



world dab

WorldDAB Global Update
Hanns Wolter, Chair, WorldDAB Spectrum and Network
Implementation Committee
WorldDAB Seminar on DAB+ signal distribution
Geneva, Switzerland and online, 9 March, 2023

DAB+ Development and growth

WorldDAB Spectrum and Network Implementation Committee



- Monitors and lobbies to ensure frequency availability for DAB+
- Provides guidance on DAB network implementation
 - How to build a transmission site
 - Multiplexing and sound processing
 - Monitoring and signal distribution
 - Data service implementation

DAB+ firmly established as core future platform for radio in Europe

- Established
- On the move
- Trials

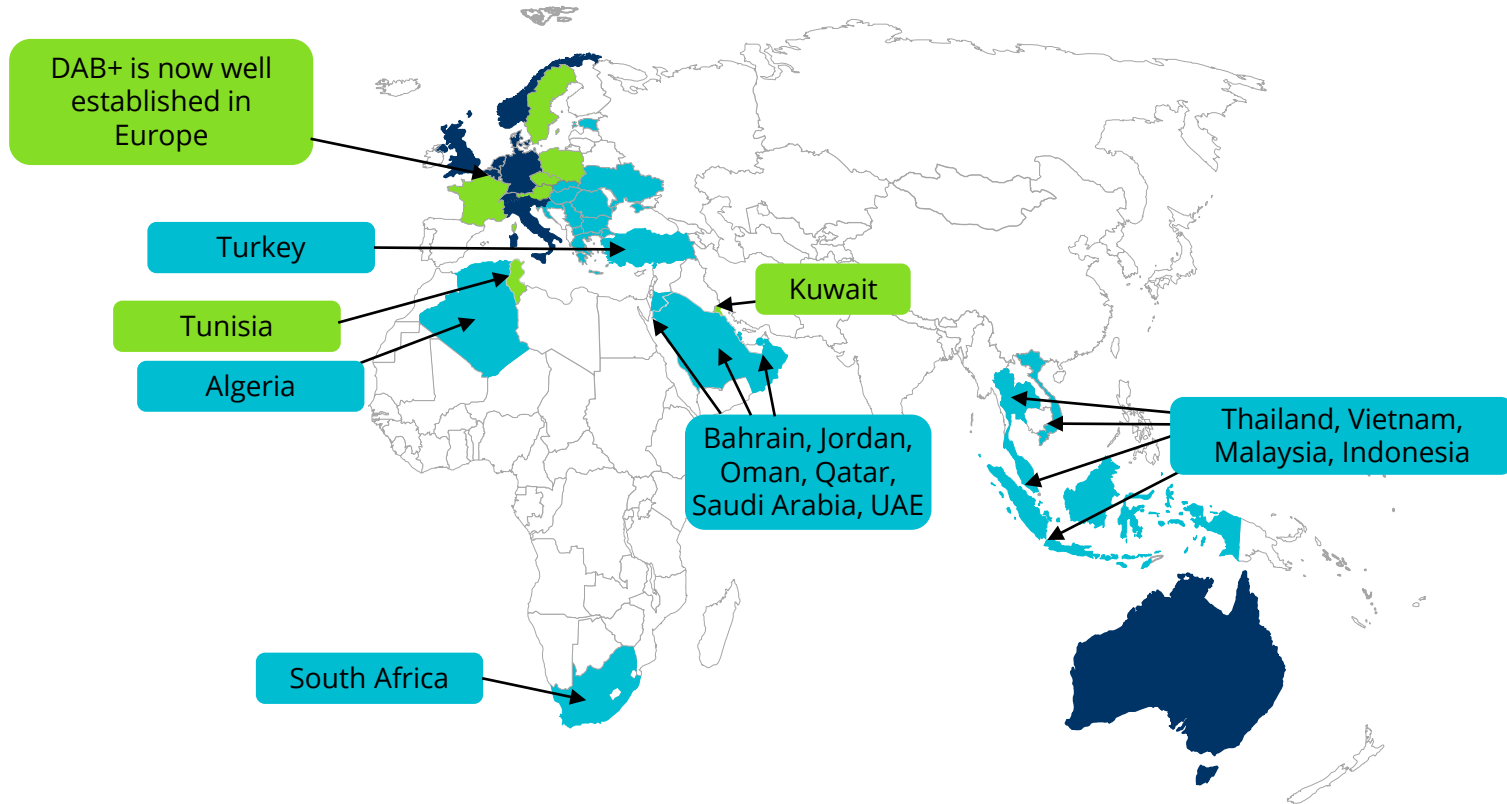


National launches

- Germany: 2011
- Netherlands: 2013
- Italy: 2014
- Slovenia: 2016
- Belgium: 2018
- Austria: 2019

