Information sheet

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Why, what and how broadcasters need to provide metadata for the car

Metadata powers the future radio experience in the car

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General Information

Introduction

Radio is facing increasing competition in the car. Radio has to be seen as well as heard. One of the best ways for broadcasters to secure their place on the dashboard screen is to provide metadata. Broadcasters are responsible for providing metadata into the car to ensure that their stations look as good as they sound to the driver. This information sheet will tell you what metadata is, why it's important and what you as broadcasters need to do to provide the correct metadata.

What is metadata?

Metadata is the text and visual information that helps provide a better user experience in the car

Most radio stations are already producing content and metadata about their station and programmes for use on websites and in apps. Some examples are: the radio station name; logo; description; information about the current programme; presenter; artist; song; advertiser; images of the presenters; performers or products.
If you're seeing this kind of information for your station online or in apps, it should be possible to repurpose it for DAB and hybrid radio, and have it appear in the dashboard.

Why is metadata important for broadcasters?

If you do not generate and communicate metadata for the car:

- The dashboard screen could be blank with no information on your station, no branding and no easy glance information for the driver
- Your competitors will have a better in-car User Experience (UX)
- You could lose listeners – over 25% of listening takes place in the car
- Incorrect station logos provided by 3rd party suppliers may be shown
- A third party could potentially monetise your space in the dashboard

- Listeners will find it easier to get information like artist and title when they listen to songs from streaming music services.

What do drivers and listeners expect from radio today?

How can the listener benefit from metadata?

Metadata enriches the user experience for drivers, enhancing the radio audio with additional visual information delivered safely to the dashboard.

Radio must compete with the intuitive look and feel of other media in the dash

Android Auto, Apple Carplay, Spotify are all visually appealing in today's dashboard. As the big tech companies invest heavily in their user experience, these audio and music services are gaining prominence and share of the UX in the car. Radio needs to move with the times to keep up with its competitors through the better use of metadata.

Why is it important to act now?

Car manufacturers need unity from the radio industry

Car manufacturers want the radio user experience to be seamless – they have designed their User Experience to compliment the best experience possible. Car manufacturers don't want to see a poor radio experience on their dashboard when there is no metadata – they want to work with the radio industry to provide a positive radio experience, provided that broadcasters are prioritising the delivery of metadata. Car manufacturers are now planning for the future, and they need to know that broadcasters are serious about supporting a richer radio experience.

The automotive industry wants to prioritise radio in the car by implementing the following:

- A more personalised experience of radio
- A seamless listening experience between the car and other devices
- User interfaces with improved interactivity, search functions, visuals and voice capability

What car manufacturers say

Metadata is important because Radio has long suffered from lacking in a user experience which allows useful information to the user. Media, for some time has a multitude of ways to improve visual and appropriate content. With higher resolution screens now being commonplace, allows a much more immersive experience and Radio needs to make sure it embraces technology with data, images and relevant interactions, whilst on the move to not alienate drivers and passengers**. (Jaguar Land Rover)**

Our statement stays unchanged in this regards: the more broadcasters support the use of metadata and the more metadata they provide (Logos, Covers, tags, etc...), the better radio experience will be for the user in the vehicle. **(BMW)**

Metadata is important because it provides a lot of additional information to the user. We are interested on showing all the metadata on the music transmitted via DAB. We would like all the broadcasters to send metadata and to implement all the features provided by the DAB, such as the EPG, slideshow. This will lead to a more complete and effective experience for the end user. **(Fiat)**

With the metadata, the broadcaster makes the radio user experience more attractive and provides a real advantage for DAB vs. FM-RDS. That is the reason, why we stick to our previous statement that the in-vehicle radio experience will be better if the broadcaster provides as much as possible metadata along with the music via DAB. This gives us the ability to provide a better in-vehicle radio user experience. **(Ford)**

Some examples of in-car trends that are made possible with metadata:

- On-demand content requirement – associated podcasts
- Larger and better dashboard screens – rich visual content
- Autonomous cars – more interaction with stations
- Connectivity – associated content (e.g. find out more about etc.)
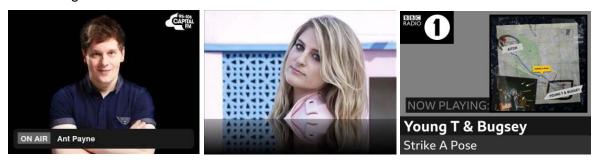
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Why is it important to send metadata over the air via DAB+?

