

In-car user experience research

The background image shows the interior of a car. A person's hand is visible in the lower-left foreground, adjusting a silver knob on the center console. The center console features a digital display with navigation information, including a star icon and the text 'SCHLAGERPAKETS'. The dashboard and steering wheel are also visible in the background.

Laurence Harrison, Chairman, World DAB Automotive Group

World DAB Automotive Conference, Munich, 21 June 2017



World DAB Automotive UX Group
Building a great in-car digital radio UX



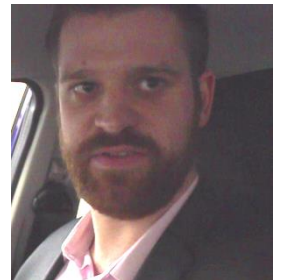
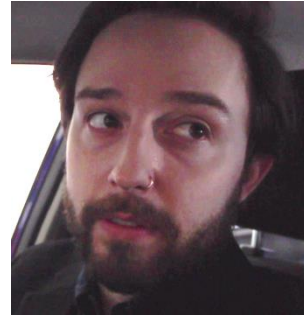
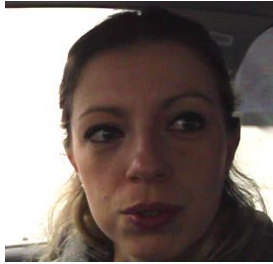
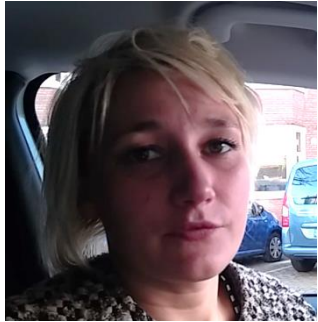
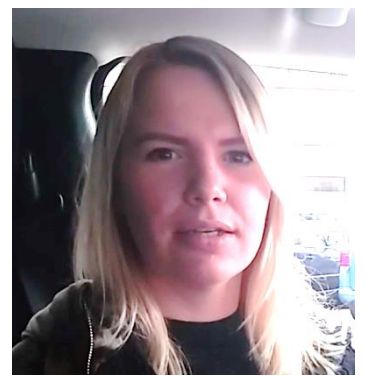
In-car user experience research

Objective: Help inform digital radio UX development and design guidelines

Questions: How easy is it to use DAB digital radio?
Can you find the DAB radio?
Can you find the station you want?
Can you set a pre-set?
Do you understand the DAB terminology?
Do you value the extra data?

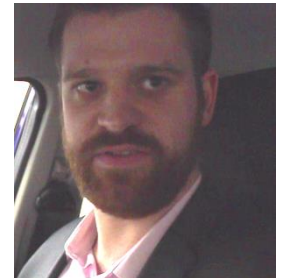
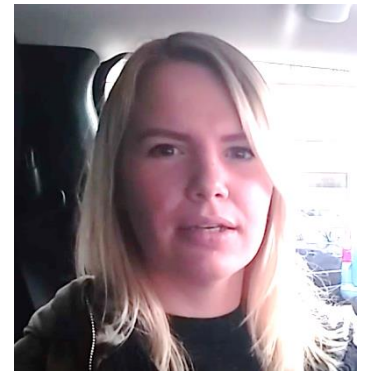
Five European markets





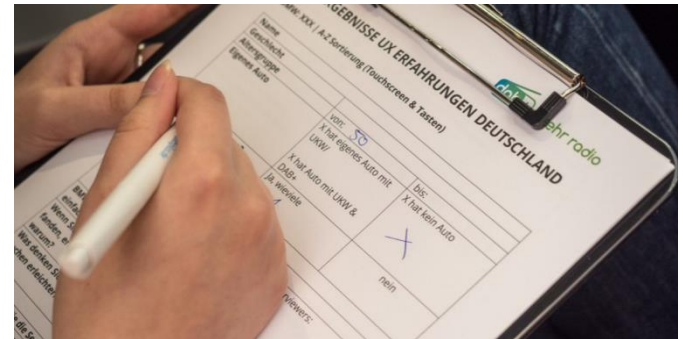
Respondents

- 40 people
- 16 male / 24 female
- Age range: 22-68
- 24 own cars with FM only
- 5 had cars with DAB
- 11 had no car
- 18 have DAB at home