Around the world, interest in DAB+ is growing

- Established
- On the move
- Trials



France: DAB+ goes national



- 25 services on national DAB+
- Launch 12 October 2021

Germany: private mux for North Rhine-Westphalia



Neues Radio im Westen!

Der landesweite DAB+ Multiplex in Nordrhein-Westfalen geht am 29. Oktober on air.

audio.digital
NEUES RADIO IM WESTEN

dab+

- 18 million population
- Launch 29 October 2021

First countries switching off FM



Norway: 2017

- Record listening July 2020



Switzerland: 2024

Growth in Western Europe



UK:
68% of listening is digital



Italy:
Expansion of local muxes



Belgium:
Planned expansion of local services



Netherlands:
3rd national mux April 2022

Progress in Central and Eastern Europe



Poland



Austria



**Coverage extending to:
80% and 83%**



Croatia



Czech Republic



**National muxes move to
regular status**

Drivers of growth

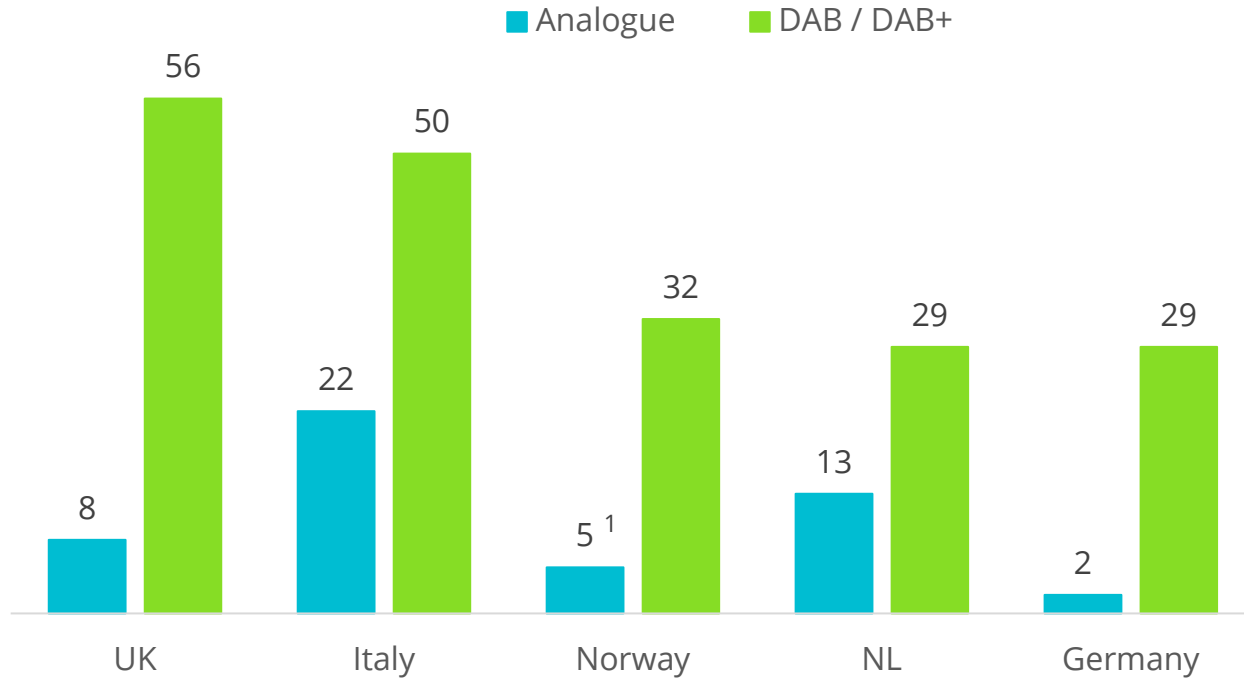
Further progress is expected – driven by the EECC



