DAB+ standards update

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ABU DBS, 6 April 2021

Topics

- Receiver testing
- Text handling
- Hybrid radio

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Receiver testing

- For DAB receivers, the ETSI standard TS 103 461 has become the basis of most receiver testing

- But developments to the standards, a new EU directive, and DAB expansion beyond Europe meant that an update was needed

- World DAB TC completed the process to revise the standard and the new version was published in October 2020

ETSI TS 103 461 V1.2.2 (2020-10)

ETSI

TECHNICAL SPECIFICATION

Digital Audio Broadcasting (DAB);
Domestic and in-vehicle digital radio receivers;
Minimum requirements and Test specifications
for technologies and products

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Receiver testing

- Changes have been made to the requirements and to product and core technology testing:
  - The regional text profiles concept is integrated into the text
    - As DAB in vehicles is now mandated by the EU in member states through the EECC, the All Europe regional profile is specifically mentioned
  - All receivers are tested for correct reaction to emergency alarm announcements
  - Extra service following tests with the Extended Country Code (ECC) are added

- The extra core technology tests ensure that the chip sets and modules used in products will be able to deliver non-Latin text to suitable displays
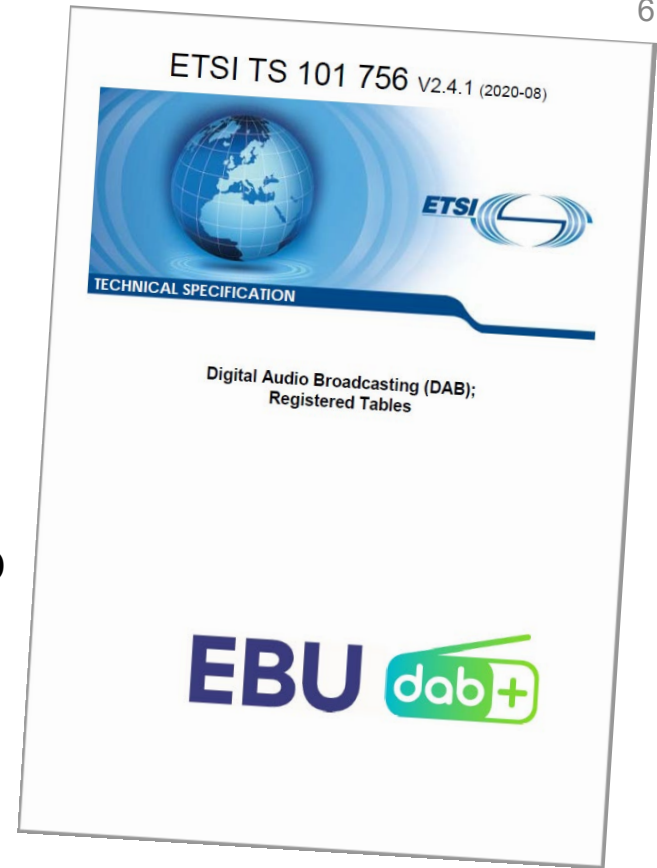
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Text handling

- The new signalling to improve the presentation of non-Latin scripts is fully specified
  - A new version of ETSI TS 103 176 was published in August 2020
- This ETSI specification defines the framework for using non-Latin text
  - An additional signalling field to provide key complexity indicators and allow receivers to implement an intelligent presentation scheme
  - The regional profiles concept to define scope and limits for particular markets so that broadcasters provide text that can be displayed correctly by receivers

ETSI TS 103 176 V2.4.1 (2020-08)

ETSI

TECHNICAL SPECIFICATION

Digital Audio Broadcasting (DAB);
Rules of implementation;
Service information features

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Text handling

- The DAB registered tables specification has been updated to include all the regional text profiles previously contained in TS 103 176 and with increased clarity
  - Four profiles
    - EBU Latin   abcdef
    - All Europe   abcdef αβγδεζ ЖЩЍЯЮ
    - ASBU   ٣¿ гё₈ abcdef
    - Thai   Äɫ¼£¬ abcdef
  - Also provided are starburst display glyphs for the Greek and Cyrillic characters in the All Europe regional profile
- Published August 2020

ETSI TS 101 756 V2.4.1 (2020-08)

ETSI

TECHNICAL SPECIFICATION

Digital Audio Broadcasting (DAB);
Registered Tables

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Hybrid radio

- The Hybrid radio Service and Programme Information (SPI) specification ETSI TS 102 818 has been updated to expand the geolocation capability for IP bearers
    - It permits broadcasters to specify if IP streaming is allowed or disallowed within a specified area
    - Deals with rights issues, preferences for broadcast over IP, etc.
    - The areas can be nested
- Published August 2020

ETSI TS 102 818 V3.3.1 (2020-08)

ETSI

TECHNICAL SPECIFICATION

Hybrid Digital Radio (DAB, DRM, RadioDNS);
XML Specification for Service and
Programme Information (SPI)

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Thank you

www.worlddab.org