



## Automotive Workshop XVII Summary

The following are notes from the meeting held on 25th June 2004, if you would like to watch the recording please contact [team@radiodns.org](mailto:team@radiodns.org)

Nick Piggott (RadioDNS) introduced the meeting and noted that whilst this meeting was being held online, the workshops that we hold in-person have proved to be very interesting, interactive and valuable..

He also introduced the agenda, which has been suggested by attendees and then reviewed the content from the last meeting

### **Cover Art: Broadcasters providing it and level of support from manufacturers.**

Roger Hofman (FFH) requested this be added to the agenda as execution could be improved and images are often replaced somewhere in the journey between the broadcaster and the radio. During the discussion it was said it is useful if done properly but some broadcasters just send their logo even though there are better ways to send the logo. Nick Piggott asked if there was any interest in visuals via IP, Thomas Braun (Mercedes-Benz) said it would be beneficial for them and Domminik Gammert (Mercedes-Benz) it would depend on things, such as quality of image. Klaus Bischof (CARIAD) added that this needs to be supported by a significant number of broadcasters.

### **Station Logo size:**

Lars-Peder Lundren (Paneda) asked for this to be on the agenda as he has seen vehicles that seem to be picking random artwork to display, which could be because they choose the first one, but they aren't good enough quality. Some stations have got round this by just sending one larger logo rather than adhering to the standard. Others in the meeting said they have also seen this. Nick Piggott said he didn't think sending one logo was a good workaround, and asked the group for advice on how to fix this. Gunter Lorenz (Radio Data Center GmbH) said he thinks the standard is slightly ambiguous, and maybe it should specify that there are no workarounds. Nick agreed as fixing one car with a workaround of "withholding logos" might mean 'breaking' many others. It is reasonable for the manufacturers affected by this problem to fix it rather than expect workarounds from broadcasters.

### **Voice assistance**

Feedback received so far is that this is an issue of growing urgency. One issue that needs clarity, given that the same radio station name can exist multiple times in one country, is the importance of providing the geo-location. Klaus Bischof said that all manufacturers must support voice assistance for many applications, radio is just one of them. Dominik Gammert said the most important is that the station name alias with phoneme support is provided as soon as possible.

### **Process for Reporting Field Issues**

Nick Piggott asked if it would be worthwhile for RadioDNS and WorldDAB to manage a project for reporting faults. Klaus Bischof said that there was good communication with broadcasters during the development phase, it's more about how many broadcasters are interested and how to collect the data of all the companies doing tests and finding issues. Nick suggested a ticketing system from a single place to report. Dominik Gammert said a system or database of contacts would be useful. Rosie Smith (WorldDAB) said she thinks problems are being picked up by individuals who know what they should and shouldn't be seeing rather than general users and there is already a reporting process, the WorldDAB helpline, and it works well. Rosie added WorldDAB would like to do some research where problems are actively sought out and is trying to formalise it into a system.

**Action for Rosie Smith is to create a form rather than just an email address for reporting.**

### **DAB Linkage and Linkage Set Usage**

Nick Piggott introduced this by welcoming Dominik Gammert to present an overview of how linking works by pulling together radio services that broadcast the same or similar content, in a logical way for the listener, replicating the FM RDS PI code matching.

Dominik presented a use case of different interpretations of the standard TS 103 176 and asked which interpretation is correct and what should be recommended to the broadcaster. Discussion on hard linkage sets and the correct interpretation of the standard, potentially in different scenarios.

A proposal of how the standard should be interpreted was presented by Dominik and there was a discussion on this, including implicit linking and providing dead link or an RDS PI code alternative, with further discussion on implied links. Nick summarised that it isn't clear and there are use cases meaning the scenario is legitimate but the issue is that there could be one ensemble carrying many different versions of the same broadcast and there is no differentiation that can be made without additional assumptions.

Thomas Braun added that their supplier said their implementation strictly follows the requirement of one hard linkage set or SID information. Klaus Bischof added that he has seen a similar problem in Bavaria and he said he thinks it is more about back linking.

Nick Piggott said there is a lack of clarity in the specification, the problem is happening in-market at the moment, and that the broadcaster isn't trying to do something wrong, but might not be adhering to the specification and he said he would like to take this problem to the WorldDAB technical group and ask what the intended implementation is. It means that there will still be some examples in-market of mis-interpretation but will educate broadcasters on how it should be done. Thomas Gammert said this will bring more confidence to the broadcasters to know what is correct.

**Action for Nick Piggott is to take this in-market problem to the WorldDAB technical group.**

### **Broadcast Radio Apps & Broadcaster IP Apps - seamless integration**

Nick Piggott summarised that there are more implementations of radio being an in-car app as well as broadcasters having their own app and asked how to make this a seamless experience between the two. A suggestion was to open up the APIs but there have been some concerns from manufacturers that broadcasters should not be able to access the generic radio app and so switching between the apps needs to be as seamless as possible. Currently the idea is for the radio app to handle the live stream and the broadcasters app to handle online / on-demand and Nick asked if this is still the direction everyone is happy with and if there are

any concerns. Domminik Gammert asked for an example and is it particular for the different display environments. Nick said one scenario is a link to the app store / play store to download the broadcasters app, the manufacturer would then action the correct link. Once the broadcaster app is installed it should automatically respond to URLs structured by the broadcaster.

No problems were discussed on this and Ben Poor (EBU) said he thought this was in direct alignment with the EBU's direction of travel for recommendation to members.

### **Radio Tuner and Antenna Performance**

Roberto Moro (SRGSSR) said that when a broadcaster is planning a DAB network they assume minimum field strengths and many are happy to say that minimum strength is low because then coverage increases but broadcasters should adhere on the specifications set out by WorldDAB.

David Sice (Intermedia CBTS) added that there are still areas in cities where there is dropout and he wants to establish research around vertical, horizontal and elliptical transmission and wanted to know about any documentation available about antenna placement in cars.

Klaus Bischof said to take into account protection levels and regarding polarisation their vehicles mostly have antennae in the window and their developers said polarisation is not as important as you might think, the signal is rotated from the chassis and will receive all polarisation directions.

Roberto Moro added that the German Institute of Rundfunk Technik has done measurements and gave advice about aero-protection. Domminik Gammert said that most antennas are now in-window, polarisation doesn't matter as much with these so vertical, horizontal or in between is more influenced by terrain and reflection area and regarding sensitivity the minimum receiver requirements gives the minimum of what you can expect, the values are achievable but not easy but can be used for an initial guideline without taking into account specifics of vehicle.

### **Radio in IP Only vehicles**

Nick Piggott said there was a question from the last workshop asking how IP only radio would work: would it be pre-installed or left up to drivers to install their own apps adding replication radio in the IP domain is difficult and may irritate drivers and therefore do we need to make it more important for broadcasters to provide geo-information as part of their metadata. He asked for any developments on this issue from the group, but there were no immediate concerns raised.

### **Next meetings**

Nick Piggott said that the next meeting will be in-person at the end of October - we will communicate the date and location as soon as we can. He added the last in-person meeting was really valuable and we would encourage everyone to attend if possible.