

Sat Distribution Service

1 Standard service

The satellite distribution platforms of MEDIA BROADCAST („MB“abbreviated) are used for the transmission from TV- and audio broadcast programs rather media- and data distribution services. The signals are radiated in a MCPC (Multiple Channel per Carrier)-carrier following the DVB-S-Standard for DTH-reception.

In detail:

1.1 Signal reception

The hand over of the ready to be aired signal from the customer to MB takes place at MB's teleport in Usingen, Germany.

Standard signal interface to the DVB-S platform:

- TV-signals (video, audio, program associated data):
DVB-ASI or Fast Ethernet
- Audio broadcast-signal (audio, program associated data (e.g. RDS data): DVB-ASI

Other signal interfaces are optional (surcharge)

- Digital signals:
 - Video: SDI
 - Audio: SDI embedded
 - Audio: AES/EBU
 - Media / Data: IP and others
- Analogue signals:
 - Video: Composite PAL + NTSC
 - Audio: 15 kHz analogue

1.2 Multiplexing

The multiplexing-component adds the SPTS (Single Program Transport Streams) to a common MPTS (Multiple Program Transport Stream) and completes this signal with the PSI (Program Specific Information) and PCR (Program Clock Reference) according the DVB-Standard.

1.3 Ground segment

The equipment of the satellite platform contains the baseband- and radio frequency- equipment (transmission path). The equipment will be provided with redundancy (n+1).

1.4 Space segment

MB provides for the distribution of the customer signal an allotted satellite frequency on an available orbit position.

2 Troubleshooting management

The Service will be monitored and controlled for quality and security. In the Satellite Network Management Center (hereafter referred to as "SNMC"), faults in the satellite connections will be processed 24 hours a day, seven days a week. The SNMC is constantly available via a 24-hour hotline.

3 Service Level

The on-site MB service team is in charge of rapid trouble shooting:

On-site Service hours

(Location Teleport Usingen):

Mon. – Thurs.: 7:30 – 15:30 CET

Fri.: 7:30 – 14:30 CET

(Except on public holidays)

Response time:

during on-site service hours: ≤ 2 hr.

outside on-site service

hours with call over: ≤ 4 hr.

MTTR-value

(mean time to repair): 8 hr.

4 Optional features:

- **Contribution**
 - Terrestrial
 - e.g. to the teleport Usingen via international PoPs:
 - Frankfurt, Deutschland
Ancotel
Kleyerstraße 90
60326 Frankfurt
Interface: 100BaseT or DVB-ASI
 - London, UK
Pacific Television Center (PAC TV)
6 Braham Street
London E1 8EE
UK
Interface: DVB-ASI
 - Via Satellite: Turnaround from other orbit positions
 - **Encoding**
 - At the studio site (through MB)
 - At the teleport Usingen (through MB)
 - **IP-Encapsulation**
 - **Playout**
 - At the teleport Usingen (through MB)
 - At the teleport Usingen (through customer)
 - Content delivery
 - from DVD, etc. / without Remote Update
 - from Server with Remote Update via IP-connection from customer to Usingen
 - **Encryption**
 - **Norm conversion (e.g. from NTSC to PAL and vice versa)**