- European Electronic Communications Code (EECC) effective from 21 December 2020
- All new car radios in the EU need to have digital terrestrial radio

DAB+ offers greater choice – on average, six times as many services as FM

National radio services



(1) pre-FM switch-off

DAB offers clearer sound - particularly where FM is overcrowded



DAB is the green solution



- DAB+ consumes significantly less energy than FM
- BBC study shows DAB is 33% more efficient than FM¹

(1) <https://www.bbc.co.uk/rd/publications/research-393-energy-footprint-bbc-radio-environment-impact-sustainability>

Digital radio's green credentials



- DAB+ more energy efficient than FM and IP
- Reports
 - UK: 2020
 - Germany: 2021

BBC

BR

B|LM

<https://www.bbc.co.uk/rd/publications/research-393-energy-footprint-bbc-radio-environment-impact-sustainability>

https://www.worlddab.org/public_document/file/1460/Report_Green-Radio_BLM_BR_E_Web.pdf?1636114991

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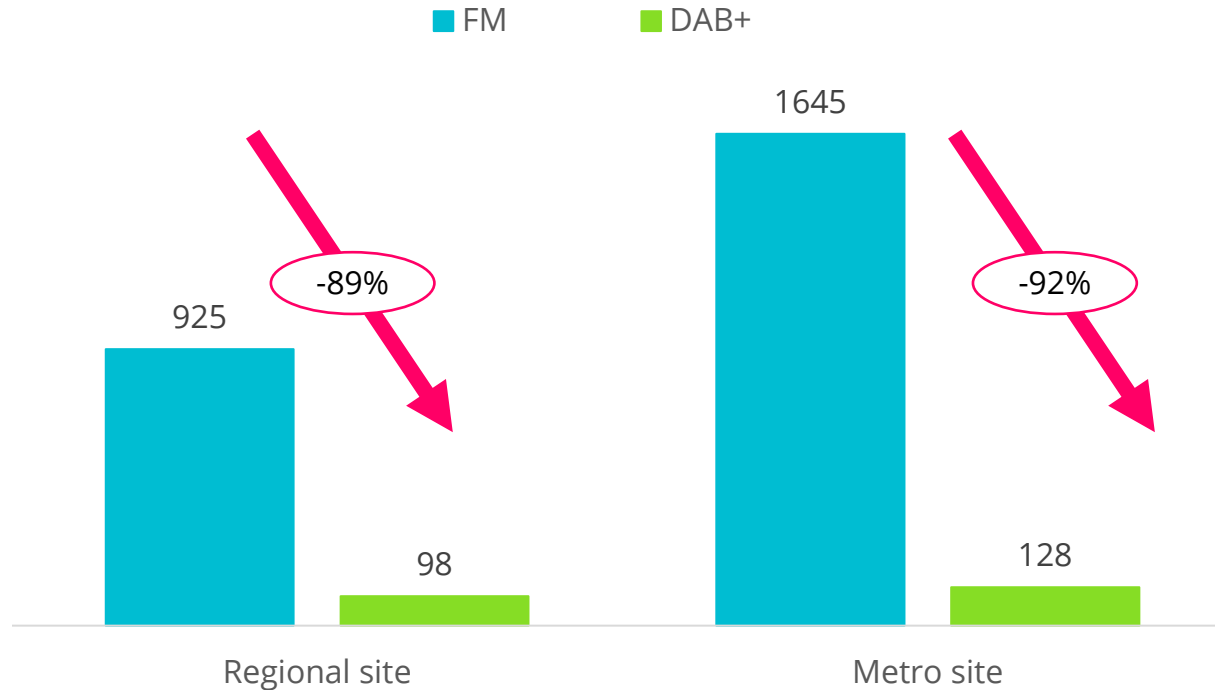
For broadcasters, DAB+ preserves core strengths of traditional radio



