

Radio  [®]
HYBRID RADIO

WORLD

DAB

Automotive UX Workshop

7th February 2017
EBU, Geneva

WiFi Code: 4018

Automotive UX Workshop

14:30 - 17:00

<https://radiodns.org/get-involved/automotive-workshop-feb-2017/>

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Welcome

Matt Deegan, Moderator

WiFi Code: 4018

Meeting Format

Discussion is required

Please give your **name** and **organisation**

Press the Microphone button in front of you to speak

Automotive UX Working Group

Laurence Harrison, DRUK
Sam Bonham, DRUK

WiFi Code: 4018

In-car user experience research

Sam Bonham
Laurence Harrison
Digital Radio UK



In-car user experience research

Background:

- WorldDAB UX group set up to improve digital radio in car
- Car manufacturers and broadcasters collaborating
- Opinions on UX not supported by consumer evidence
- Research agreed across 7 markets
- Will inform development of DAB UX industry guidelines



In-car user experience research

Objective: To acquire in-car digital radio consumer feedback

Key question: How easy is it to use the in-car digital radio?

- Justification (why do you think that?)
- Suggestions for improvement

Specifically:

- How easy it is to find and start to play the DAB radio
- Searching for stations (e.g. by mux or A-Z list)
- Understanding and value of terminology and iconography
- The value of DAB radio data (logos, DLS etc)





The set up

- Two cars
 - One entry-level volume seller, one high-end
 - Different presentations of DAB radio
- Stationary for research
- Respondents were not given any guidance or instruction
- No familiarisation with the UI beforehand
- Even split between respondents being in car one/two first

Car 1: mainstream

Car 2: high-end

“Radio” button

“Radio” button

Search by multiplex

Integrated FM/DAB station list

Small screen

Large colour screen



Respondents

- Ten people
- Six male / four female
- Age range: 22-58
- Six own cars (with FM radio)
- Four had no car
- Seven have DAB at home



A grayscale photograph of two men standing in a parking garage. The man on the left is wearing a light-colored button-down shirt and dark trousers, with his arms crossed. The man on the right is wearing a light-colored long-sleeved shirt and dark trousers, also with his arms crossed. They are standing between two cars. The car on the left is a dark-colored sedan with a license plate that reads "BG66 VNA". The car on the right is a light-colored sedan. The background shows the concrete walls and ceiling of the parking garage, with some electrical boxes and pipes visible.

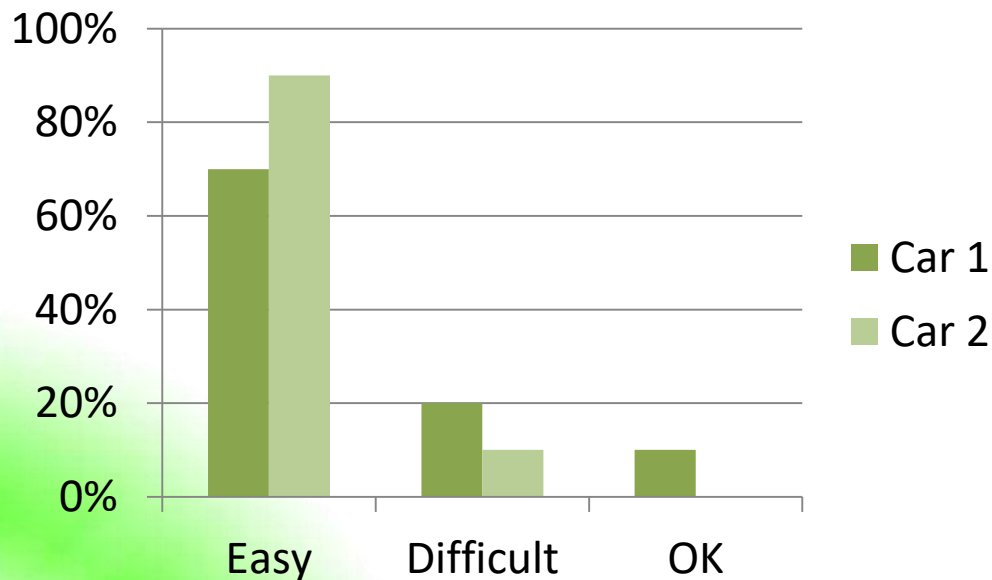
This is qualitative research

Section one: Finding the DAB radio

Headline: A RADIO button makes it easy to find DAB radio

*Please can you
find the DAB
radio?*

*Was that easy
or difficult?*



Section one: Finding the DAB radio

Car one:

