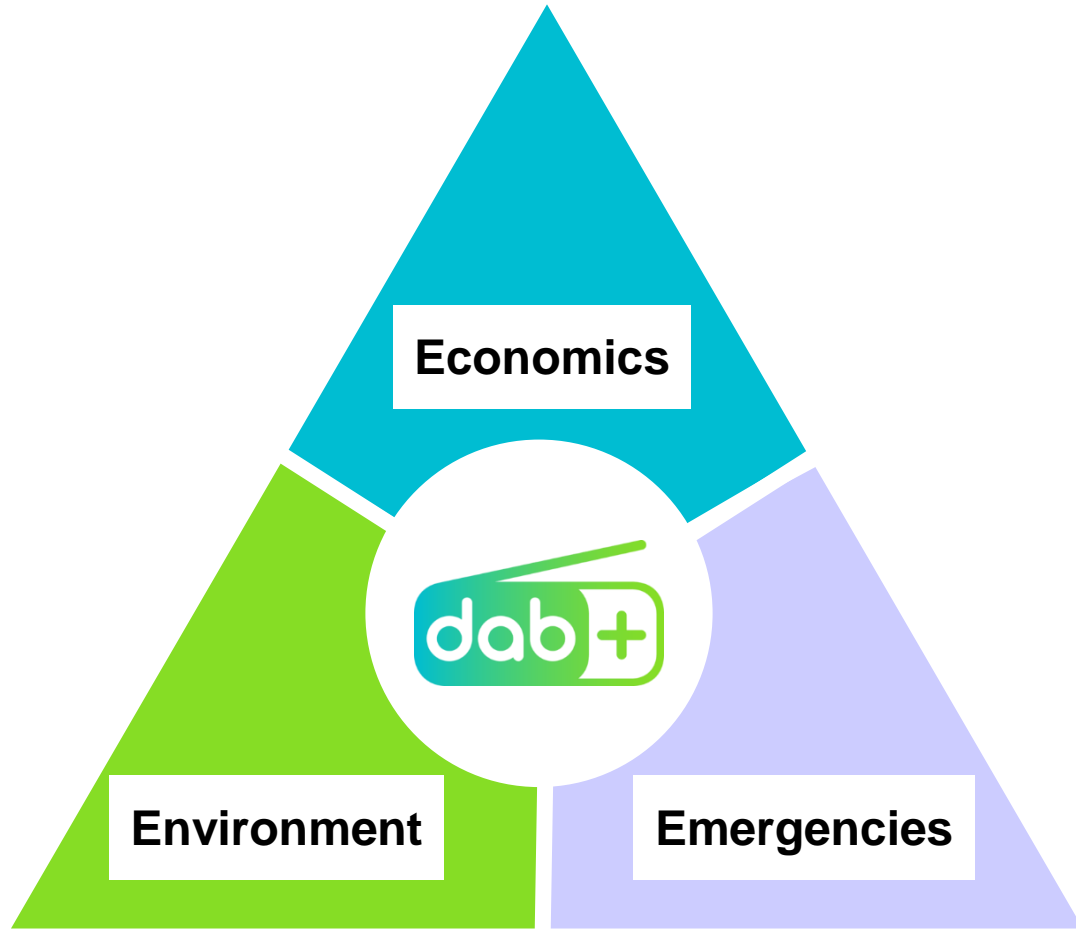


# **Economics, environment and emergencies leading the way for DAB+ development**

Lindsay Cornell, Chair, WorldDAB Technical Committee

ABU TC, November 2022

