

DAB: international status

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Istanbul: 14th June, 2014

Contents



1. WorldDMB

- 2. International developments
- 3. Why digital radio? Why now?



WorldDMB – who we are



- Promote digital radio (DAB / DAB+) around the world
- Developed DAB technical standards
- Not-for-profit membership organisation



Over 80 members from 22 countries – across radio ecosystem

Government ministries

Regulators

Public broadcasters

Private broadcasters

Network providers

Equipment manufacturers

Silicon providers

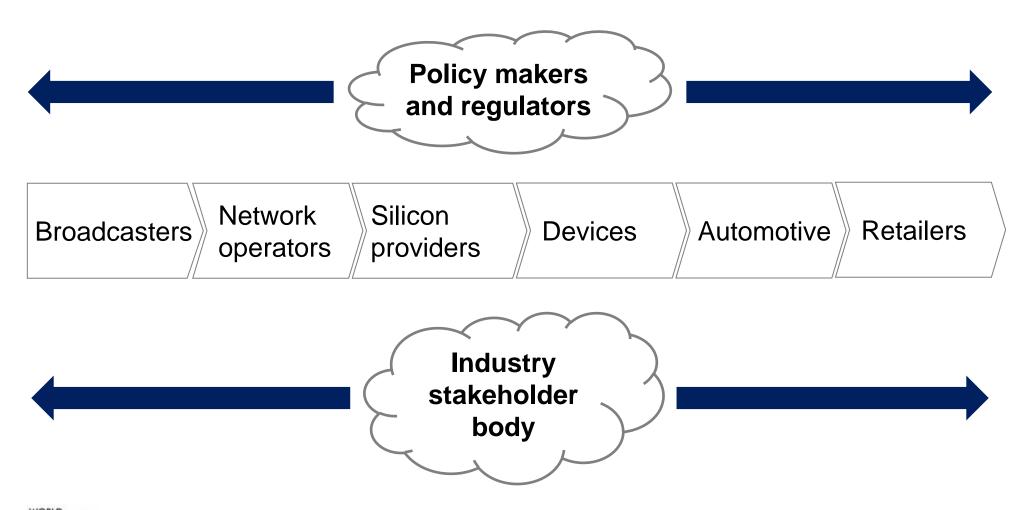
Device manufacturers

Automotive

Industry bodies



Our role: to ensure collaboration





Contents

1. WorldDMB



2. International developments

3. Why digital radio? Why now?



A digital radio wave is moving across Europe



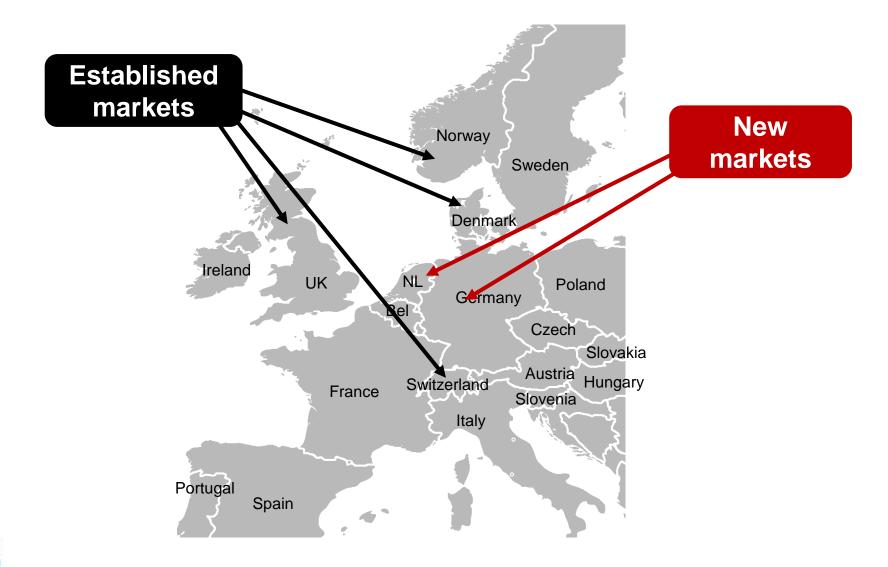


Four core markets: UK, Norway, Denmark and Switzerland



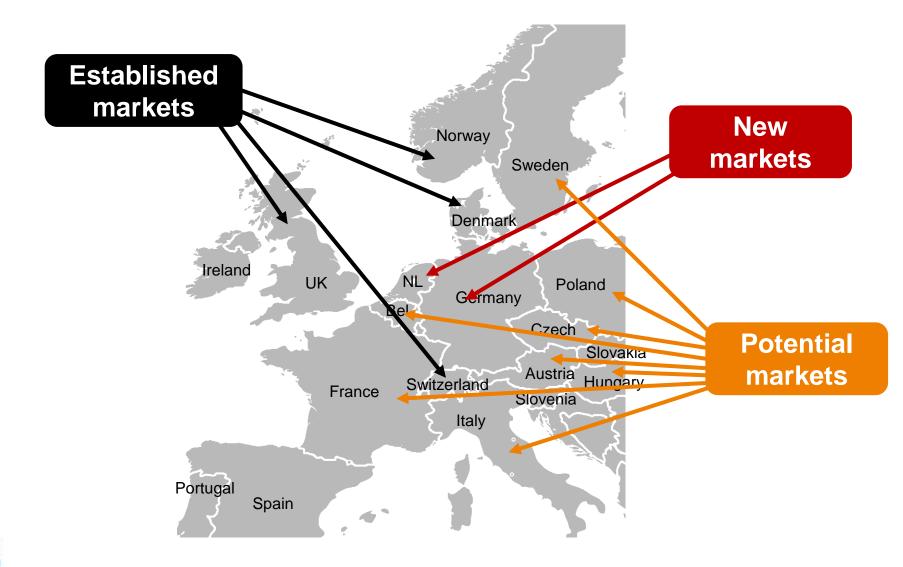


Followed by Germany (2011) and Netherlands (2013)