*I would expect there to be a
DAB button*

*It was easy, just press
RADIO*

*Is this it? I do not know if I
have found DAB*

Car two:

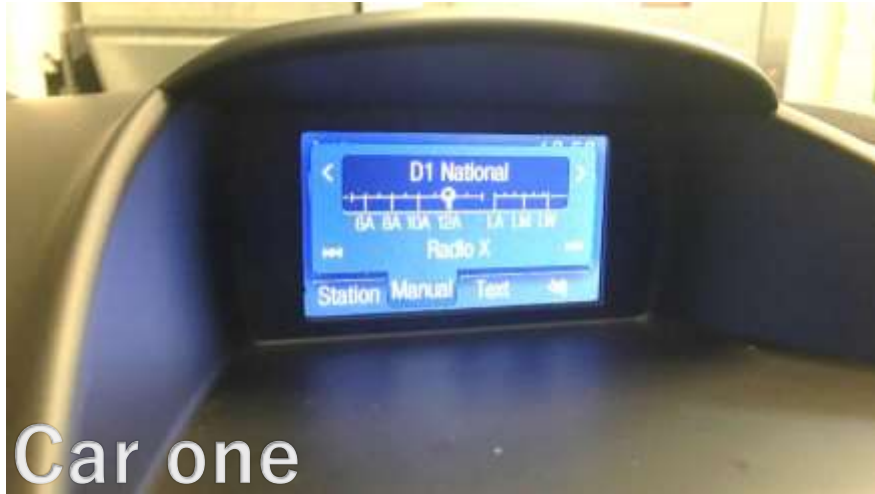
Am I on FM or DAB?

*Strange that it is not a
touch-screen*

*A RADIO button on the
steering wheel would have
been useful*



Section two: Search and tune to a station

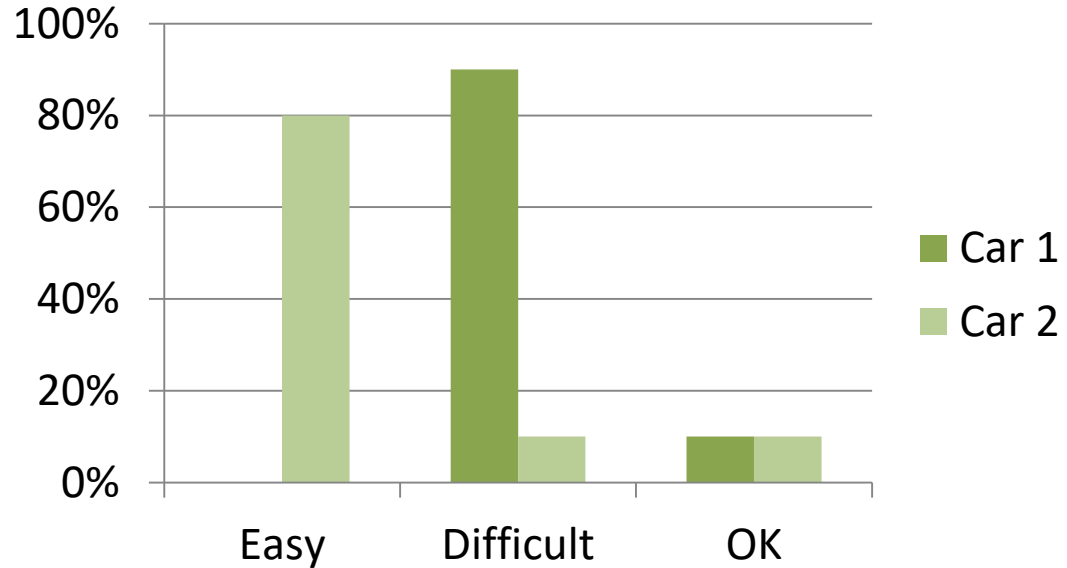


Section two: Search and tune to a station

Headline: An A-Z station list is the best station search experience. Searching by multiplex is difficult