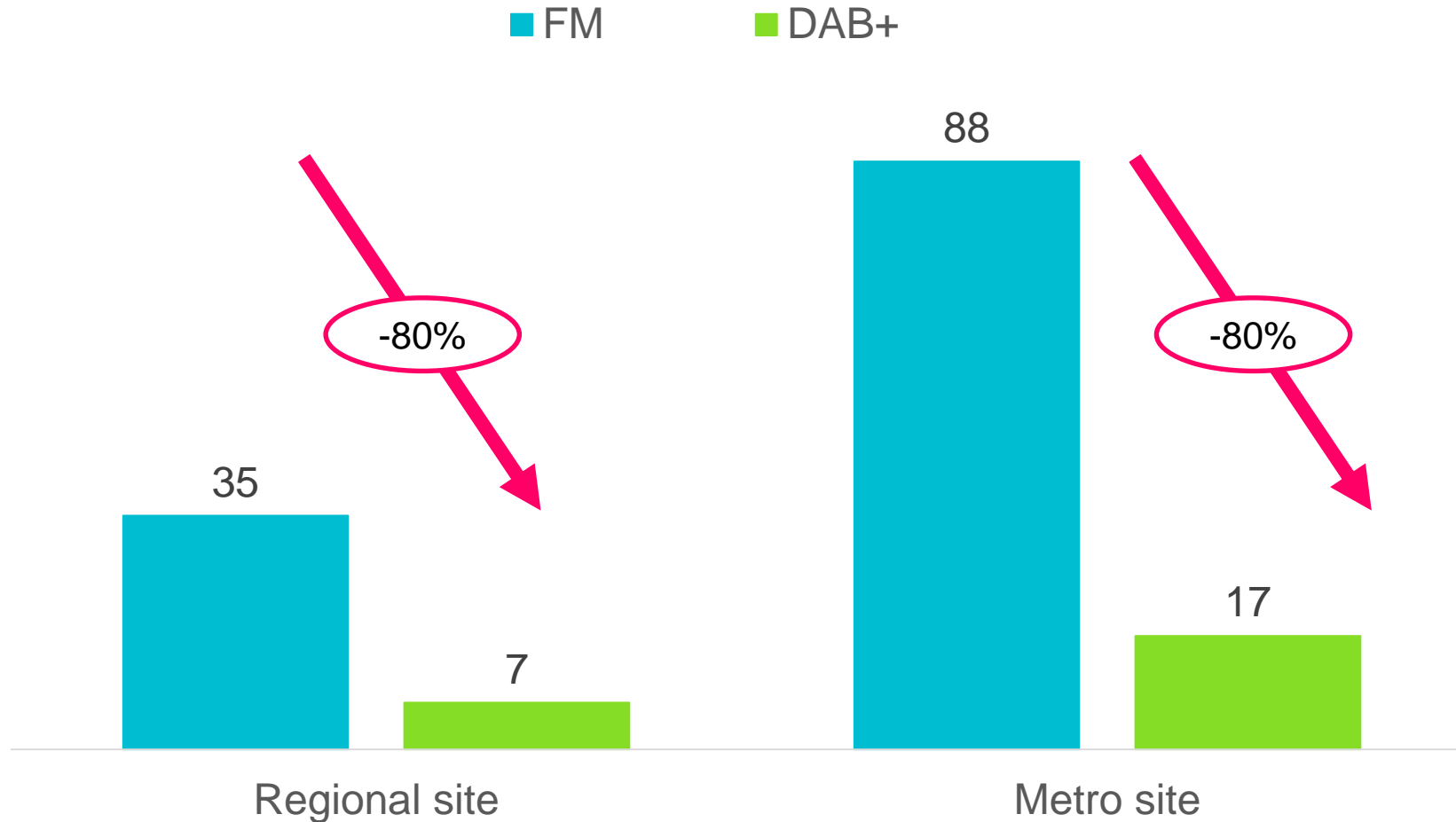
# Three macro reasons for DAB+



- **Economics:** costs lower, opportunities greater
- **Environment:** energy usage lower
- **Emergencies:** resilience

