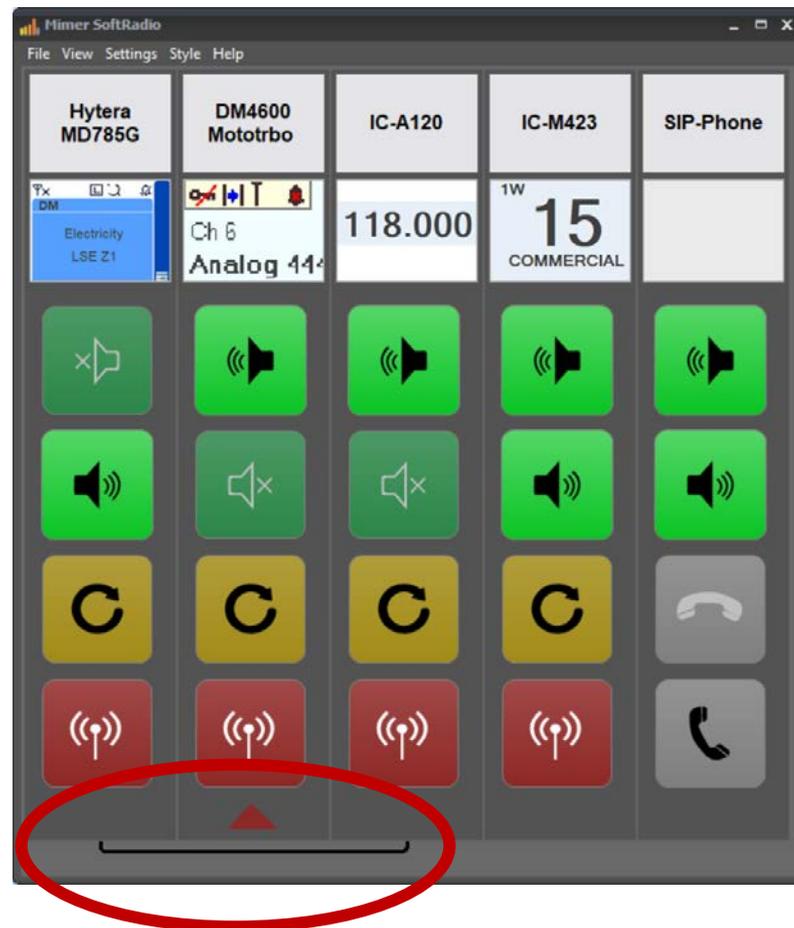
The screenshot shows the 'Select devices' dialog box. It contains a table with the following data:

ID	Name	Active	All Radios	Day Time	Night Time	Marine and Air
130	Hytera	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
124	DM4600	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
134	IC-A120	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
127	MTM5400	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
133	IC-M423	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
240	Mimer SIP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

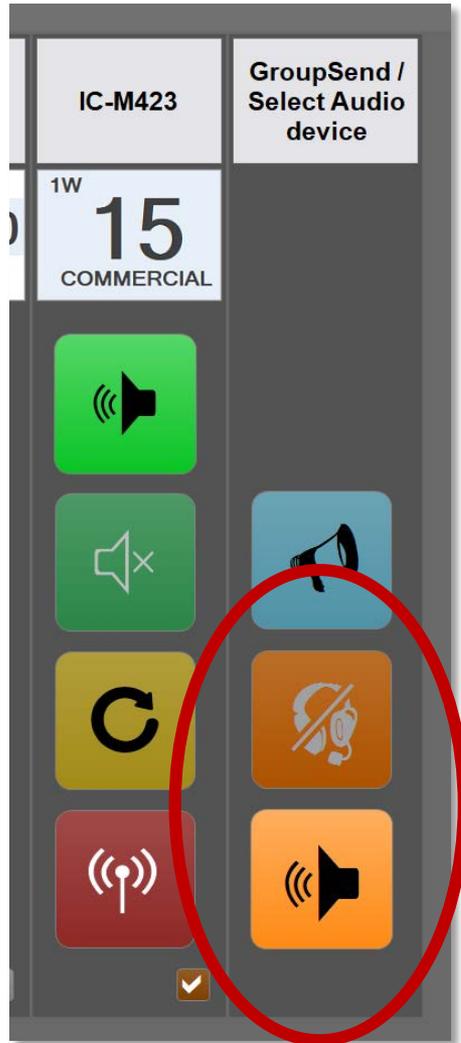
At the bottom of the dialog box, there are two buttons: 'OK' (with a green checkmark) and 'Cancel' (with a red X).