Methods

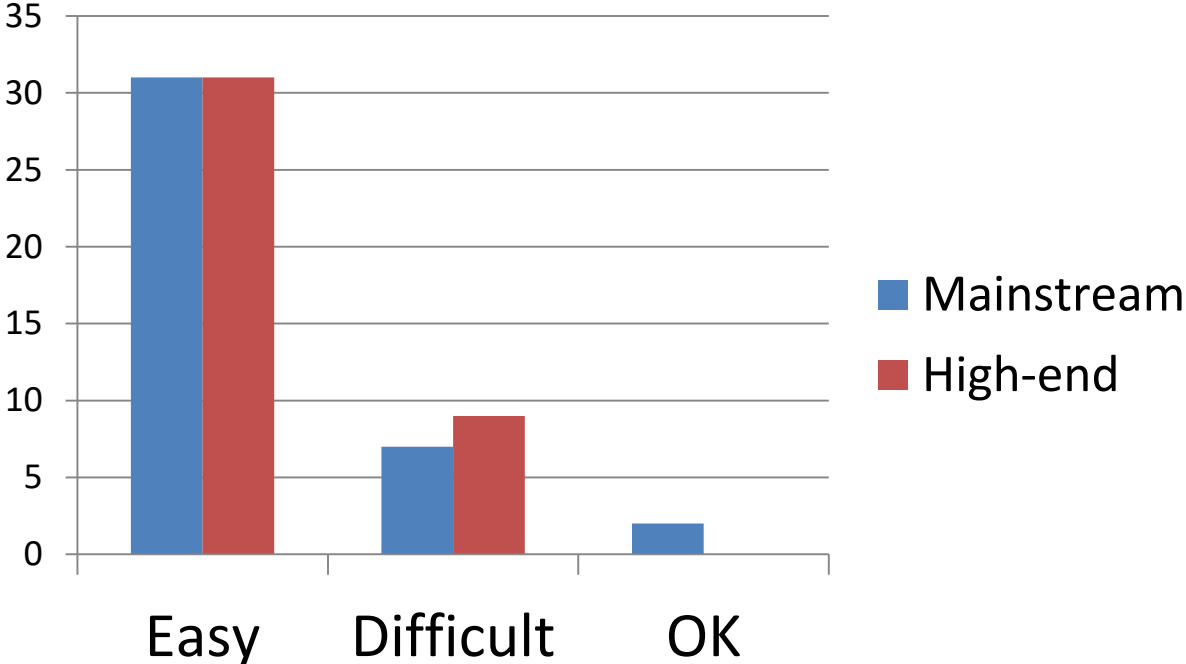
- Qualitative research
- 2 cars in each market
- Different cars used
- Typically one mainstream, one high-end
- No guidance given on how to use radio



Finding DAB+: A RADIO button is essential

Please can you find the DAB radio?

Was that easy or difficult?



