

## Upgrade of EBU Satellite Ground Stations

Within the network of the European Broadcasting Union there do exist a lot of satellite ground stations installed by NEC back in the beginning of the 1990's. These satellite ground stations were originally used for analog TV Uplink purposes and are nowadays mostly transferred into digital DVB Uplink stations. SatService GmbH has developed an upgrade package for these stations consisting of the following sub-systems:

- Antenna Control Step-Track System
- 2:1 redundant LNC L-Band Distributor System on receive Side
- 2:1 redundant HPA System on the transmit Side
- Monitoring and Control System for the whole RF Part

SatService upgraded satellite ground stations originally delivered by NEC in the 1990s:

- SRG Zurich, ZUR-4: 7.6m Antenna
- SRG Lugano, LUG-1: 7.6m Antenna
- NOB Hilversum: 7.6m Antenna
- NRK Oslo: 6.4m Antenna

Our upgrades are not limited to stations built by NEC. We can also perform this for ground stations of other manufacturers like, for example, Scientific Atlanta.



### **sat-nms Monitoring & Control**

- Interfacing to all Ground Station Equipment
- Performs HPA Redundancy Switching
- Controls all Waveguide and Coaxial Switches
- Control of Spectrum Analyzer
- Unlimited Number of Clients connected via TCP/IP possible
- Java-based Client-Server Software

### **sat-nms Antenna tracking system**

- Indoor Unit including step-track and adaptive Tracking Algorithm
- ACU-Positioner interfaces to original NEC Resolvers and Motors
- New Frequency Inverters
- TCP/IP Interface to Indoor Unit

### **sat-nms Beacon Receiver**

- Full L-Band Tuning Range 950-2000MHz
- TCP/IP-based with web-browser Interface
- Compact small DIN Rail compatible Box
- Electronically calibrated for Level and Frequency Measurement

### **HPA System**

- 2:1 redundant TWTA System
- 350W TWTAs
- Old Waveguide Switching System still in Use

### **Receive System**

- 2:1 redundant PLL-LNC System



### **Contact Information**

SatService, Gesellschaft für Kommunikationssysteme mbH

Hardstrasse 9,  
D-78256 Steisslingen, Germany

Phone +49 7738 997 91 10

Fax +49 7738 997 91 99

E-Mail [sales@sat-servicegmbh.de](mailto:sales@sat-servicegmbh.de)

[www.satnms.com](http://www.satnms.com)

[www.sat-servicegmbh.de](http://www.sat-servicegmbh.de)