# Economics: cost per service far lower than FM

Annual cost to broadcasters of transmission per service<sup>1</sup>, US\$k






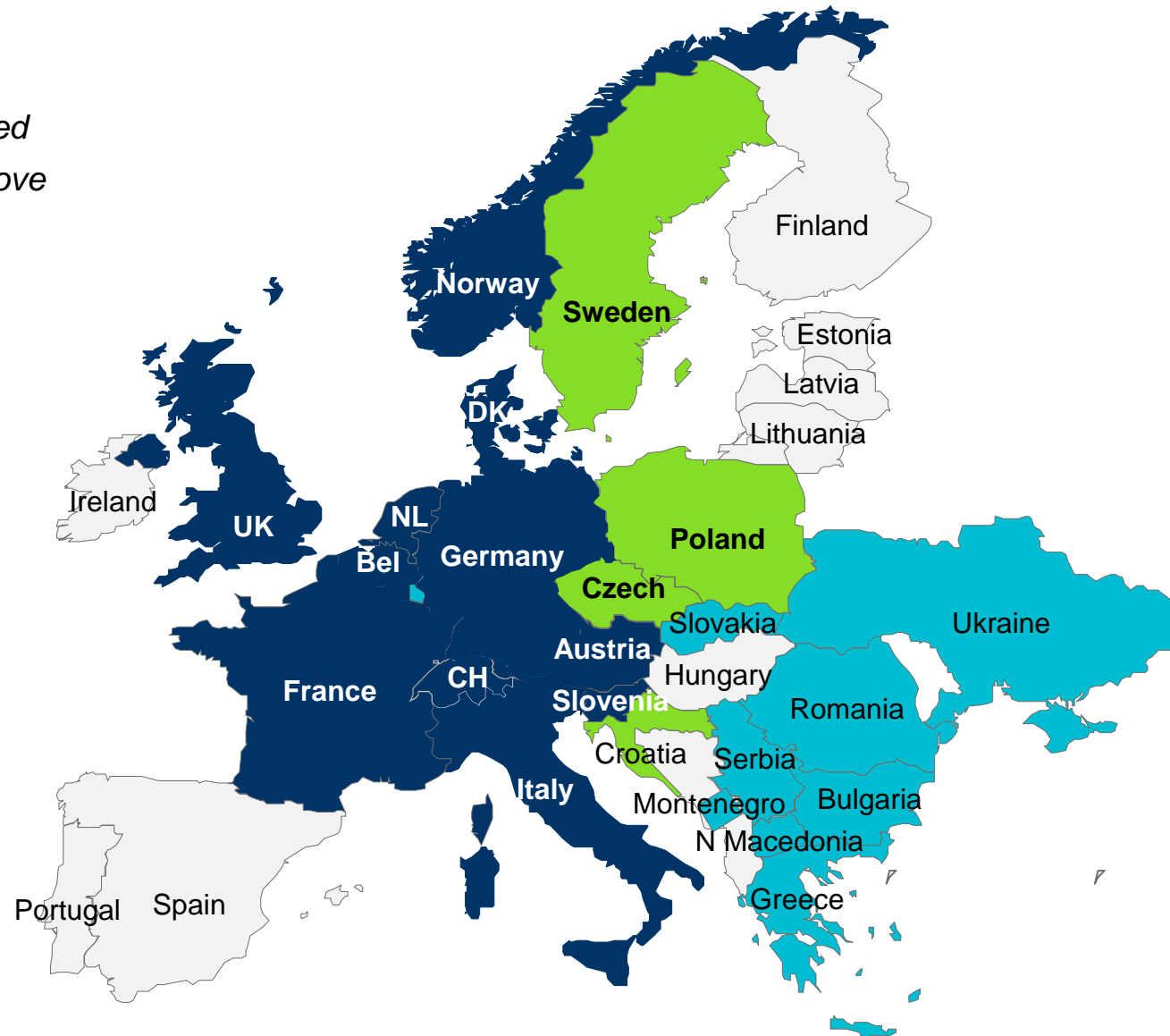
Source: Total operating costs sourced from broadcasters and network operators

Note (1) Operating costs for DAB+ assumes 18 services on multiplex; opex includes site and tower leases, power, telco, maintenance, monitoring and support costs