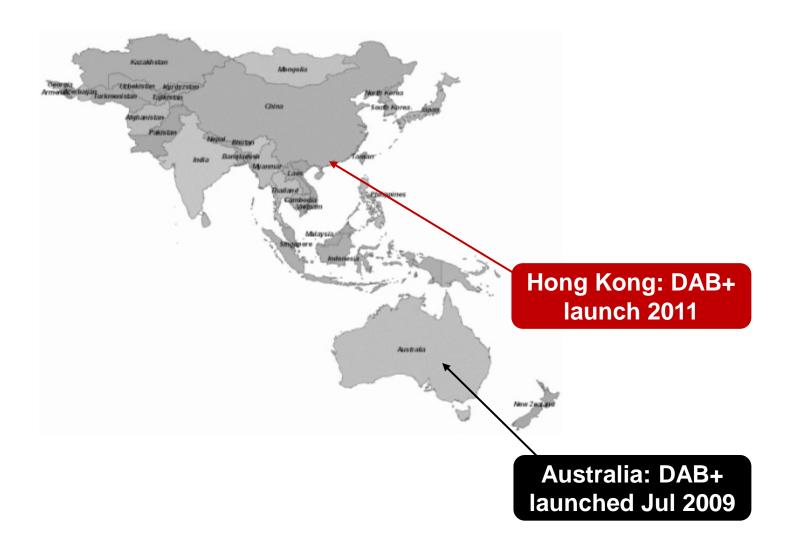


Several potential markets



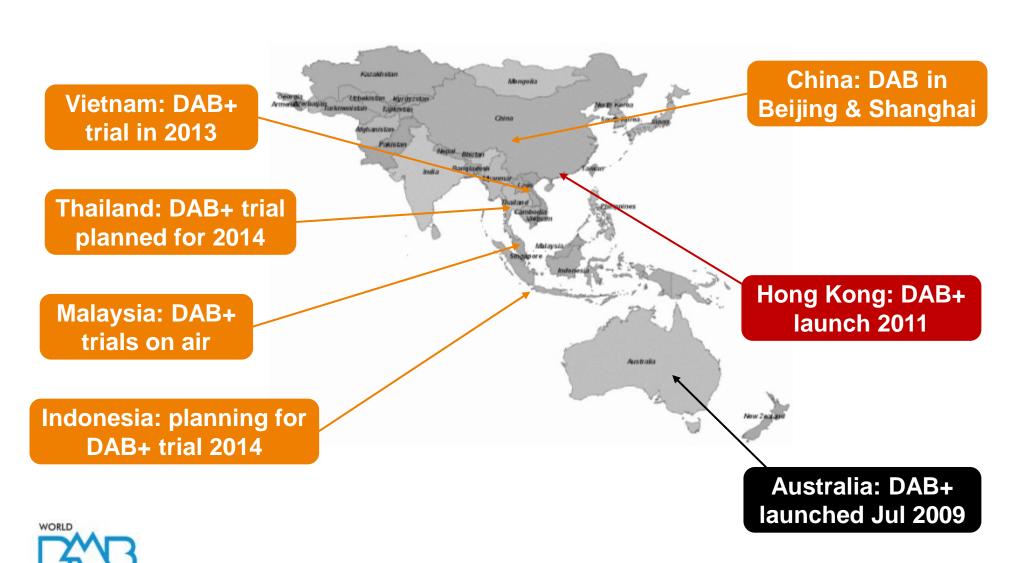


In Asia Pacific, a similar process is under way





In Asia Pacific, a similar process is under way



Norway – first to have digital switchover - in 2017



- 45% of daily listeners use a digital device
- DAB coverage
 - 98.8% (public multiplex)
- DSO in 2017 if criteria achieved (2019 latest)



Source: Digitalradio Norge

United Kingdom – "future of radio is digital"



- 48% of households have DAB¹
- 94% national coverage and all major roads
- By 2015
 - 2nd national commercial mux
 - 360 more transmitters



Source: (1) RAJAR

Denmark – DSO target 2019



- 37% have digital radio
- Switching from DAB to DAB+
- Launching 3rd national mux (13 regions)
- Conditional DSO target 2019



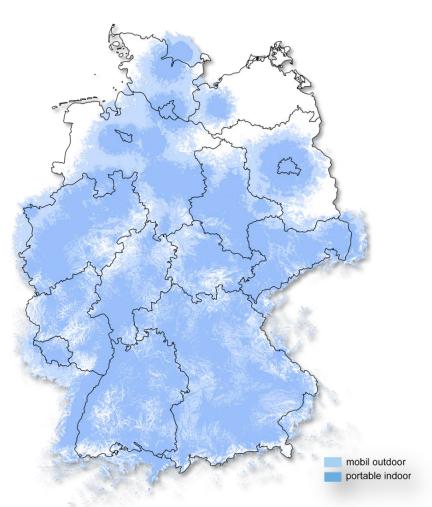
Switzerland – planning for digital migration



- 33% of households have DAB
- 99% coverage¹
 - all major tunnels by 2016
 - trials for small-scale local DAB
- Report being drafted about digital migration plans
 - DSO expected to start ~2020



Germany – growing momentum



- Launched DAB+ August 2011
 - coverage 91%
 - national and regional services