Finding the DAB radio – Observations

Difficult to find DAB behind a “media” button and large menu

In some cars it was difficult to go to DAB from AM/FM

Some respondents unsure if they were listening to DAB

Respondents expected all screens to be touchscreen

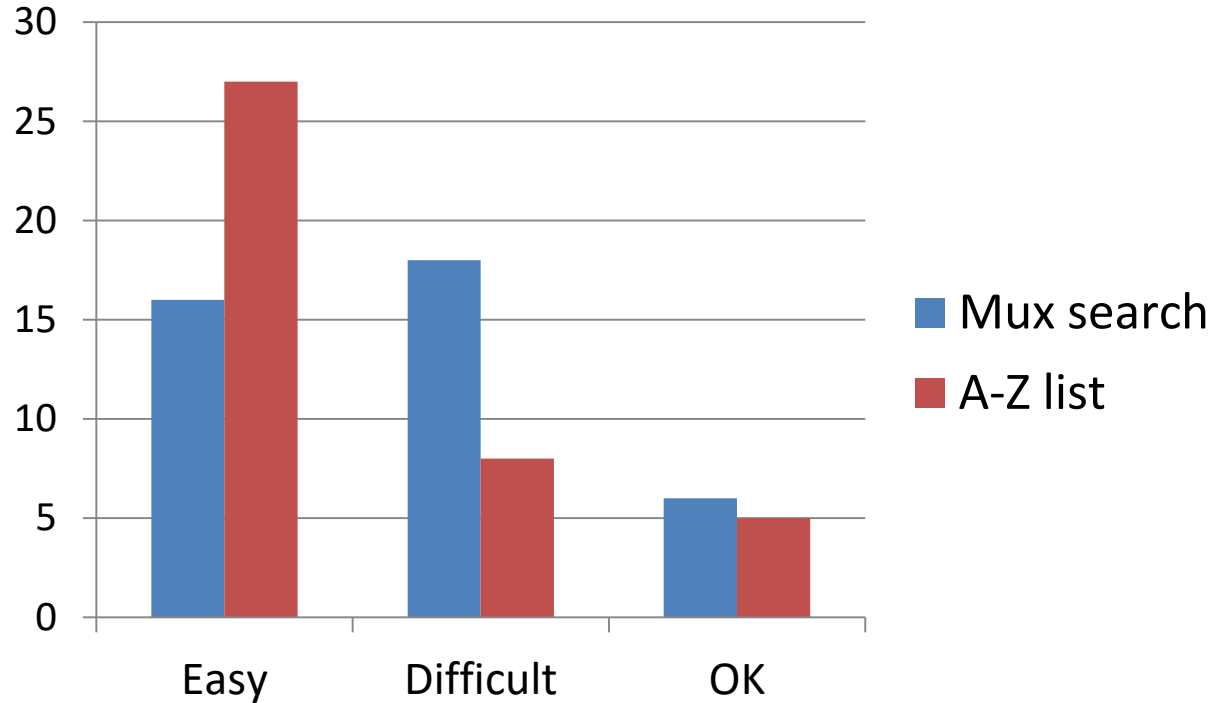