- Free to air
- No 3rd party gatekeeper
- Reliable in times of emergency

DAB+ offers lower distribution costs

Annual cost to broadcasters of transmission per service¹, \$k



Source: GatesAir. Note: (1) Opex costs; on DAB+, assumes 18 services on multiplex; for further information

DAB+ receivers – rapid growth driven by affordable prices



- Prices from EUR 20
- Strong growth in major markets
 - Italy: +94%
 - France: +70%
 - Germany: +26%
 - Belgium: +39%
 - NL: +21%
 - UK: -16%

Source: GfK: April 20-March 21 compared to April 19-March 20

Marketing: international DAB+ logo and brand guide

Introduced 2018



<https://www.worlddab.org/resources/marketing-dab-plus>

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What are the commercial implications?

Listeners value choice

22 million people

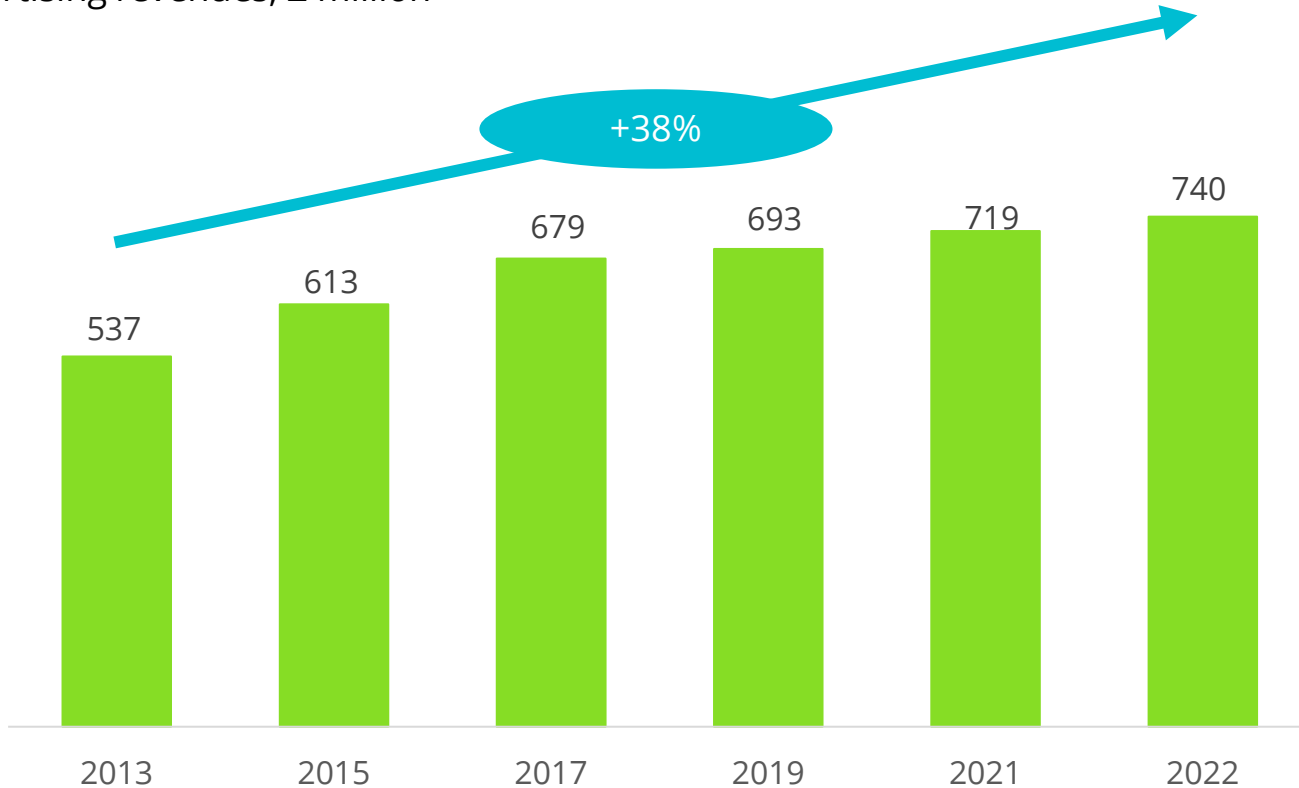
in the UK, listen to services not available to them on
analogue radio*

*Source: RAJAR/Ipsos MORI/RSMB (Q2 2022) estimated
Digital only services plus Out of Area analogue services broadcast on digital radio*

Audiences drive commercial revenues – UK up over 30% in nine years



UK radio advertising revenues, £ million



Source: Radiocentre

Opportunity to innovate: brand extensions

Absolute.