Option: CrossPatch

Several radios can be connected together to make up a patch.



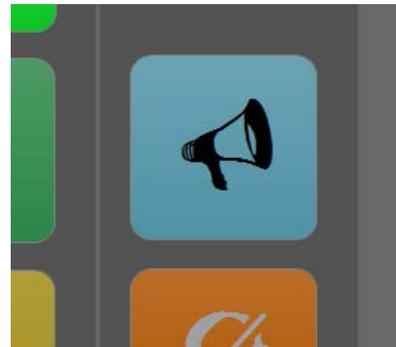
Option: Custom Function Panel



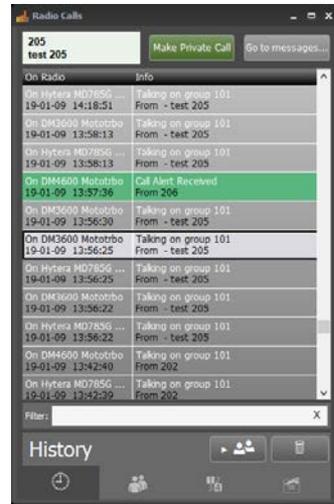
**Programmable keys mainly
used for selecting your
audio device.**

Option: GroupSend

You can transmit on several radio units at the same time.



Option: RadioCalls



- Contact List
- Private Calls
- Call logging
- Text messaging

Option: Marine Calls

Make DSC Call - IC-M423 (765432109)

Individual Routine Call to 123456789 Use CH:88

Category: Individual Call, Group Call, All Ships Call

Format: Routine, Safety, Urgency, Position Request, Polling Request, Test Call

Address Source: Favourites List, Enter manually

Select Channel: 78, 88, Enter manually

Favourites: Swea Sandö - 12345

MMSI: 123456789

Channel: 88

Close Send Call

Marine systems

DSC calls can be made and answered.

ATIS calls can be decoded and exported

All calls are logged

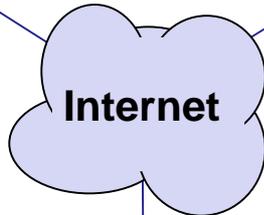
Time	Ra Name	Type	ID	Message
19-01-17 13:28:26	North Coastal Radio Site	INDIVIDUAL from	123456788	ROUTINE to 000000011, , Radio Telephone
19-01-17 13:14:50	South Island Radio Site	Self Cancel by	123456788	of DISTRESS From:123456788 ?9999?99999 UTC8
19-01-17 13:14:33	South Island Radio Site	DISTRESS From	123456788	?9999?99999 UTC8:88 Undesignated distress
19-01-17 13:10:22	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to me , Ch08, Radio Telephone
19-01-17 13:08:38	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to 123456789, Ch08, Radio Telephone
19-01-17 13:06:09	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to 222333444, RxCh08 , Tx , Radio Telepl
19-01-17 13:05:14	South Island Radio Site	INDIVIDUAL from	123456788	ROUTINE to me , RxCh06 , Tx , Radio Telephon
19-01-17 11:53:33	GM360 DSC	INDIVIDUAL from	123456788	ROUTINE to 123456777, RxCh08 , Tx , Radio Telepl
19-01-17 11:49:08	GM360 DSC	INDIVIDUAL from	123456788	ROUTINE to me , RxCh77 , Tx , Radio Telephon
19-01-17 11:46:57	GM360 DSC	INDIVIDUAL from	123456788	ROUTINE to me , RxCh08 , Tx , Radio Telephon