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



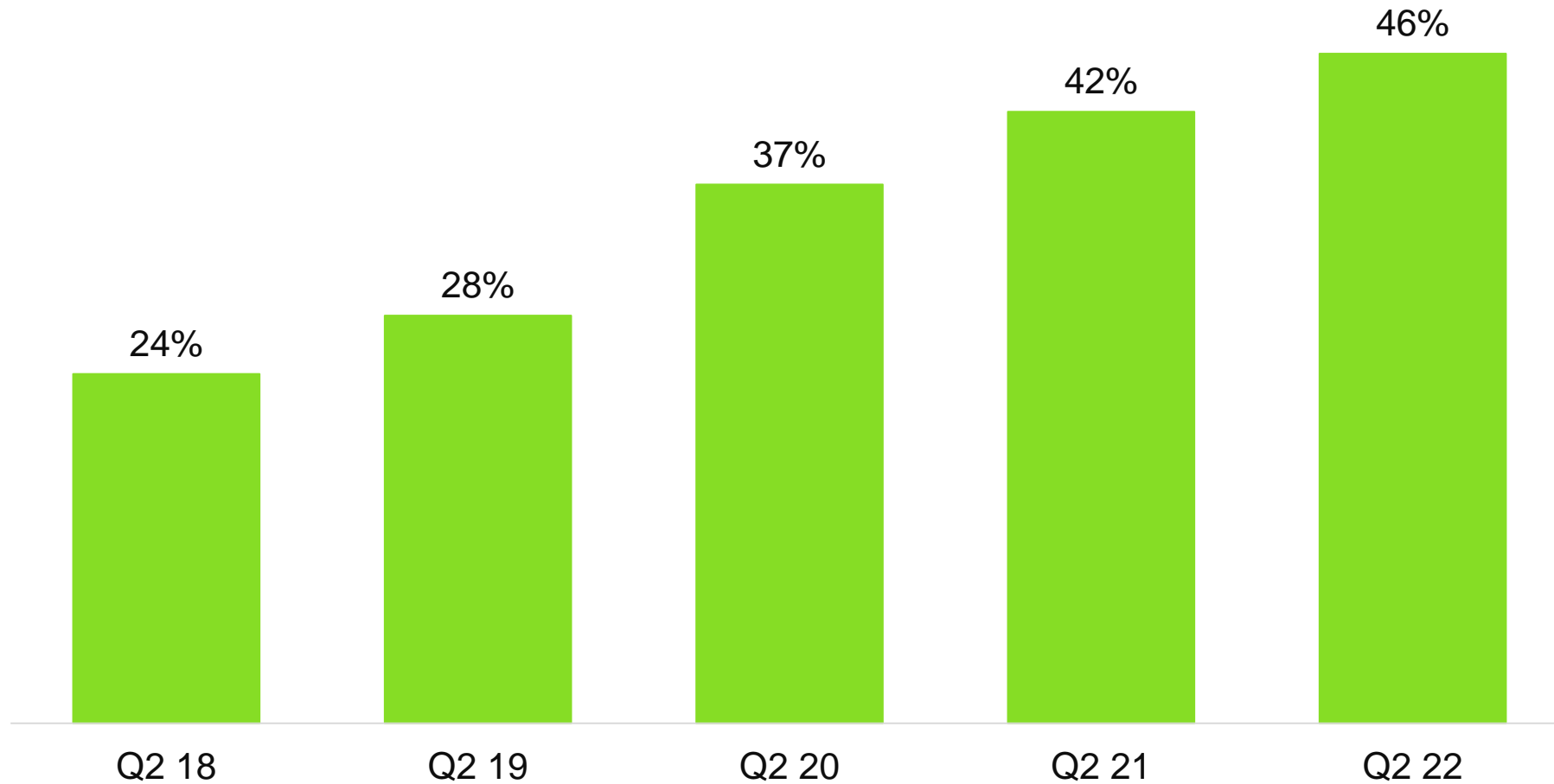
-  *Established*
-  *On the move*
-  *Trials*