▶ absoluteradio.co.uk

**Absolute
Radio** ▶▶

**Absolute
Radio** ▶▶ **60s**

**Absolute
Radio** ▶▶ **70s**

**Absolute
Radio** ▶▶ **80s**

**Absolute
Radio** ▶▶ **90s**

**Absolute
Radio** ▶▶ **00s**

**Absolute
Radio** ▶▶ **10s**

**Absolute
Radio** ▶▶ **20s**

**Absolute
Radio** ▶▶ **CLASSIC
ROCK**

**Absolute
Radio** ▶▶ **COUNTRY**

Audience has tripled in seven years

Opportunities to extend reach

LBC expansion – from London to UK



Analogue

- LBC – for 40 years, a London radio station (news / talk)
- Audience 2014: 1.1 million

Analogue plus digital

- February 2014 launched on national DAB+
- Audience today: 3.3 million (3x)

Source: RAJAR/Ipsos MORI/RSMB.

New business models



- Waitrose & Partners: official sponsor of The Graham Norton Radio Show on Virgin Radio
- Non-traditional model
 - no ad breaks
 - food ideas and inspiration
 - good demographic fit (ABC1) / shared brand values
- Partnership conceived and brokered by Manning Gottlieb OMD and Virgin Radio UK

Visual advertising via DAB+



Switzerland 2020

- Display ads streamed onto screens of
 - DAB-enabled car displays
 - DAB home radios with displays
- Advertising image appears on the DAB display - regardless of radio station being played
- Aim: to reach all car drivers and passengers in Switzerland
- Example: Lattesso coffee
- Collaboration between ad agency TheIndustry and network operator Digis

Visual advertising via DAB+



Germany 2020

- Hesse private broadcaster FFH launches Visual Spots on DAB+
- While audio spot is playing, retailer's logo appears on car radio display
 - synchronised with audio commercial
 - increases impact of messaging¹
- Technology developed in-house
- Ads are part of FFH visual radio offer – also includes weather icons, traffic info

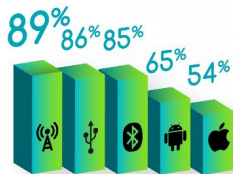
(1) FFH Marketing Director Frank Schierholz

DAB+ in cars

2021 Car Buyers Survey

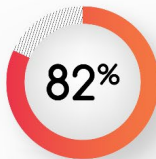
CAR BUYERS SAY BROADCAST RADIO IS A MUST

Almost all in-car radio listeners say a broadcast radio tuner should be standard equipment in every car



When considering which car to purchase or lease, radio is the most important audio feature to have, ahead of USB ports, Bluetooth, Android Auto and Apple CarPlay

Prospective car buyers say they are less likely to buy or lease a car that does not have a radio



Research conducted by Edison Research, Sep 2021. >6000 respondents from US, UK, Germany, France, Italy, Australia. Commissioned by WorldDAB with partner Radioplayer and supported by Commercial Radio Australia, National Association of Broadcasters and Xperi

- Over 80% of consumers are less likely to buy or lease cars without a built-in radio tuner

- Consumption of broadcast radio is significantly higher than for any other form of in-car audio; 93% want access to radio to remain free

- Car buyers' most desired radio features include voice controls and content information