 - 2013 receiver sales: up 52% year on year
- ARD preparing report on future of broadcast radio



Netherlands – launched DAB+ Sept 2013

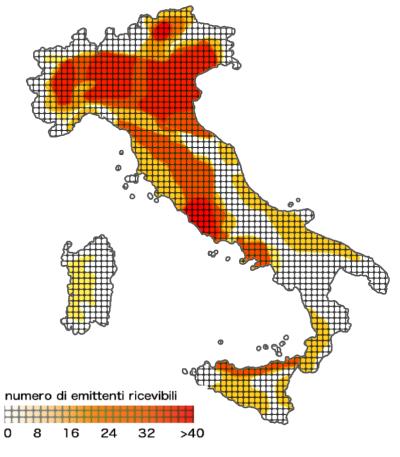


- 26 services
 - 17 commercial (8 digital-only)
 - 9 from NPO (4 digital-only)
- Coverage: 95%
- Joint marketing activity
 - public / private broadcasters & Ministry of Economic Affairs



Italy - coverage in place, awaiting regulatory approval

Coverage map



- DAB+ services licensed in Trentino (Q4 2012)
- Two trial national multiplexes (70% population coverage)
- RAI committed to roll out DAB+ over next three years



France – launching in June 2014



- Licences awarded for Paris,
 Nice and Marseille
- DAB+ approved Sept 2013
- Launch in June 2014¹



Poland – first steps



- Polskie Radio started DAB+ in October 2013
 - Warsaw
 - Katowice
- Eight more cities in 2014¹



Sweden – decision on DAB+ next year



- Government and broadcaster support for DAB+ (June 2013)
- Special advisor appointed
- Parliamentary decision in 2015



Australia – leaping ahead



- DAB+ launched 2009
 - five major cities
- 1.6m devices sold (400k p.a.)
 - 16% household penetration
- DAB+ standard in several car models¹