# % of new consumer radios with DAB almost doubled in 4 years



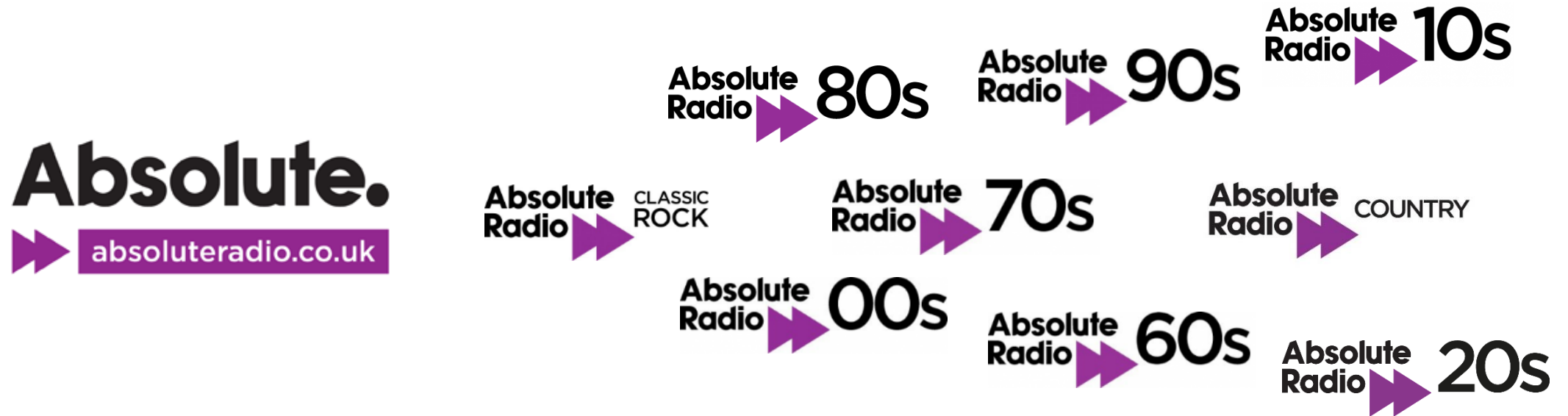
New consumer radios with DAB as standard