Listeners need simple navigation

WorldDAB Automotive
Working Group



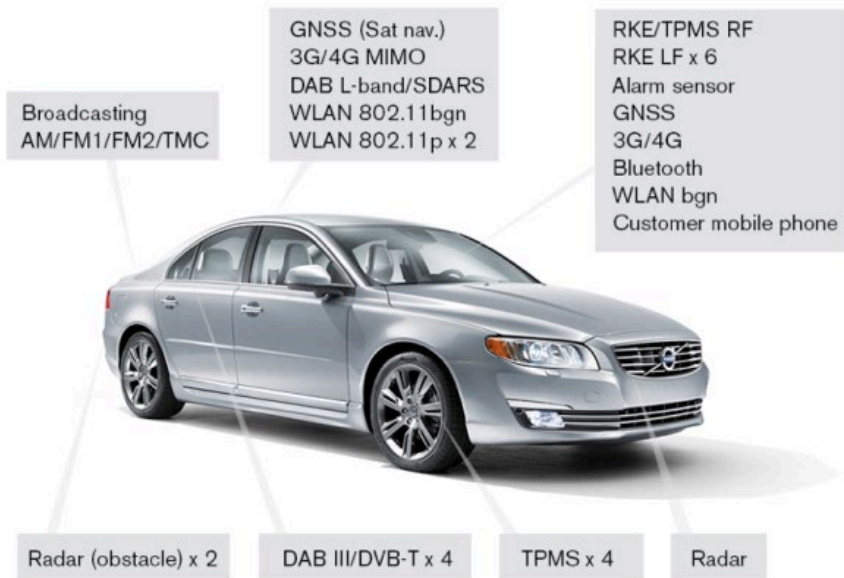
- A radio button is essential
- A-Z station list
- Pre-sets should be easy to programme

(1) <https://www.worlddab.org/automotive/user-experience-guidelines>

Listeners deserve great audio quality

WorldDAB Automotive
Working Group

Antenna complexity



- Optimise antenna performance
- Collaborate on testing (test routes)
- Electric vehicles next focus of investigation

Image source: Electronic Environment

Listeners need strong, clear branding and visuals

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- Visuals / logos to maximise impact on the dashboard
- Competition (online services)

Radio in the car is changing

We are embracing hybrid radio (DAB+ and IP)

WorldDAB Automotive
Working Group



- Extend geographic reach
- Additional data, e.g. station logos
- Potential for personalisation and localisation

Image source: Audi

We are engaging with Android Automotive

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- WorldDAB members are part of the Android Automotive NAB Pilot project
- Cross-sector involvement brings important new perspectives to this work

We are focusing on voice as a key user interface

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Siri



amazon alexa



Google Assistant

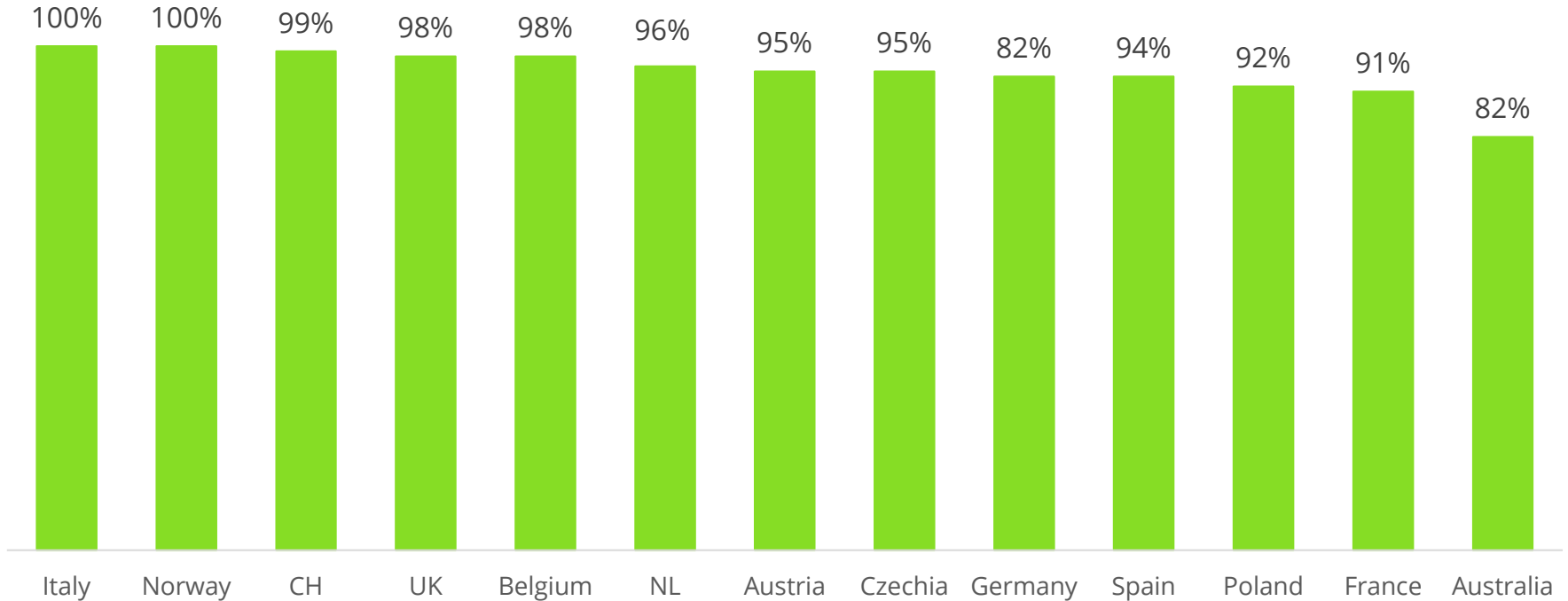
- Voice assistants well established in cars
- Radio needs to be part of this ecosystem

