



Automotive Workshop XXV

Summary of Discussions

Tuesday 7th July 2026

This workshop was a follow-up to our in-person meeting on 12th May 2026 in London, if you were unable to attend the in-person meeting, there is a [Summary](#) available.

Nick Piggott (RadioDNS) and Rosemary Smith (WorldDAB) hosted the meeting and began by introducing the topics on the agenda, encouraging attendees to participate. New attendees were welcomed and introduced themselves. Nick also reminded the group that no individual contributions are attributed to any attendee in the notes, unless explicitly agreed.

The agenda topics were mostly a continuation of the topics from the in-person workshop of 12th May 2026, plus two additional topics.

1. Ensuring good quality experiences for drivers using voice assistants / agentic LLMs in vehicles

The meeting began by giving a summary of points discussed at the last meeting:

- Deciding "Intent" is difficult but radio should be high on the decision list - the word "radio" is very defining
- Broadcasters should be providing metadata to support voice assistants - including geo-location data
- Manufacturers should be ingesting that metadata to improve accuracy
- Visibility of "success rate" would help with optimising metadata
- Information should be in the User Experience Guidelines

It was asked if Ofcom (UK) were taking a greater role in working with Automotive OEMs, but there was no other knowledge of this from other attendees.

It was acknowledged that getting large providers of voice assistants (e.g. Google, Amazon) to take accountability for accurate results for requests for radio services is difficult.

It was discussed whether providing more accurate metadata (such as phonemes) has helped engage these providers and improve the outcomes. Some people are doing this, and the outcomes don't seem to be yet dramatically improved. Jarred (CRA, Australia)

reported that his research shows around a 70% success rate with Google, which has been passed on to them.

It was asked how best to deal with third party/white label voice assistant providers used by vehicle OEMs. The conclusion was that radio stations should deal with the OEM, who in turn will manage the process with their voice assistant provider.

After discussion, it was concluded that there was no example of a good implementation of accessing radio through a voice assistant that could be used as a reference. This is a concern because radio (alongside navigation) is a function drivers are most likely to want to use.

There seems to be very limited research available on how drivers are currently trying/would want to use voice assistants in vehicles for radio. There is more generic research about radio listening using smart speakers, but this doesn't reveal the failure rate or users' (dis)satisfactions.

Rosemary took an action to investigate driver/user expectations of using radio via voice assistants.

It was acknowledged that it's unlikely we'll get detailed information about failure rates from the current providers of voice assistants, so more experimentation (similar to Jarred's tests) might be required.

It was noted that some streaming music providers already have playlists that contain radio-related words like "FM" and "radio", and they seem to be getting priority ahead of searches for radio. This needs to be communicated to OEMs, so they understand the priority order for search should give radio more prominence. There was a question about whether this "prominence" issue fell into the scope of regulators like Ofcom (UK).

The new User Experience Guidelines website will have a section on voice assistants, incorporating some of the guidance published by RadioDNS/WorldDAB a year or so ago, but not yet widely established.

Voice Assistant activation of radio in vehicles is a priority topic.

2. Problems caused by incorrect broadcast identifiers (e.g. RDS PI code, DAB SId code, HD Radio FCC ID)

Summary of discussion from last meeting:

- Broadcasters mis-configure, fail to update records quickly and don't monitor their broadcast identifiers
- RadioDNS / WorldDAB can reinforce the importance of this
- wrongradiostationlogos.com can help identify problems, but it's too late by then

Following a discussion reiterating the importance of this issue, it was concluded that there was no new information available or required.

The focus must be on educating radio stations to routinely check that their broadcast identifiers are correctly configured in all places.

3. Problems with prioritising broadcaster provided metadata & content - logos, visuals,

phonemes etc.

It was acknowledged at the last workshop that the presentation of visual content is inconsistent. Some manufacturers prioritise third-party content providers over broadcaster content and some broadcasters don't provide very good quality content.

The consensus was that broadcaster content should be prioritised, but no consensus was reached on how broadcasters should indicate that they do not want third-party content to be automatically provided (whilst recognising that a driver option may be provided to override that with positive confirmation that the driver understands the content is not coming from the radio station).

There was no new update at this meeting, so the issue progresses..

4. Radio Station Display Advertising - NEW TOPIC

The workshop heard that radio stations are exploring enhancing audio advertising with visual content. This raised a concern about the risks of driver distraction and experience degradation.

It was acknowledged that broadcasters should be able to provide relevant visual enhancement to radio advertising. The User Experience Guidelines already suggest good design requirements for the broadcasters to reduce the risk of distraction, and suggest that visuals changing more frequently than once every 20 seconds can be blocked by the manufacturer.

The example was given that in the UK, radio advertising has to follow some existing guidelines (in the audio domain) about avoiding driver distraction ([section 4.5](#) "Advertisements must not include sounds that are likely to create a safety hazard, for example, to those listening to the radio while driving."). It might be relevant to amend/extend those guidelines to visuals accompanying radio advertisements. This would cover the case, for example, of an advertiser encouraging people to scan a QR code on the screen whilst driving.