DSC Call

Option: Marine Calls

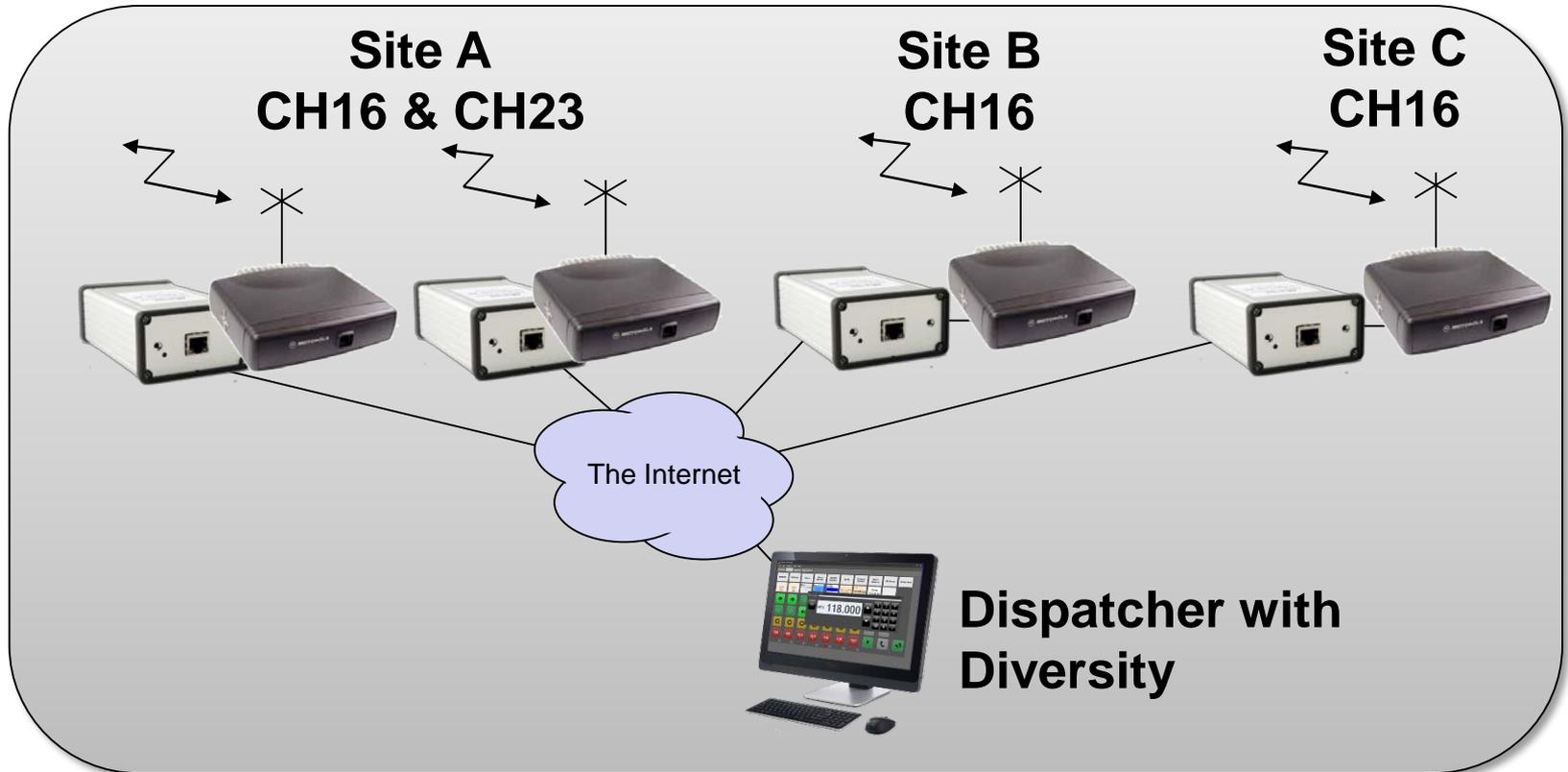


Typical marine setup with fixed radios for CH16 and CH70(DSC) at each site.