Our priorities for next three years

DAB+ now standard in majority of new cars

New cars with DAB+ as standard

Goal: to build on this position



Source: JATO, SMMT / DRUK, GfK (Italy 2021), CRA, WorldDAB

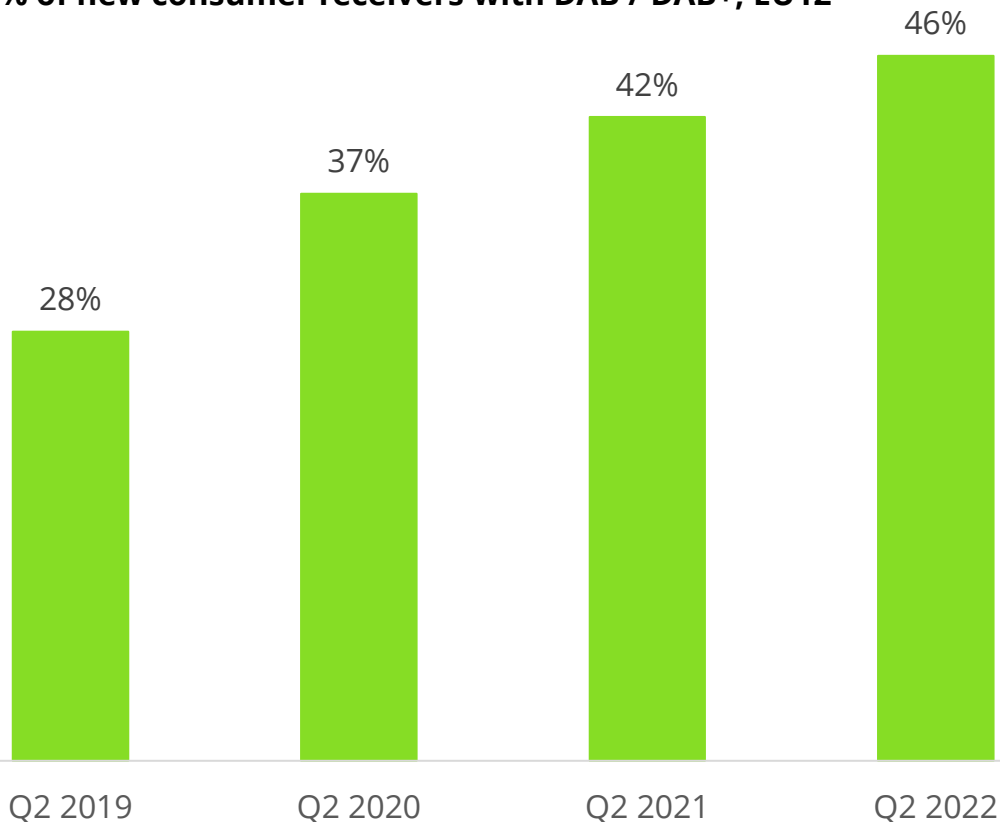
Maintain regulatory support for digital terrestrial radio



- Benefits for consumers & citizens
 - increased choice
 - free-to-air
 - reliable in emergencies