Some information is best sent over the air using DAB+, with supporting information sent via IP to provide a truly hybrid radio experience:

DAB Content	Online Additional Content
DAB+ Audio DAB Text – for basic information DAB Slideshow – for Visuals DAB SPI* Logo – for Navigation DAB SPI Programme Information	Audio streams Slideshow – for better quality text and visuals SPI – for more information SPI – with on-demand links – for richer information

* SPI = Service Programme Information

Text and Slideshow (over DAB and/or IP) can be used to show real time information about what the driver is listening to, for example artist and title of the current song, information about the current programme and presenter, news information, traffic information or advertising.

SPI (over DAB and/or IP) can be used to provide information about the station and its programmes, and link into on-demand and podcast content.

A roadmap for broadcasters to implement metadata

Check list and next steps to get your metadata to the dashboard:

1. **Engagement** – ensure it is understood what the metadata roadmap looks like and how you want your station to look in the car
2. **Hygiene** – you already have this data. Ensure you know what is required now, the format it is required in and how it is being provided
3. **Responsibility** – clearly identify the team that is responsible for generating and providing metadata in other areas, and can help transfer the metadata to the car

Find out more and speak to someone who can advise from the WorldDAB network:

metadata@worlddab.org

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Metadata guidelines – what should be provided

Minimum – this should be provided now by every station

- Station name in short form (8 characters)
- Station name in a longer format (16 characters)
- A short description of the station – for instance, the marketing slogan ("The Greatest Hits Of All Time")
- A longer description of the station – for instance ("We play the Greatest Hits of All Time from artists like The Beatles, ABBA, Coldplay and more")
- Five different sized station logos. These sizes are the most likely to be used on a car dashboard. (You can find the exact sizes at https://radiodns.org/get-involved/project-logo/technical-details/).
- DAB and FM information – this is essential to link your station to the right metadata and content.

This information should be provided online (using the SPI standard). Where possible it should also be transmitted over DAB.

Advanced Service Information – recommended that this is provided in addition to Minimum

- Station logos in more formats – additional to those in minimum
- Live IP streams
- Podcasts and catchup shows
- Phonetics to enhance voice control – this will improve the listeners' ability to find your station quickly using voice assistants

This information should be provided online (using the SPI standard).

Realtime Programme Information – recommended that this is provided in addition to Minimum

- Information on what is on-air now on your station, at least at a "per programme" level. Produce it in text form and as a visual image.

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This information should be provided online (using Slideshow). Where possible it should also be transmitted over DAB. Online visuals must be at a higher resolution / quality than those transmitted over DAB.

Future – the longer-term roadmap to be determined but could include:

- Create more dynamic real-time information (text and visuals), changing on each on-air event – songs, links, news, traffic, advertising.

- Metadata supporting a more personalised experience e.g. links like "find out more" taking the listener to more content. Better recommendations to e.g. more on-demand content

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Metadata – technical information

How is metadata transmitted to the listener?

To bring metadata to the customers, broadcasters can use it in several ways:

- FM RDS – simple text information
- DAB+ – logos, text, visuals and programme information
- RadioDNS (IP) – enhanced logos, text, visuals, on-demand content

Metadata requirements

	metadata	DAB+	IP
Minimum	Audio	• Audio encoding: AAC+ (DAB+) • Audio encoding: MPEG2 (DAB – UK Only)	Audio Encoding: AAC, AAC+ or MP3 Transport: Icecast, HLS, MPEG-DASH Bitrates: 48-128kbps
	Station Logos	4 sizes	5 sizes
	Station Name	• Short name • Medium name	• Short name • Medium name • Short description • Long description
	Genre Information	• Programme Type	• One or more genres
	Real time text information	Current programme, current song, current advertisment etc.	
Advanced	Programme information (SPI)	• Today and tomorrows programmes	• Up to 14 days of detailed programme information
	Real time visual information (Slideshow)	Visual image of current presenter, song artist and title, advertiser product etc.	
More advanced	Podcast information for current and all (catch up) shows	Podcast and On-Demand audio associated with each programme in SPI	
	Phonetics to enhance voice control	Phonetic information in your Service and Programme (SPI) Information	

This functionality is defined in these ETSI technical standards:

- DAB – EN 300 401
- DAB+ – TS 102 563
- DAB Text – EN 300 401

- DAB Text (DL+) – TS 102 980

- Service and Programme Information (SPI) – TS 102 818

- Slideshow – TS 101 499

Further information

WorldDAB Station Logo Guide:

https://www.worlddab.org/public_document/file/1091/StationLogosDoc_FINAL_2019.pdf?1548678132

RadioDNS Project Logo

https://radiodns.org/news-campaigns/project-logo/