5. Implications of prominence regulation (and equivalent regulatory interventions) Summary of discussion points from last meeting are:

- Much discussion about the complexity/ ambiguity of the German legislation
- Many reasonable implementation questions have not been given definitive answers
- At the WorldDAB Automotive Event, the regulator announced:
 - a technical specification for OTA information
 - a version 2 of the regulation, but no further information
- RadioDNS have a proposal to standardise the provision of information

The meeting noted that most of the questions collated and put to the regulator do not have definitive and binding answers yet. The meeting felt that an announcement of a "version 2" of the regulation was not helpful at this stage.

It was reported that a trial service of over-the-air signalling has been launched on a DAB multiplex in Germany, following the technical specification defined by the BLM.

6. EU - Digital Networks Act

The discussion points put to the meeting were

- The Digital Networks Act (EU legislation) is an opportunity to extend the existing mandatory DAB+ requirement laid out in the EECC
- Broadcast radio functionality should be mandatory in a wider range of vehicles
- EBU has published "EBU Position Paper - EU Digital Networks Act"

The meeting discussed the potential implications of the EU-DNA making the inclusion of broadcast radio mandatory in vehicles. There was not a consensus on whether this was a good outcome or not. There was some concern that a mandate could be poorly implemented.

Specifically, there was a discussion about AM radio in electric vehicles, and the implications of suppressing electro-magnetic interference.

It was reported that China has mandated a form of DRM (Digital Radio Mondiale) for AM radio transmission, and further mandated that radio must be included in vehicles for emergency warnings.

Nick Piggott highlighted that there is a difference between guidance and regulation, and added that the concerns of the manufacturers is understood - if they must put radio into vehicles there may be situations where this cannot happen and making it mandatory could have unintended and unwanted consequences.

It was mentioned that some OEMs propose to provide IP-based apps that "emulate" broadcast radio, which users might prefer.

7. Implications of HMI design/functionality lagging available features/functionality

Summary of discussion from last meeting:

- Some layers of functionality are very hard to update (towards the hardware / firmware)
- Application level functionality may be updateable faster, but might be constrained by the hardware/firmware capabilities
- There is an engineering cost involved with any changes to either planned or already launched software which is hard to justify

Nick Piggott said there is growing evidence that drivers are not satisfied with touch screens as a user interface, and increasing concerns about the safety / distraction implications. The updated EuroNCAP safety ratings will take this into account. As a result, there is more interest in re-introducing some hard buttons to control vehicle functionality.

Re-introduction of hard buttons / hard keys to vehicle dashboards

There was a discussion about the pre-requisites for radio justifying a dedicated hard button / set of hard buttons, either on the dashboard and/or on the steering wheel stalk.

A point was raised about the potential disconnect between how often drivers use radio functionality, and how often vehicle HMI designers *think* drivers use radio functionality.

Mention was made of research from South America about user preference for hard buttons for actions such as volume. It was noted that hard buttons are expensive and add to the cost, so it might be more successful to continue lobbying to require a radio button on the first level on the screen.

As an example of a small but important detail that is being missed by HMI designers in some newer vehicles; Drivers are accustomed to the radio coming back on as soon as the ignition is turned on (if it was on when the ignition was turned off).

It was mentioned that alongside buttons and touchscreens, gestures are also being offered to navigate the screen in the car which could add further to driver distraction.

8. Importance of implementing soft-linking for consistent driver experience

Summary of topics from the last meeting:

- This shouldn't be hard to implement
- "It's just RDS Regional PI Coding" might explain it better
- What happens if there are two options - same service on IP, similar service on DAB/FM?
- The User Experience Guidelines needs to cover this topic

RadioDNS and WorldDAB will be educating on this. There is still an outstanding question on the best option to offer a driver if all the "hard" broadcast links have been exhausted - a) switch to the identical service on IP or b) switch to a "similar" service through broadcast soft linking. Input was requested from the group on this choice.

The functionality of Soft linking was not received positively by a few members of the meeting. There wasn't sufficient time to explore the nature of the issue, but Nick and Rosemary will pick this up outside the meeting to understand the issue and report back at the next workshop.

9. Brief updates

Android Automotive: We are still looking for potential participants to create an open-source code base to patch missing functionality in the HAL/AIDL layer.

UX Guidelines: These are in final review and design improvements, and will go live shortly.

Wrong Radio Stations Logos: Work on this project will still follow publication of the UX Guidelines. We'd like input from OEMs on how they would like to receive notification of issues.

10. Next workshop:

The next workshop will be an "In-person" workshop in Paris on 24th November 2026

The dates for the 2027 meetings will be confirmed shortly as well as the registration for attending the meeting in Paris in November.