Marine Calls and virtual control heads

Option: Diversity

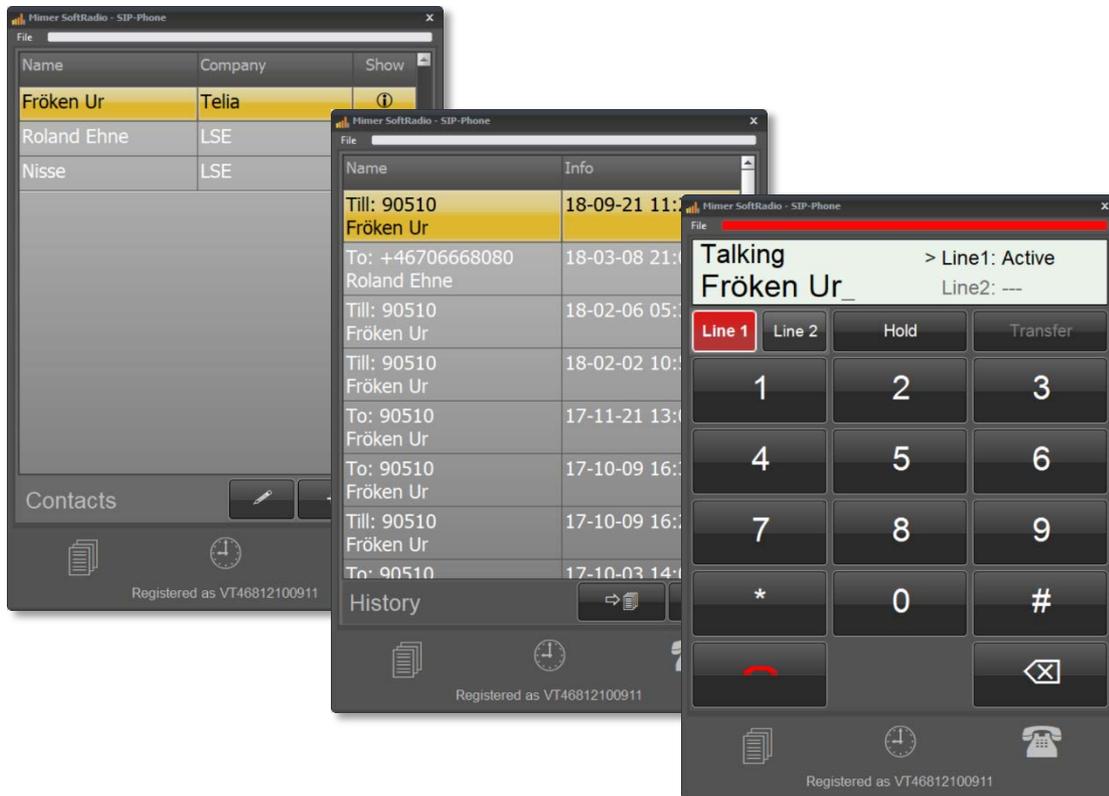


In systems with several base stations on the same channel these can be connected together in a voting system so the operator always gets the best audio