*Please can you
tune to XYZ
station?*

*Was that easy
or difficult?*



Section two: Search and tune to a station

Car one:

- Most could not find the station
- Many used the volume button at first
- Some scrolled through every single station to find the right one
- The phone connection was an added confusion for some
- Most people were irritated with this process

Car two:

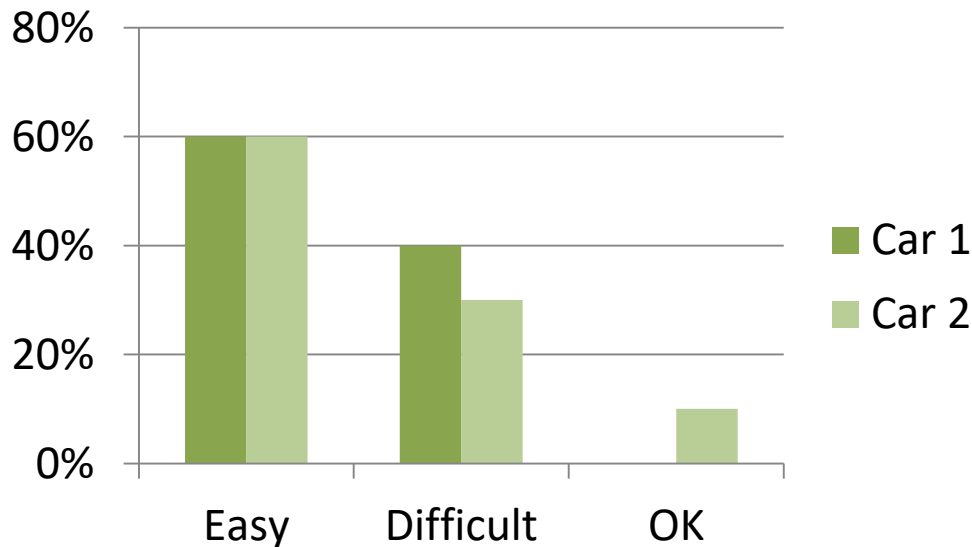
- Everyone found the station
- No one found the scrolling nav wheel
- Most thought it was a touch screen
- Some people were confused by the frequency bands



Section three: set a preset

Headline: If you have done it before, you can set a preset.
Otherwise it is difficult