# For broadcasters, DAB+ offers opportunities to innovate



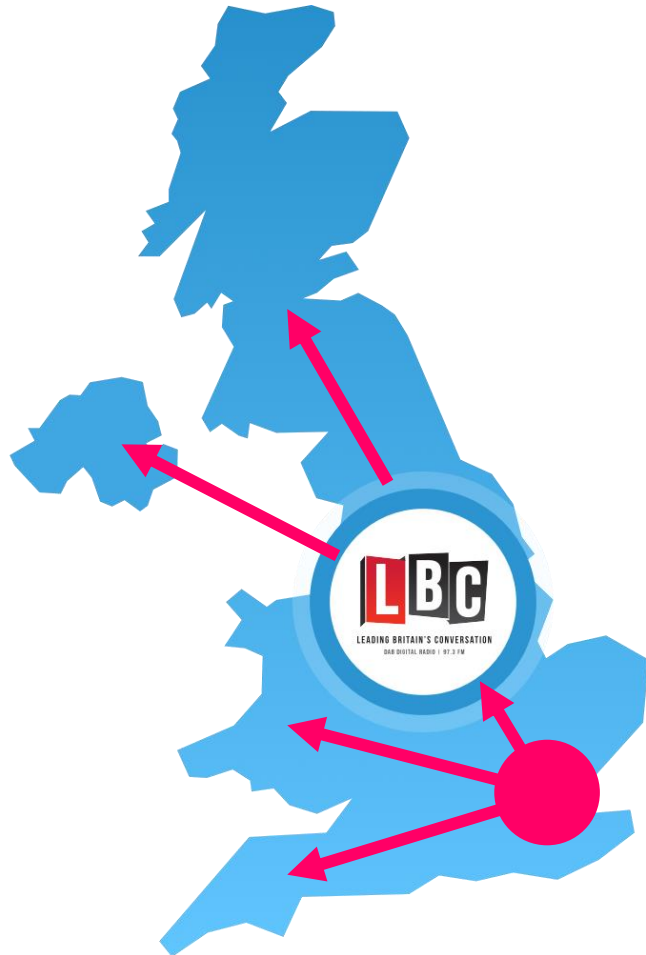
## Brand extensions



**Audience has tripled:  
1.7 million (Q1 12) to 5.1 million (Q2 22)**

# 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)

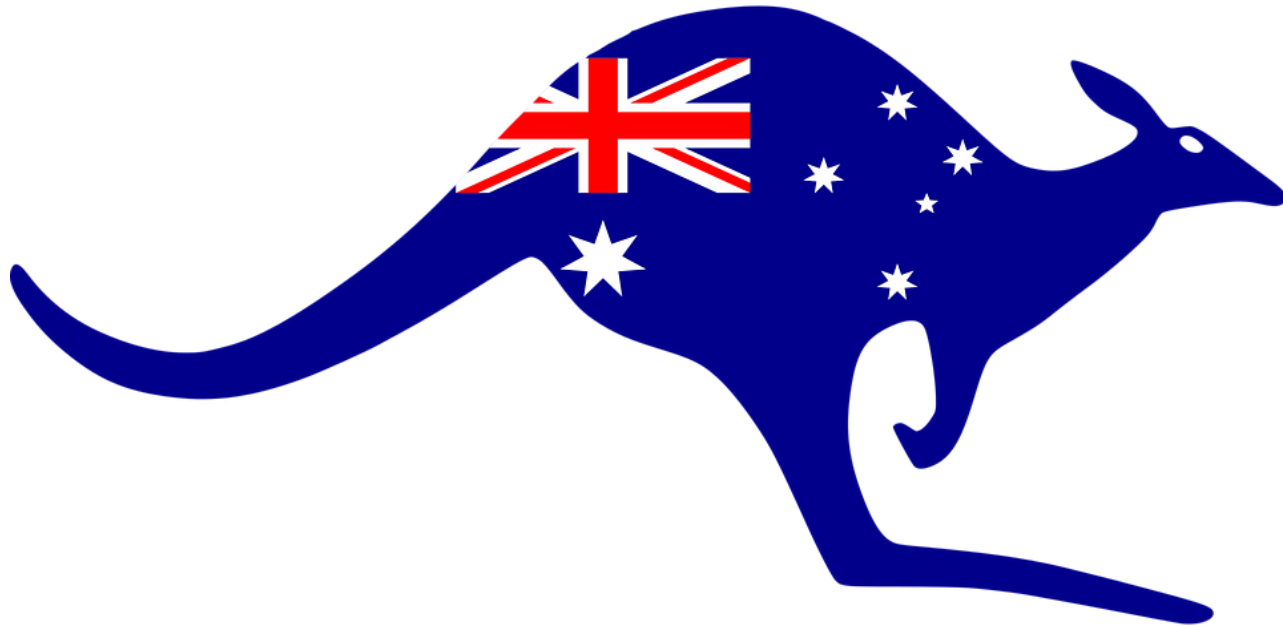


22 million people

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

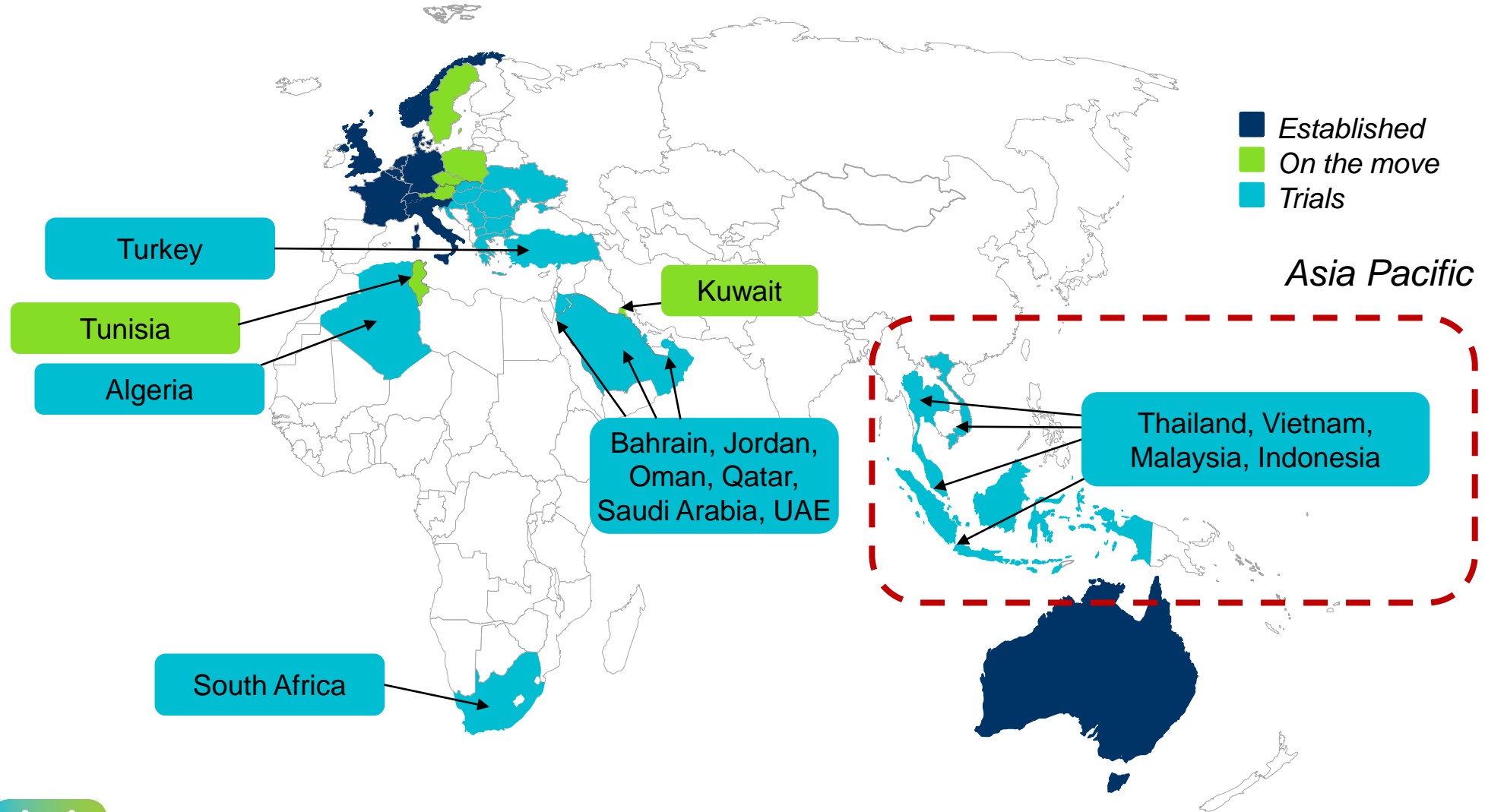


# Not just a European story

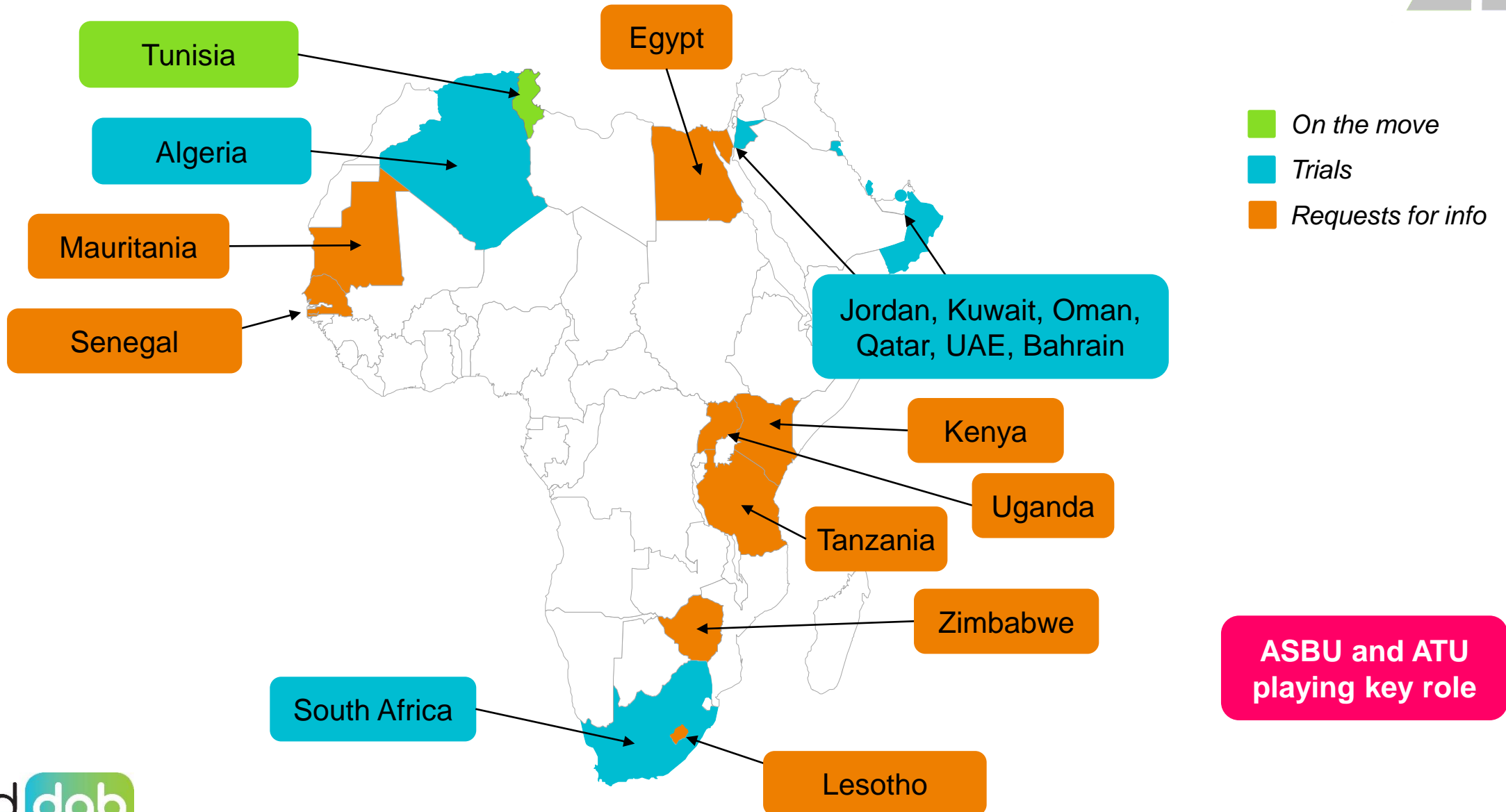


- Australia: commercial DAB+ stations reaching record audiences

# Asia Pacific markets continue to run trials



# Africa and Middle East have seen a step change in interest



# Environment: DAB+ is the green solution



- DAB+ consumes significantly less energy than FM
- BBC study: DAB 33% more efficient than FM<sup>1</sup>
- German study (BLM): similar results

# Energy consumption: a key factor in switch-off decisions



Norway: 2017



Switzerland: 2024

*Partial switch-offs*