Contents

1. WorldDMB

2. International developments



3. Why digital radio? Why now?



EBU calling for DAB / DAB+ across Europe



EBU recommendations

- Digital broadcast backbone¹
- Devices to offer analogue & digital²
 - consumer
 - automotive
 - smartphones
- Harmonisation across Europe



Note: (1) Recommendation R138 https://tech.ebu.ch/docs/r/r138.pdf

(2) Euro-chip / smart radio initiative: http://www3.ebu.ch/cms/fr/sites/ebu/contents/programming/radio/digital-radio/welcome-page/about-euro-chip.html

The competitive landscape for radio is changing

Online music services

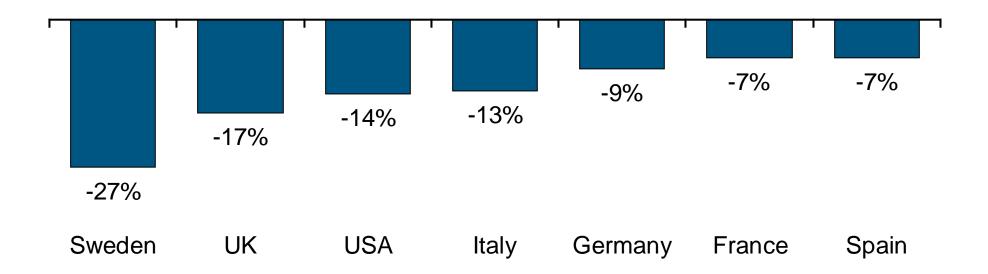


- Digital music services
- Smart devices
- Competition for FM radio



Younger audiences are listening less

Changes in youth per capita listening hours, 2006-10¹





Note: (1) Definition of youth varies by market; e.g. Sweden (9-19s), UK (15-24s); US data 2006-08 & 2009-11 (new methodology in 2009). Source: EBU (Europe), Arbitron (US).