Continued progress with consumer receivers

% of new consumer receivers with DAB / DAB+, EU12



Source: GfK

Keys to future success

- Engagement with retailers
- Sustained marketing campaigns
- Receiver regulation (Italy, Germany, France already in place)

Ensure car makers understand consumer attitudes to radio

International research study

- Car buyer expectations re broadcast radio
- Broadcast radio's points of differentiation
- Expectations re development of radio in-car



- Share results with OEMs
 - Europe
 - North America
 - Asia Pacific

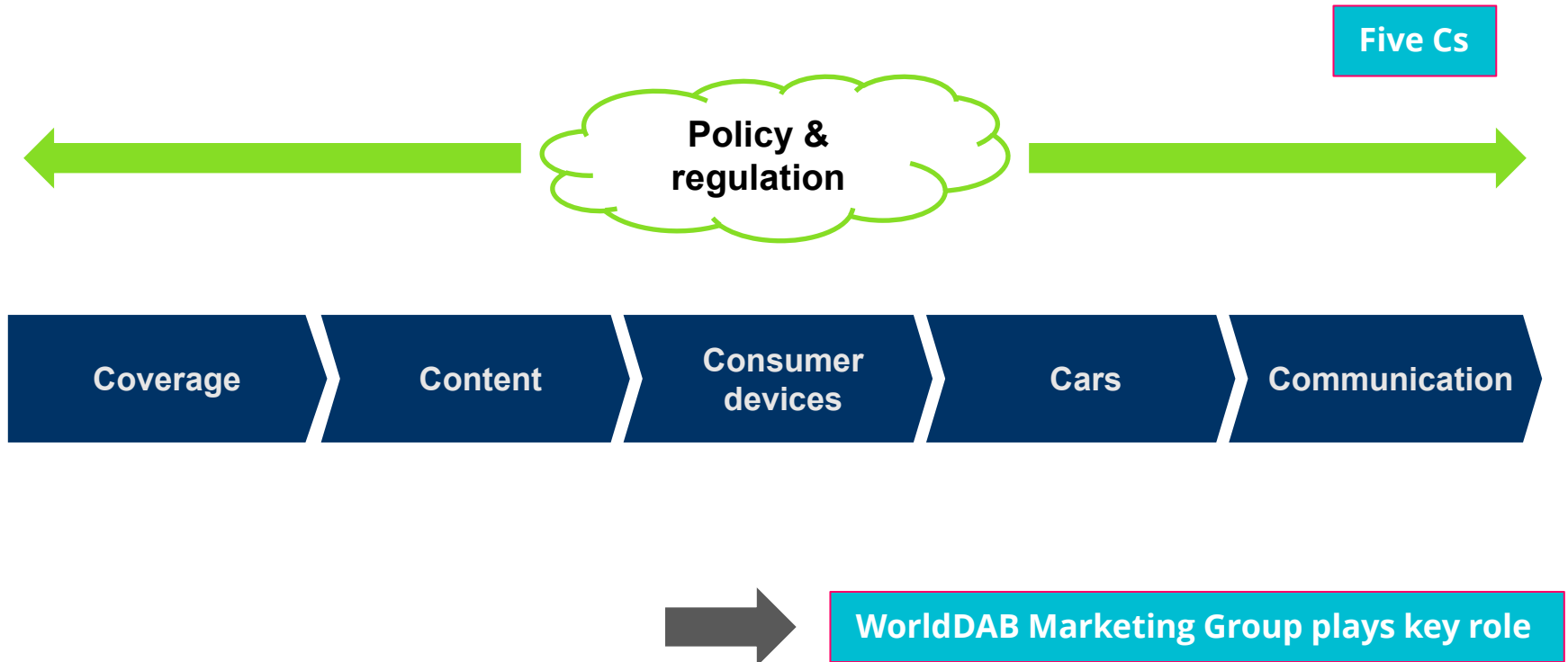
Work with car makers on innovation



- Enhance DAB+ in the connected car
 - Metadata (e.g. station logos)
 - Voice control
 - Android Automotive
- WorldDAB Automotive Working Group

How do we achieve success?

Share best practice



Thank you

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