## Rohde & Schwarz FM and TV transmitters provide Greater Brussels with entertainment

It can hardly be overlooked, the 300-m high tower in a rural area around Leeuw-Saint-Pierre, directly located on the route to Pepingen in the heartland of Flemish Brabant (FIG). Extremely powerful sound-broadcast and TV transmitters from Rohde & Schwarz are operated in this tower. The whole story began because of an accident. In autumn 1983 a heavy storm destroyed the antenna mast of BRTN (Belgian TV and broadcasting company of the Flemish community) and RTBF (Belgian TV and broadcasting company of the French community) at the Wavre broadcast station. BRTN chose Leeuw-Saint-Pierre to set up a new mast now providing Greater Brussels with the FM programs Radio 1, Radio 2, Radio 3, Studio Brussels and Radio Donna and with the two TV programs TV1 and TV2.

The transmitters are located in a huge hall on the second platform of the tower at the base of the antenna mast. The FM transmitters have a power of 10 kW each and a common standby transmitter. Radio Donna, the fifth program, transmits with 2.5 kW and has a standby transmitter of the same power. The different radio programs are taken via a transmitter-combining filter and emitted from a common antenna. The FM transmitters are solid-state throughout, which keeps operating costs at a minimum. The transmitters are aircooled and the recovered heat is used to warm the rooms in winter.

The transmitter for TV1, the most modern in Europe according to Paul Desmet, advisor to the head of program services, consists of two 10-kW solid-state transmitters that are used together. The system thus corresponds to a 20-kW transmitter operating with integrated active standby. The system for TV2 consists of two identical transmitters yielding a total power of 40 kW. These are

operated in turns, ie in passive standby. In contrast to the transmitters for TV1, those for TV2 have klystron tubes and are extremely reliable.

Rohde & Schwarz, which is firmly established in Belgium's FM network, won the order in the face of competition from four other well-known European transmitter producers. "It was the most favourable offer for BRTN", confirms

Broadcasting tower of Belgium's BRTN at Leeuw-Saint-Pierre in Flemish Brabant and view of hall with TV transmitters from Rohde & Schwarz Photos: BRTN



Paul Desmond. The high-quality systems are in compliance with all standard specifications and completely meet user requirements, especially with regard to price, ease of maintenance and repair as well as safety regulations.

Leo Terneven (BRTN)

Reader service card 151/20 for further information on FM and TV transmitters