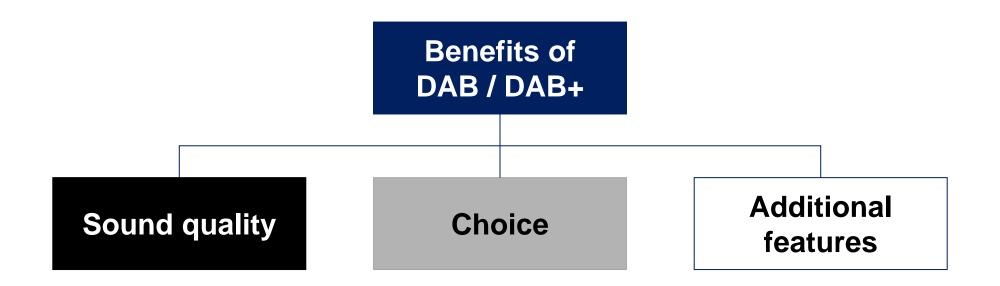
In many markets, FM spectrum is full



- Overloaded airwaves
- No capacity for new services
- Difficult to innovate



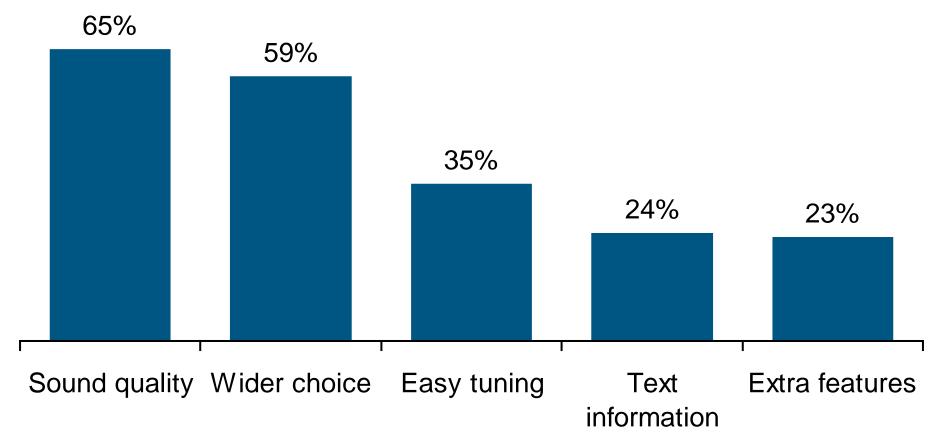
Digital radio offers solutions





Sound quality and choice are top two benefits

UK, % benefits of digital radio

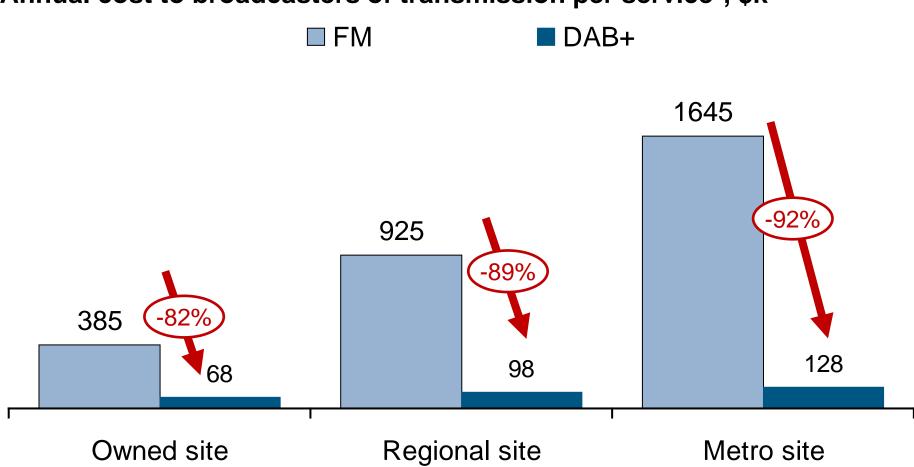




Source: Ofcom

DAB+ offers significant efficiency savings

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, see: http://www.worlddab.org/public_document/file/441/2014-02-

19_Harris_comparison_DAB__to_FM_and_DRM_final.pdf?1392974163

DAB / DAB+ radios now mass market









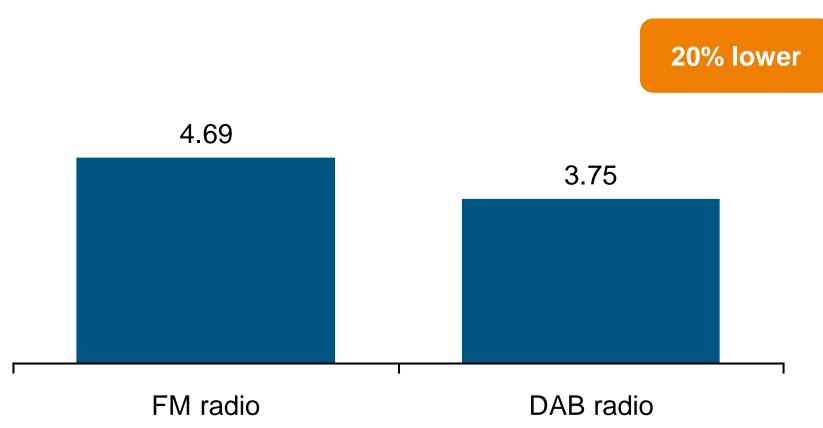
Over 300 receivers available

- Portables
- Clock radios
- Home audio systems



Digital radios consume 20% less power than FM devices

Power consumption of in-use devices, W

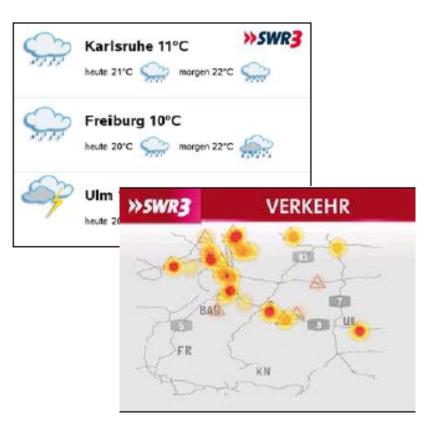




Source: DCMS / Intertek Technical Report, March 2013

Digital radio enables data services – at-home and in-car

Categorised slideshow



TPEG



Enhanced traffic information



Automotive brands offering DAB – increasingly as standard















































Conclusions

Europe

- Momentum growing
- German launch key development

Benefits

- Better quality sound, greater choice
- Innovation



- Mass market devices available for home and car
- International support



Summary

1. European momentum building

- UK seen as key innovator
- Norway first country to commit to DSO

2. Germany focus for rest of Europe

Italy near tipping point; France watching closely

3. Automotive and smartphones key priorities: international co-operation required



Thank you

For further information, please contact: www.worlddab.org