Search and tune to a station



Search and tune: An A-Z station list is best

*Please can you
tune to XYZ
station?*

*Was that easy or
difficult?*

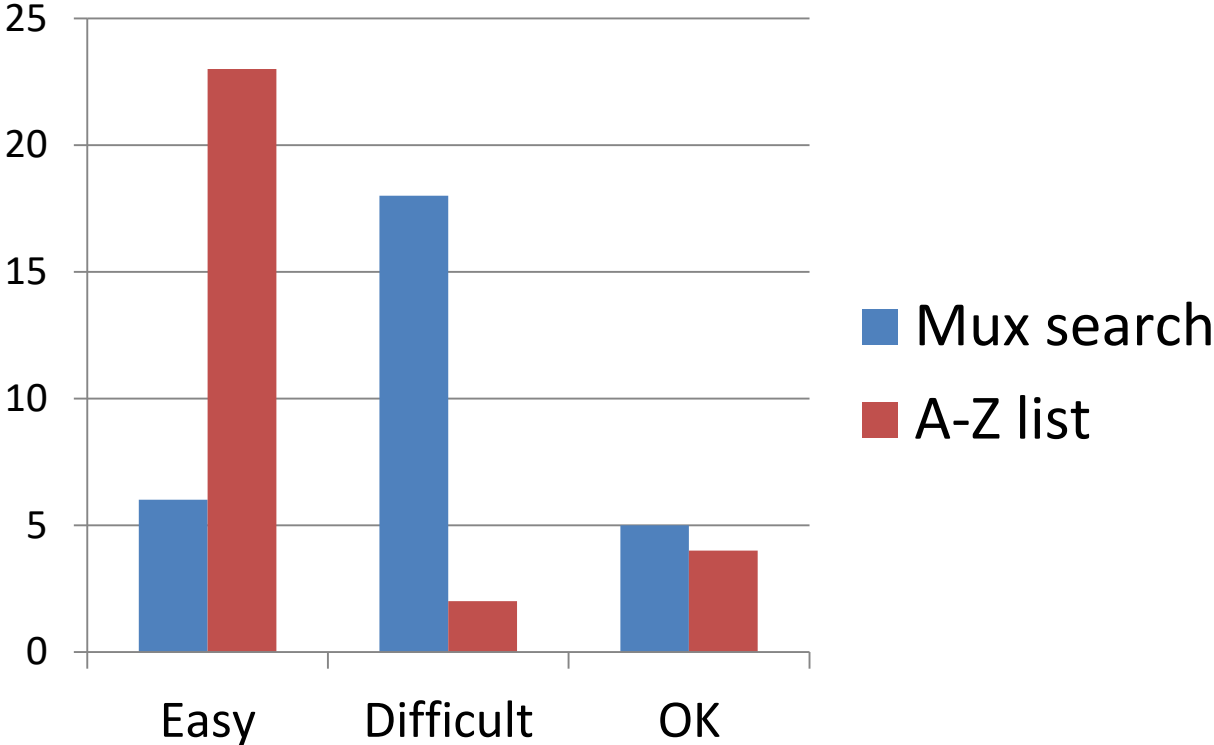


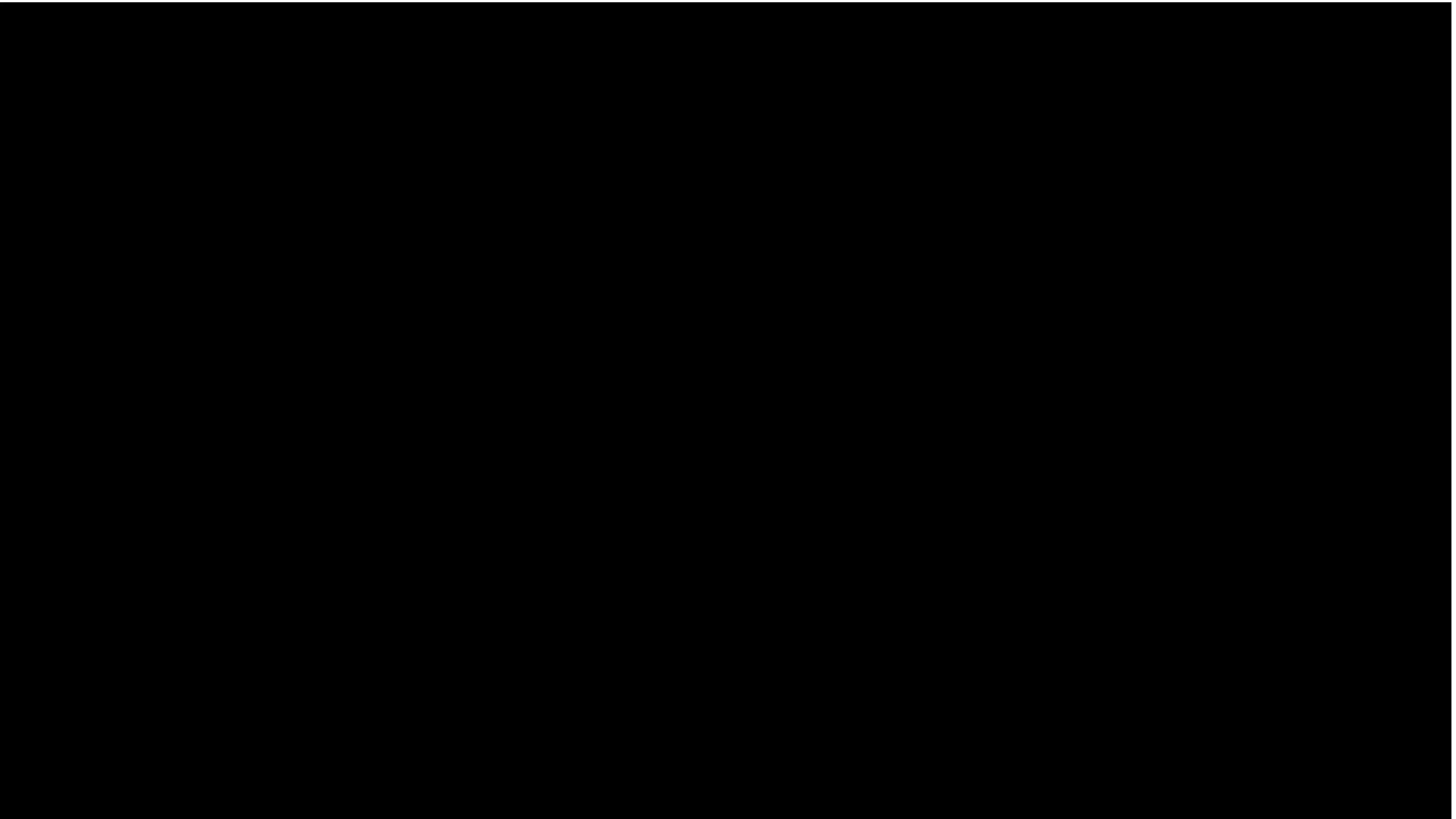
Search and tune: An A-Z station list is best

Without Belgium:

*Expanded mux
station list*

*Aftermarket unit
with only
optional A-Z list*





Search and tune: Observations

Using multiplex search many people couldn't find station at all

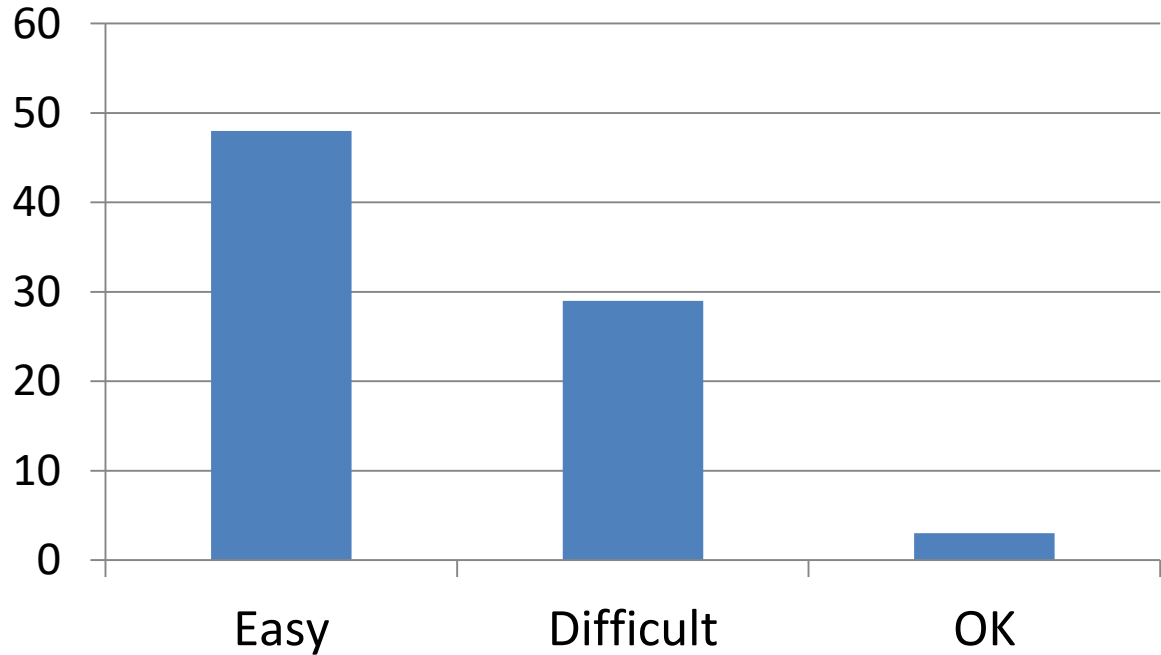
People do not understand what a multiplex is

Searching by multiplex is irritating and confusing

A-Z station list is easy. Some suggestions to make it even easier

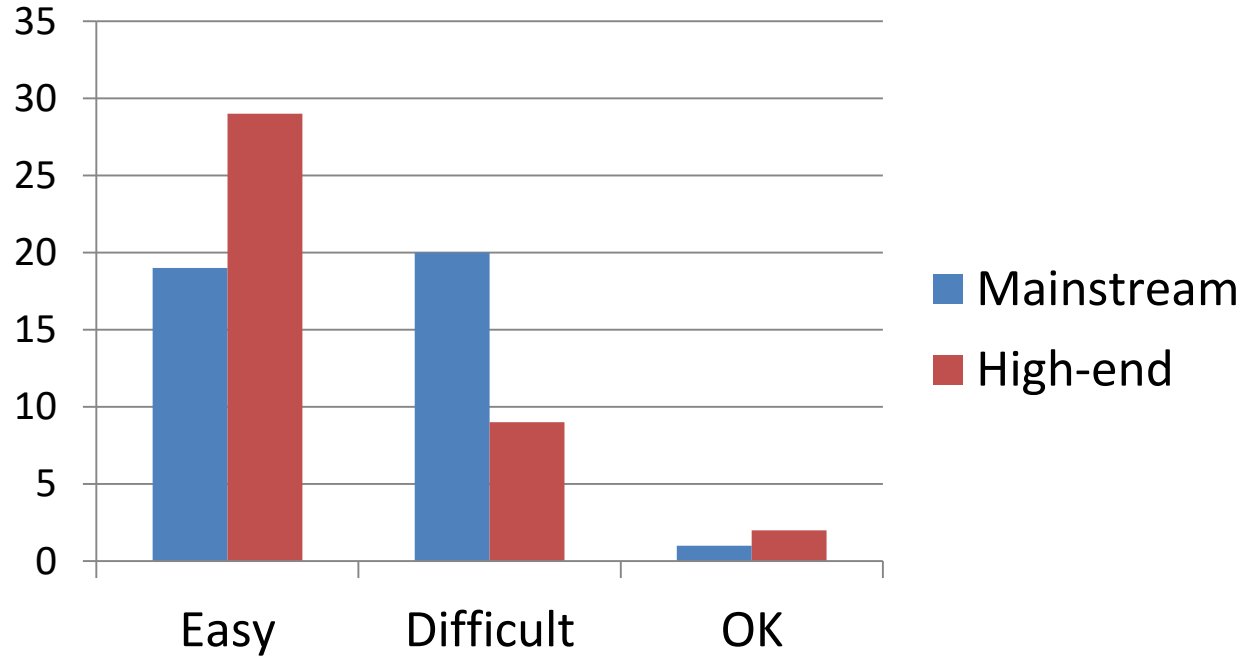
Setting a pre-set: Unless you already know how, it is difficult, sometimes impossible!