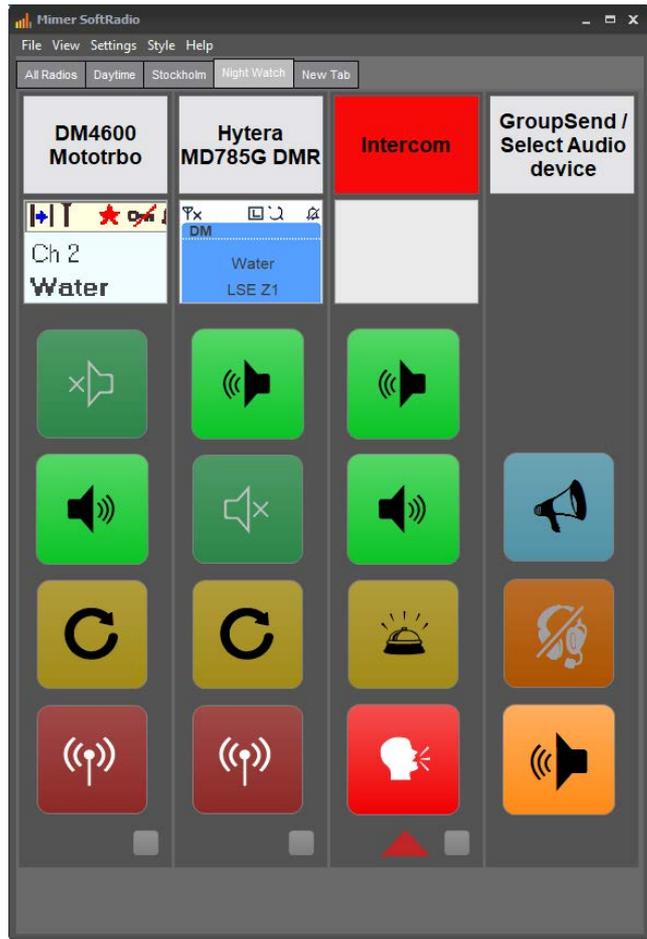
Typical use is a coastal radio system for CH16

Option: PhoneConnect

One device panel can be changed to a telephone panel.
Connection through two wire (POTS),
IP-phone (SIP) or GSM-module.



Option: Intercom



One device panel can be changed to an intercom panel

The dispatchers can then talk between each other in the same manner as transmitting over the radio

Option: Damm TetraFlex

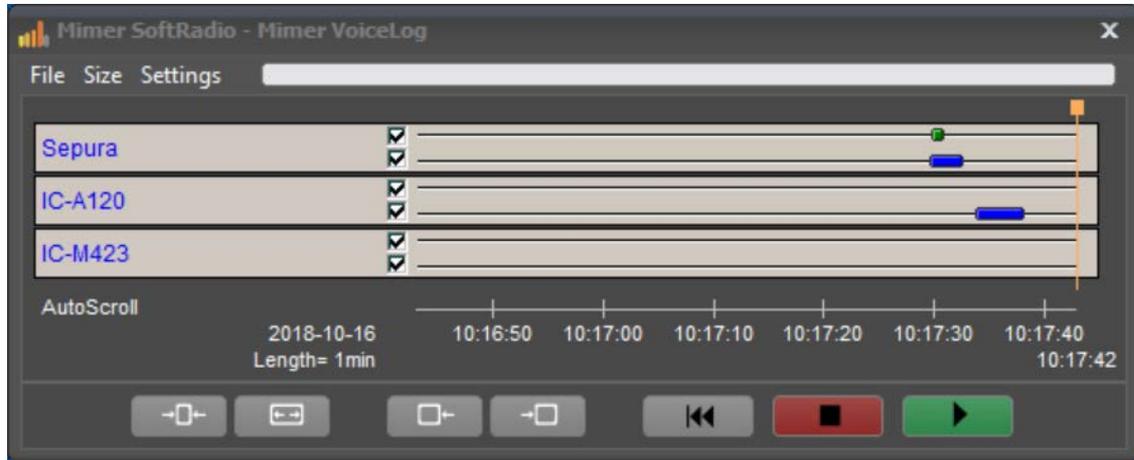


SoftRadio can be connected to a Damm base station.

You can then control all the functions in the Tetra system without going through a “donor radio”.