*Please set XYZ
station as a
preset?*



Section four: terminology

**Headline: No one
understands TP
or frequency
blocks**

*Do you know what
this means?*

TP
Service linking

Media

TA

DLS text

Scan

RDS

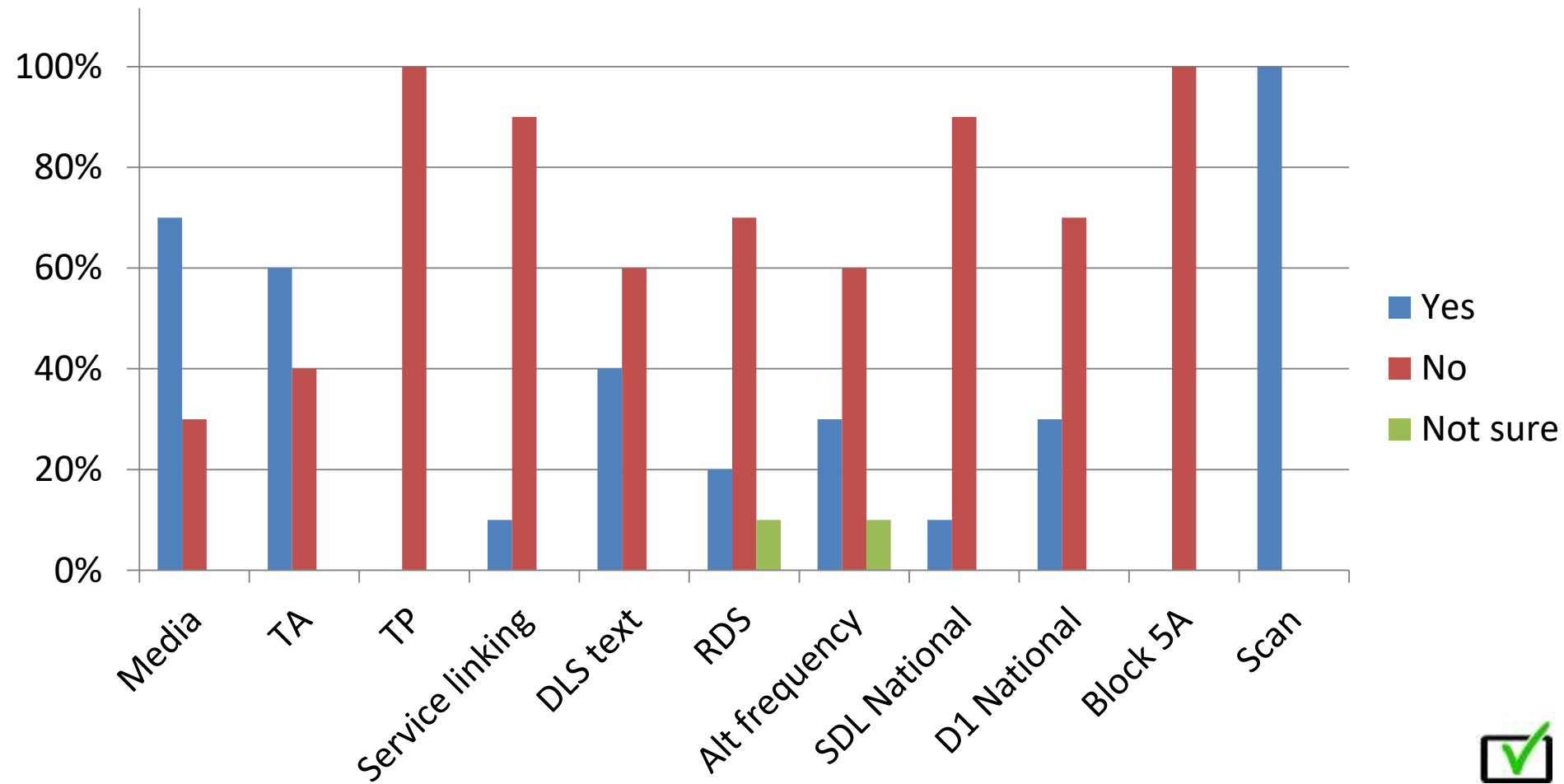
Alternative frequency

SDL National

D1 National

Block 5A





Section four: terminology

Understood

Scan

Some understand

Media

TA

DLS text

Not understood

TP

Service linking

RDS

Alternative frequency

SDL National

D1 National

Block 5A



Station



Setting a station

Activating/deactivating the preset...