Germany



South Tyrol  
Italy



Long wave  
France

Expect more of these  
in next five years

# Emergencies – DAB+ is resilient



- Broadcast radio - reliable in times of emergency
- Mobile services less robust



# Resilience of DAB+ recognised by European Union



- European Union mandate (EECC): new car radios must have digital terrestrial
- Reliability in emergencies an important factor in this decision

# Impact of EECC has been significant



**Italy**  
**100%**



**UK**  
**98%**



**Germany**  
**94%**



**France\***  
**91%**



**Poland**  
**96%**



**Sweden**  
**94%**



**Spain**  
**94%**

- Almost all new cars in Europe have DAB+ as standard
  - existing DAB+ markets
  - markets where DAB+ is not established
- Never been easier for new markets to launch



# Germany proposing DAB+ as part of national warning infrastructure



- Following floods in 2021, German authorities and broadcasters discuss role for DAB+
- German radio industry publishes proposal (Sept 2022)
- Proposal submitted to WorldDAB Technical Committee (Oct 2022)
- Next step: build international alignment

# WorldDAB committees and working groups continue to be active



## Marketing

- Share best practice

## Technical

- Maintain / refine standards

## Automotive

- Optimise in-car experience

## Spectrum & Network Infrastructure

- Help new players get started

## Asia Pacific Technical

- Support for Asia Pac region

# Events and meetings



- WorldDAB workshop @ ABU DBS 2023 in Kuala Lumpur
- WorldDAB Summit was held on 17 November
  - available to watch on catch-up on [WorldDAB YouTube channel](#)
- WorldDAB APAC Technical Group - next meeting
  - 6 December 2022
  - 14:00 ICT Bangkok / 18:00 AET Sydney / 07:00 UTC
  - Email [ProjectOffice@WorldDAB.org](mailto:ProjectOffice@WorldDAB.org) to attend

Topics:

DAB+ ASO – Norway

DAB+ rollout, monitoring and testing experiences

DAB+ multiplexing systems – small scale DAB+





Thank you