

Briefing
World DAB Technical Committee
Interoperability Workshop 2019
IRT, München, 27 Nov 2019, 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.

Agenda

The workshop provides opportunities for testing ETI file playout and reception for the use cases listed below. Besides those ETI file centric aspects opportunities for testing of OMRI implementation can be arranged with IRT.

Participants are encouraged to propose topics and provide ETI files.

ETI file use cases

Generally, any DAB system aspect is relevant to this workshop that is of interest to World DAB members. As an annual event, various topics have been explored before. The following topics may be of interest, testing will be facilitated by available equipment and provided ETI files.

DABv2 ensembles

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

Non-latin Text

ETSI TS 103 176 (v2.2.1) introduces new coding facilities to support non-latin text specifically in FIG2 labels and dynamic label segment. A text control field indicates requirements in the receiver to support the text encoded in Unicode.

Various region specific profiles lay out a minimum glyph set and rendering capabilities required. Receivers can be tested at handling the new encoding scheme and dealing with FIG1 and FIG2 labels.

Service following, international linkage sets

Service following is being implemented widely, specific aspects of service linking (FIG 0/6), frequency information (FIG 0/21) and other ensemble services information (FIG 0/24) in relation to receiver behavior and performance can be evaluated. Of specific interest is the validation of international linkage sets, ECC provision and service Id matching.

Ensemble reconfigurations and regionalisation

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 in transmission and reception.

Service list management and service component information

A signaling to indicate changes to the service list has been introduced with DABv2 and is now part of the DAB system standard. Testing of service component information (FIG 0/20) 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

Exploring practical aspects of coding and service formatting assists broadcasters and receiver makers addressing implementations. As of recently a use case for cross-ensemble service logo provision has been trialed.

TPEG service transport

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