Station list

Saving/deleting a station

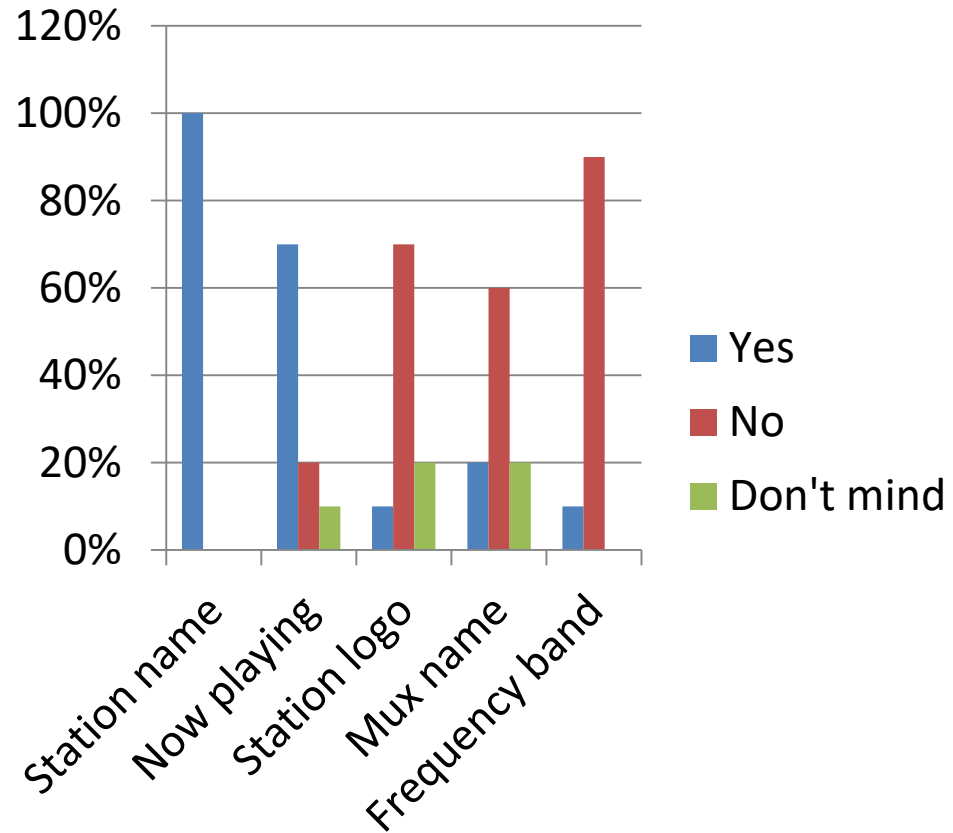
Station tracking (FM/DAB radio)

Frequency fix function (FM radio m...

Section five: value of data

Headline: Station
name and now
playing are
valuable.
Frequency band is
not

Would you find this information/data useful?



Section six: improvements

Car one respondent
feedback:

Include an A-Z station list

Remove information on muxes

Make it simpler (Apple-esque)

Remove information on frequency bands

Type station into search bar

Car two respondent
feedback:


Search by letter

Separate buttons for DAB and FM

Have presets set automatically

Include a DAB button



A faded background image showing two men standing in front of a row of cars in what appears to be a dealership or service center. The man on the left is wearing a light-colored shirt and dark trousers, and the man on the right is wearing a light-colored sweater and dark trousers. They are both smiling at the camera. The cars are parked in a row, and the background shows a building with some signage.

**Many of the issues raised
could be solved at the
dealership**

Conclusions

1. A RADIO button is great
2. An A-Z station list is great
3. Several digital terms are not great
4. Drivers expect a great UI

Lets make digital radio in the car great... again!

Next steps

- Share this work with the WorldDAB UX Group
- Share with other broadcasters and manufacturers
- Digital Radio UK to refine the questionnaire
- Others carry out the research (France, Netherlands, Belgium, Germany, Norway, Italy)
- Include hybrid and connected products in the research
- Draft UX guidelines – Complete by Aug 2017

In-car user experience research

A grayscale photograph of two men standing in a garage between two cars. The man on the left is wearing a light-colored button-down shirt and dark trousers, with his arms crossed. The man on the right is wearing a light-colored sweater and dark trousers, also with his arms crossed. To the left is a dark-colored car with a license plate that reads 'BG66 VNA'. To the right is a light-colored car. The background shows a garage with a door and some equipment on the wall.

Sam Bonham

Laurence Harrison

Digital Radio UK

Navigation & Listing

Stations, Buttons

UI Consistency

Icons, Language

Coffee Break

15 minutes

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Logos and Metadata

Visual Enhancements

Discovery and Sharing

Search, Bookmark

Voice Control

Accuracy in Voice control

Summary

Matt Deegan, Moderator

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