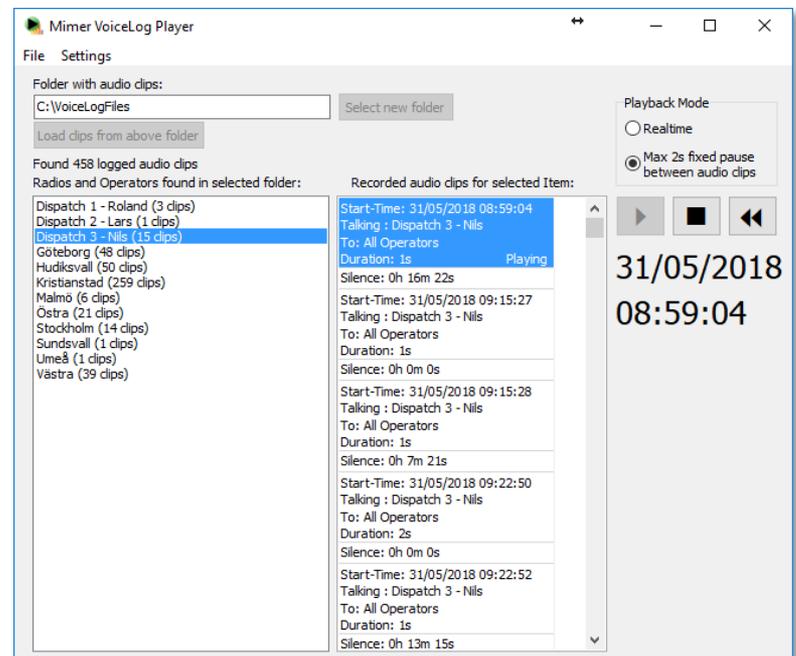
- **TalkGroup Calls**
- **Private Calls**
- **Emergency Calls**
- **SDS**
- **Status**
- **Etc**

Mimer VoiceLog

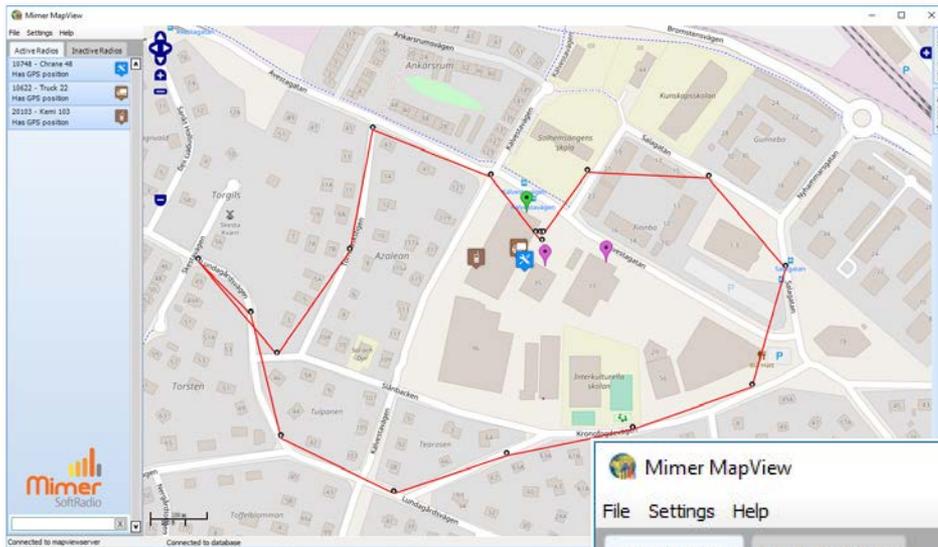


All audio in the Mimer system is recorded on a server and time stamped.

The dispatcher can back-track an hour and the supervisor listen to everything in the log



Mimer MapView



Radios with built in GPS can be positioned on Google Maps

Optional:

- Other map sources
- Tracking of units
- Indoor beacons

