



## BOR - Wireless Community Radio Broadcasting

The wireless community radio broadcasting is used to transfer various information and news within the communities and cities. In addition to standard broadcasting it is designed for communication during emergency situations (floods, ecological disasters and other). The system provides wireless transmission similar to ordinary radio broadcasting and reception via the outdoor and home receivers. A citizen receives the information from the loudspeakers installed on a street or coming right into his house / apartment via the home receiver. Outdoor and home receivers are possible to be combined mutually. The system requires no wire lines thus bringing major savings during installation and follow-up servicing, in distant areas particularly.

The transmission range extends from 3 up to 10 km depending on terrain conditions, and it can easily cover even large communities.

The system is controlled via an exchange connected to the transmitter incl. antenna. The exchange can operate unattended. It enables to program a session to be broadcasted up to one week beforehand and start the automatic broadcasting at a preset time, i.e. with no operator at the office (evening hours, weekends, holidays). The information can be broadcasted selectively for max. 256 target groups like firebrigade, police, rescue team, municipality members, or you can broadcast to the selected local areas without disturbing other citizens to whom the information is not addressed. The entire wireless radio broadcasting system has been designed as a module structure of elements to be mutually combined and / or expanded. If there has already been a functional wire-based system implemented, then the effective combination with the wireless radio broadcasting is possible. You can also back-up the electric power supply in case of a power failure. In addition to standard transmission handling via a microphone connected to the exchange, a voice message can be broadcasted via the BOR system using a walkie-talkie radio or mobile (cellular) phone.

The technology applied has been approved to interconnect the BOR system with the Civil Protection Warning System.

Prior to any system installation a locality and terrain investigation along with test measurements shall be carried out. The results are then used for a so-called "technical-economical study" that includes installation possibilities, conditions as well as price calculation.



Exchange in PC version

**Description and features of BOR's individual parts:**

The basis of BOR system comprises a transmitting unit that includes the exchange, transmitters, antennas and interconnecting cables. We offer three basic options of the exchange:

**Exchange in PC version** includes a software suitable for installation in your PC equipment.



Exchange with digital recorder

**Exchange for direct broadcasting** is the simple and cheap option. A microphone or an ordinary audio input can be connected. Up to 16 target groups can be addressed for selective broadcasting.

**Exchange with digital recorder** includes a built-in digital sound recorder. It is capable to store recordings, split them into sections and program their broadcasting up to one week in advance. Up to 256 target groups can be selected and one of the groups can be used for remote switching control of various electronically operated devices (sirens, signals, traffic signs etc.).



Outdoor receiver with loudspeakers

**The broadcasting equipment** could be added with other complementary devices :

- translator to transfer a signal over a hill terrain
- GSM gateway to broadcast via a mobile phone
- switching unit to control the existing wire-based system or its sections

**Implement the receiving equipment in the following two ways:**

**Outdoor Public Address System**

It comprises a receiver, amplifier and loudspeakers. Depending on local conditions the number of loudspeakers will differ for individual coverage spots. The maximum number is 4 loudspeakers in one location.



Home receiver

**Home Receivers**

Home receivers is the terminal element designed to cover small indoor areas. It uses a starting signal to turn on the receiver, it turns off automatically once the session has ended. The receiver can be set up for a specific target group of citizens only.

edit: 5.2007