

Briefing
WorldDAB Technical Committee
Interoperability Workshop 2020
Online, 18 Nov 2020, 14:00-16:00CET

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.

Due to travel restrictions, the TC has decided to hold the Workshop 2020 as an online event. This imposes some changes on the format and organisation of the event, but it is intended to retain the benefits for World DAB members afforded by in-depth discussions on technical aspects of ETI files. The Project office has established a task force dedicated to technical discussions, everyone interested is encouraged to join the TF Interoperability at the member section of the WorldDAB website.

Target audience

The workshop is open to technical staff from all WorldDAB members.

Online event

As an online event the workshop requires preparation by all participants so that issues, topics, and material can be collected beforehand and discussed one by one in the meeting. For this to work a 2-step procedure is required.

1. Creators and contributors of ETI files are requested to submit files as soon as possible, by 30-Oct CoB at latest; either by direct upload to the ETI library or by sending a download link by email to the admin group (admin.eti@worlddab.org) for upload to the ETI library.
2. Receiver implementers and technical experts access the provided ETI files in the World DAB ETI library ('Interop' folder) for analysis and review. Issues found and questions arising shall be submitted the reflector of TF Interoperability by 13-Nov CoB.

A meeting of the Workshop organising team will review all submitted issues and prepare the agenda for the Workshop online meeting.

Eligible for submission is any ETI file that encodes a technical situation of interest to the contributing party. The submit-review structure allows for a wide spectrum of issues to be discussed. Contributors are encouraged to provide files around the ETI File use cases listed below.

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 (v2.4.1) 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.