

The metadata imperative

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- It's the data to describe data
- For radio, it's the information that enhances the audio experience
 - Text
 - Images
 - Alternate sources...
- Speaking technically, for DAB it's contained in the FIC and the SPI
 - FIC = Fast Information Channel
 - SPI = Service and Programme Information

- The most important element is the name of the station
 - That's how the user connects to the audio, so it's essential

BBC Radio 4

Capital London

LBC

- It comes in the FIC
- There's a lot more besides, but we don't have time for all the details!

Enhanced metadata

- The station name can be enhanced with the station logo
- Which comes in different sizes
- And can be used for service selection instead of the textual name
- And phonemes can also be provided to help with voice control systems
- This enhanced metadata is provided by the SPI



- SPI = **Service** and **Programme** Information
 - It's a hybrid standard, so the information is the same for **broadcast** and **IP** delivery
- Logos and phonemes are part of the **Service Information**
- The **Programme Information** allows more details to be provided
 - But it may not be easy to use in the automotive environment, where driver distraction is a key issue

The user experience

- The user experience is driven by how the metadata is managed and presented to the user
- Imagine the first date with your new in-car audio system...
 - It has a beautiful colour screen
 - The radio stations are easy to recognise with their tasteful logos
 - It sounds wonderful!
 - But what's this???
 - Some of your favourite stations are missing!

Missing metadata

- So how is this situation avoided?
- What about preloading all the logos so that the first date is perfect?
 - That could be a big task – there are a lot of radio stations
- So the first date went well, and so onto the second!

- Some great new stations have been launched. You've listened at home, but now you're out on the road.
 - But where are they? They're not in the list!
- OK, so let's listen to the classic rock station instead...
 - But what's happened? That doesn't sound right! Oh dear, they're rebranded as a Country & Western station but the logo's still the same!

- To keep everything up to date, the metadata needs to be managed
- **Broadcasters** need to make sure they are using the **SPI** to provide their metadata
 - If something changes, the metadata needs to change too
- **Devices** need to make sure they are using the **SPI** to update their stored metadata
 - When a new station launches or an existing station rebrands, then fresh SPI metadata takes care of it

- The **SPI** is the same whether delivered by **DAB** or by **IP**
 - Vehicles move around, so wireless reception is essential
- **DAB delivery of SPI** means the metadata is received in the same pipe and at the same time as the corresponding radio stations – no extra connections are needed
- **IP delivery of SPI** means that connected devices can receive metadata via mobile broadband even outside DAB service areas

The SPI standard

- The Hybrid radio Service and Programme Information (SPI) specification ETSI TS 102 818 has recently been updated to enhance the user experience
 - Voice control assistance
 - Alternative names for radio stations and programmes
 - Phoneme support for station and programme names
 - More metadata to provide details of contributors, presenters, creators



- **Broadcasters:**
 - Use the SPI to provide metadata over DAB to enhance your services
 - You can also provide the metadata online, but make sure it is an SPI document too
- **Devices makers:**
 - Decode the SPI over DAB in the background to enhance your User Interface
 - Update the stored metadata whenever the device is tuned to a DAB ensemble
 - If the device is also IP connected, seek out the online SPI for stations that haven't been updated for a while

Thank you

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