

Briefing

World DAB Technical Committee

Interoperability Workshop 2018

IRT, München, 23rd Nov 2018, 09:00-16:00

Outline

The WorldDAB TC organises an annual interoperability workshop open to WorldDAB members for a technical test session. The purpose is to provide a discussion platform for all technical aspects of operating the DAB system. Transmission side experiments and receiver prototypes can be matched and interoperability issues can be identified and addressed. Conclusions reached will be reviewed by the TC and may lead to specification updates.

Target audience

Broadcasters and equipment makers are invited to bring modulator and transmission equipment to generate test signals. Receiver makers are invited to bring receivers, prototypes and analyser tools to test against generated test signals.

The workshop is open to technical staff from all World DAB members and invited guests.

Facilities

At the event facilities are provided to generate test signals from ETI files; in addition the event host operates a local multiplex that can be used for road testing.

For operating equipment AC power, LAN and WLAN access is provided. For road-testing, a multiplexer can be configured.

The workshop is held at Institut für Rundfunktechnik (IRT), Floriansmühlstrasse 60, D-80939 Munich, Germany. For specific questions about access to facilities and test equipment, interested members should contact the host at erk@irt.de or the TC vice-chair at andreas.gorsak@de.jvckenwood.com.

Aspects of testing

Relevant for testing is any DAB system aspect that is of interest to World DAB members. Of particular interest this year are all questions arising from the recent updates of ETSI EN 300 401 and ETSI TS 103 176.

As an annual event various topics have been explored before. The following topics may be of interest, testing is facilitated by available equipment and provided ETI files.

DABv2 ensembles

The update ETSI EN 300 401 V2.1.1 has introduced a number of new rules and conventions to the DAB system. The provision and functioning of such rules, e.g. FIG 0/7, FIG repetition, MCI configuration can be explored in preparation of commercial roll-out.

Service following, dynamic hard and soft links, dead links

Service following being implemented widely, specific aspects of service linking, frequency information and other ensemble services information in relation to receiver behavior and performance can be evaluated. Of specific interest have been dynamic links, soft links and dead links before.

Ensemble reconfigurations

Changes of sub-channel capacity and encoding parameters, changes of audio encoding in combination with service linking and service component insertion and removal can be reviewed.

Regionalization

Regionalized services often combine service following and ensemble reconfiguration to provide regional broadcasting for certain periods throughout the day. This complex combination of signaling aspects can be tested on receiver samples.

Service list management and service component information

A signaling to indicate changes to the service list is a relatively new feature that has been defined previously and is now included in the DAB system standard. Testing in advance of commercial roll-out helps to address issues in signal configuration and receiver response.

Announcements and alarms

While announcements have been a main system aspect of DAB before, the revised specification describes previously non-functional other ensembles announcements. Also the specification for alarms has been revised and clarified.

SPI programme information and station logos

The provision of station logos has been discussed in the DAB community since long and is now seeing a roll-out in various countries. Exploring practical aspects of coding and service formatting assists broadcasters and receiver makers addressing implementations.

TPEG service transport

Signalling and encapsulation of TPEG traffic services in preparation of on-air provision.

Participants are encouraged to propose topics and provide ETI files.