Please can you set a station as a pre-set?



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Please can you set a station as a pre-set?

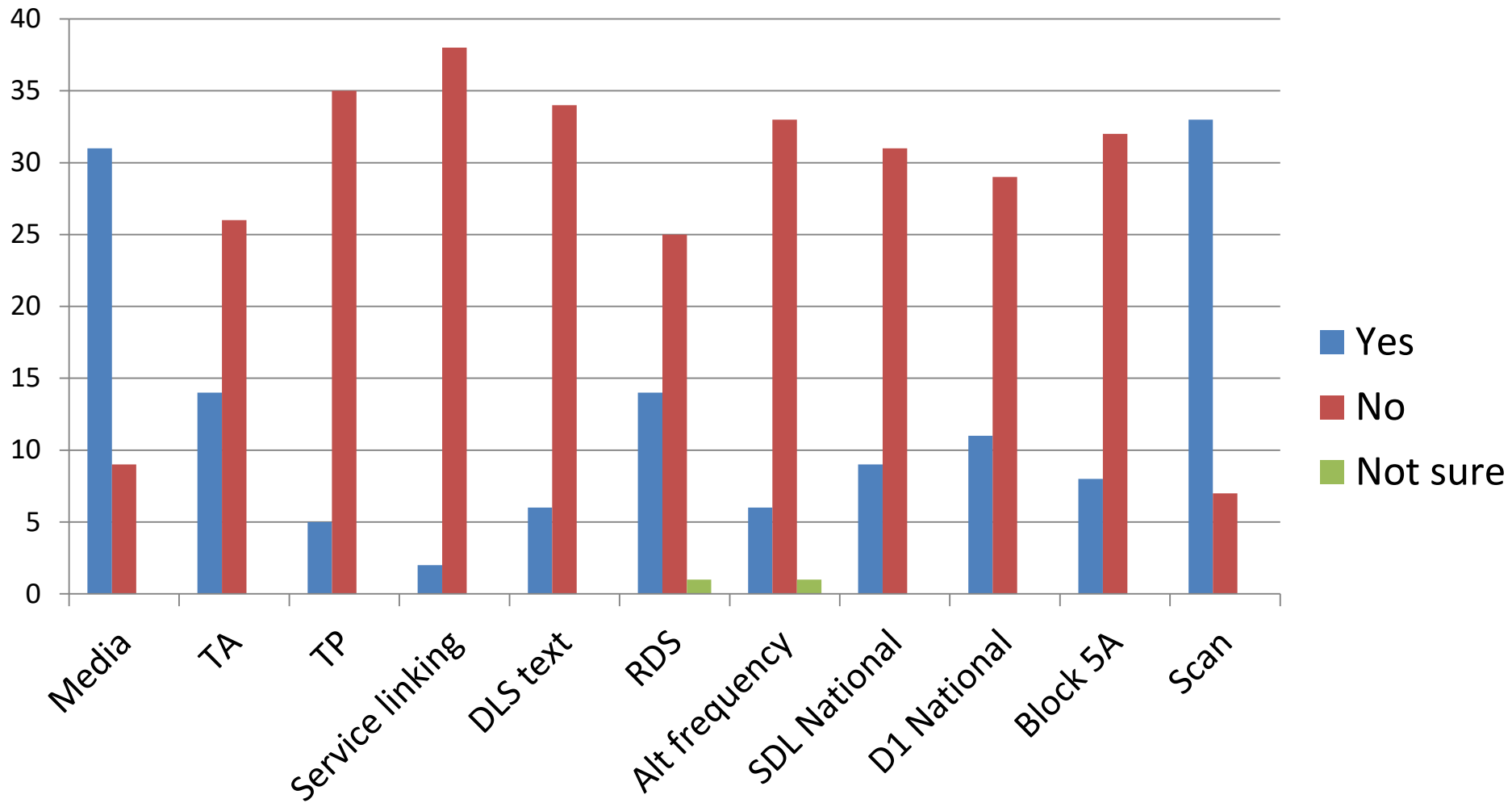


Terminology: It must be easier to understand

*Do you know what
this means?*

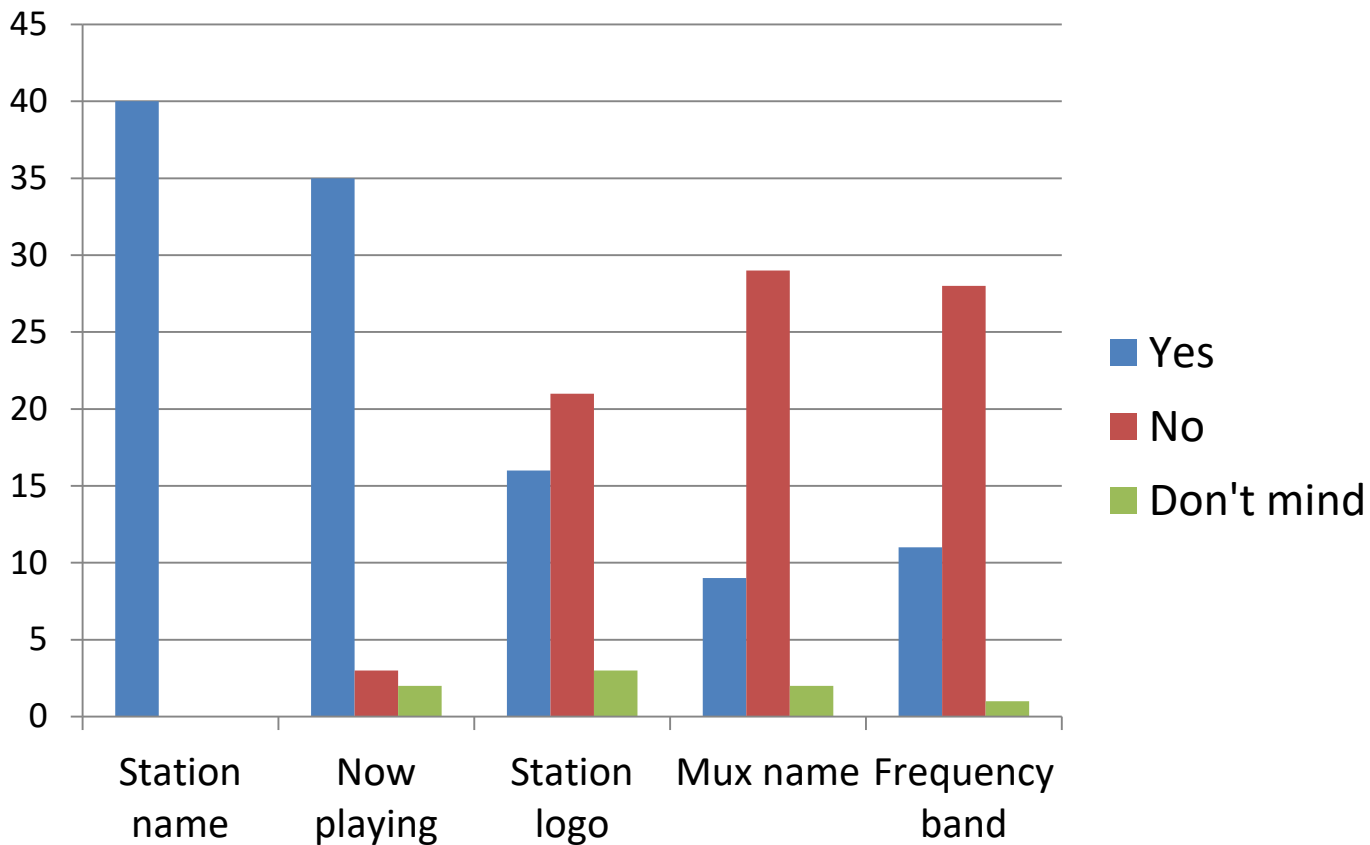
**Headline: No one
understands TP, service
linking or frequency
blocks**

TP
Service linking
Media
TA
DLS text
Scan
RDS
Alternative frequency
SDL National
D1 National
Block 5A



Data: Station name and now playing are valued

Is this information useful/of value?



How would you improve the UX?

“Include an A-Z station list”

“Have presets set automatically”

“Remove information on multiplexes and frequency bands”

“Have a logo matrix to search for stations”

“Type station into search bar and have option to show channels by genre”

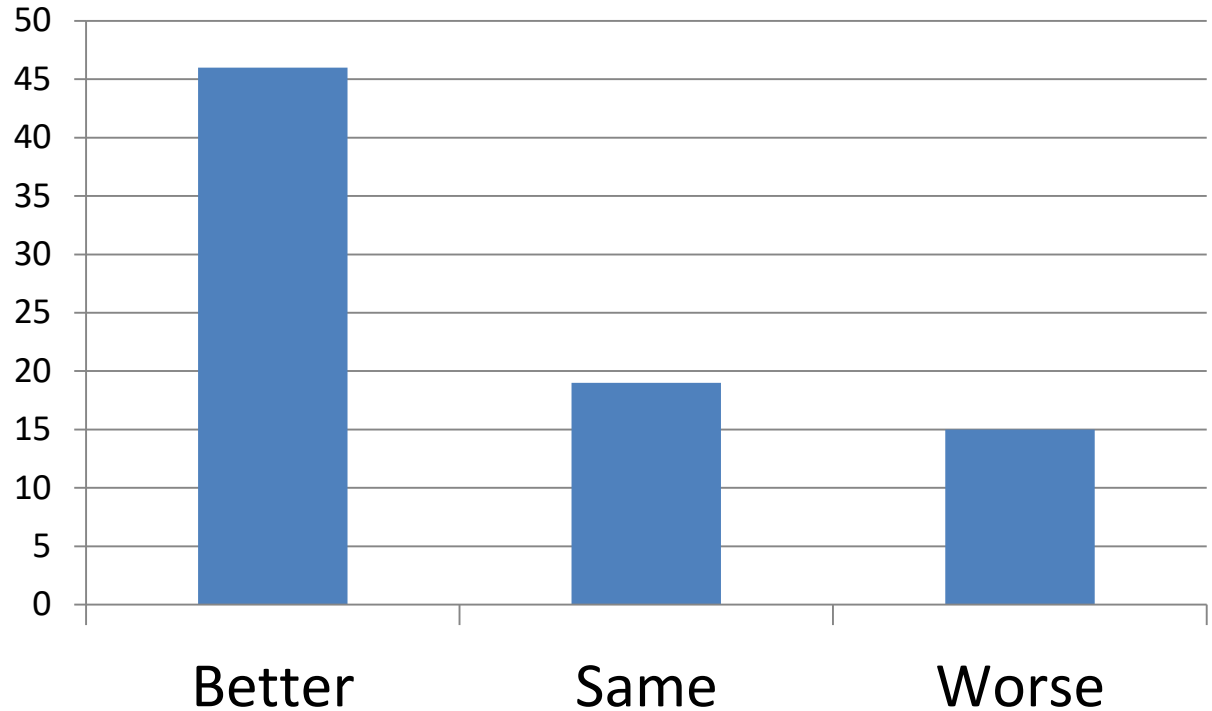
“It must be a touchscreen”

How would you improve the UX?

“Too many menus and buttons. I am lost”

Comparison: Overall the DAB UX is better than FM

How does it compare to using FM Radio?



Conclusions

1. A RADIO button is essential
2. An A-Z station list is the best search UX
3. Pre-sets should be easy to set/explained
4. Terminology must be easier to understand
5. Drivers expect a great, simple UX

Next steps

- Complete research in France
- Share with broadcasters and car manufacturers
- Develop UX guidelines – Complete Q4 2017



Thank you

**Laurence Harrison, Chairman, World DAB Automotive Group
World DAB Automotive Conference, Munich, 21 June 2017**