DAB/DAB+ DIGITAL RADIO| EUROPE AND ASIA PACIFIC

(Status June 2017)



Government policy status

Norway – DSO started Jan 2017, due to complete Dec 2017 | Switzerland – DSO planned for 2020-2024 | United Kingdom – Government committed to a digital future for radio | Denmark – timing of DSO to be decided when 50% of listening is digital | Germany – Digital Radio roadmap published by authorities Feb 2017, 2nd national mux to launch by Q2 2018 | Netherlands – fastest DAB+ launch, backed by Government support | Italy – national coverage to reach 80% by end-2017 | France – three cities on air; three more cities to start broadcasting in 2017/early 2018. Regulator consulting on roll-out process acceleration | Belgium – Flemish and French speaking governments committed to a digital radio future | Australia – DAB+ in 5 metropolitan areas 65% population coverage; regional planning started

CUMULATIVE DAB/DAB+ RECEIVER SALES (INCLUDING LINE FIT AUTOMOTIVE) 2008 – H1 2017

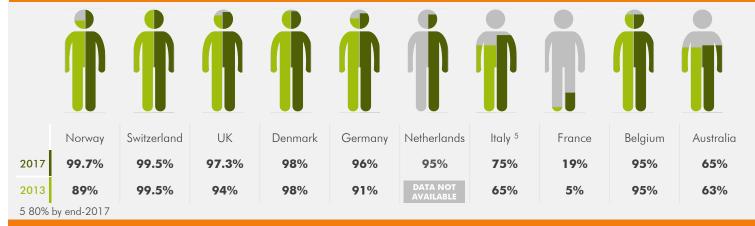


^{*} including line fit automotive | ** including pre 2008 sales | 1 May 2017 | 2 including sales starting from 2011 | 3 including sales starting from 2013

% NEW CARS W/DAB/DAB+



TOTAL DAB/DAB+ NETWORK COVERAGE (% OF POPULATION) 2013 VS 2017



DAB/DAB+ 1st LEVEL ROAD COVERAGE *

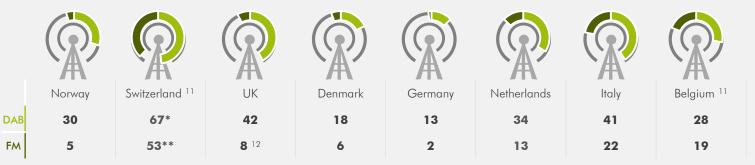


^{*}KM 1st level road coverage (motorways, autobahns, autostrade, autostradas, autoroutes). However most countries also have equivalent coverage on 2nd level routes. | 6 BBC National | 7 National mux only, regional muxes provide further coverage | 8 Road coverage of DAB+ area covered Flanders and Wallonia | 9 Road coverage of DAB+ area covered in five metropolitan capital cities

DAB/DAB+ HOUSEHOLD RECEIVER PENETRATION



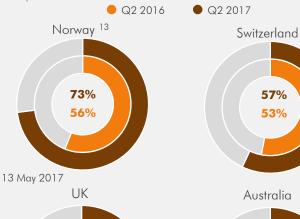
NUMBER OF NATIONAL STATIONS ON DAB/DAB+ VS FM



11 No national stations; all stations dedicated to a language region or a region | * exclusive DAB+ stations | ** simulcast DAB+ stations | 12 includes two AM

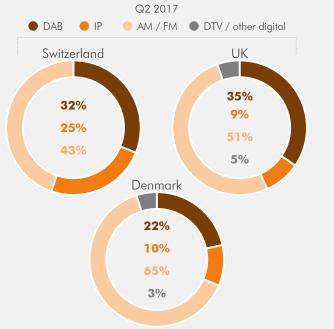
DIGITAL RADIO REACH ALL PLATFORMS

the % of people who listen to digital radio in a given time period

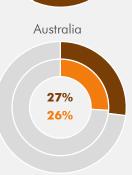


Total listening hours by platform, % share

DAB/DAB+ SHARE



61% **59**%



EMERGING MARKETS



Open tender for national/regional/ local networks DAB+ trial ongoing



Trial DAB+ 30% population

Slovenia



Regular DAB+ 73% population coverage launched September 2016



From 2018, regular DAB+ will cover ~99% of the total population 12



Trial DAB+ Jakarta 2 million population coverage



New DAB+ Trial months from 1 March 2017 w/ 18 radio channels

Bulgaria

Trial DAB+ 24% population

coverage



Regular DAB+ 90% population coverage



DAB+ 20% population coverage

Czech Republic

DAB+ 58% population coverage



Trial DAB+ 60% population coverage



Planning for 8 DAB+ trial sites to deliver 80% population

Estonia

Roadmap published w/ Trial DAB+ Talinn planned 2018



Regular DAB+ 100% population coverage



Trial DAB+ 20% population coverage



Regular DAB+ in Strasbourg, Lyon and Lille expected



2017/early 2018 13

Poland

Regular DAB+

coverage

56% population

United Arab

Emirates

Initiated industry

consultation on

DAB+ receiver

specifications



Frequency plan for DAB+ September 2017

Slovakia



Trial DAB+ 38% population coverage

Ukraine



Trial DAB+ Kiev planned 2017

12 Currently, regular DAB covers 95% of population, regular DAB+ covers 100% of Brussels population, 80% of Flanders population and trial DAB+ covers 95% of Wallonia population | 13 Regular DAB+ services on air in Paris, Marseille, Nice since 2014 (19% population coverage)

DIGITAL RADIO MARKETING BODIES

Norway – <u>radio.no</u> | Switzerland – <u>dabplus.ch</u> | United Kingdom – <u>getdigitalradio.com</u> | Denmark - <u>mereradio.dk</u> | Germany – <u>digitalradio.de</u> | Netherlands – <u>digitalradio.nl</u> | Italy – <u>digitalradio.it</u> | France – Alliance for Digital Radio | Australia – <u>digitalradioplus.com.au</u> | Austria – <u>digitalradio-oesterreich.com</u> | Belgium – <u>digitalradio.be</u> | Czech Republic – <u>rozhlas.cz/digital</u> & <u>digitalradiodab.cz</u> | Poland – <u>polskieradio.pl</u> | Slovenia – <u>rtvslo.si/dab</u> | South Africa <u>sadiba.org</u> | United Arab Emirates tra.gov.ae

For a full list of sources attributable to each statistic visit the WorldDAB website.



SOURCES - DIGITAL RADIO EUROPE AND ASIA PACIFIC (Status June 2017)

DAB/DAB+ RECEIVER SALES (INCLUDING LINE FIT AUTOMOTIVE) 2008 – H1 2017

Sources: Digital radio survey by Kantar TNS, Trade Association for consumer electronics (Norway), GfK, importers, dealers (Switzerland); MCDT, Weer GmbH (Switzerland automotive), GfK* (UK), SMMT/CAP UK (UK automotive), Digitisation report 2017 carried out by TNS Infratest (Germany), GfK*, 2011 GfK data for Denmark does not include Clock Radio and Portable Radio (Denmark), JATO Dynamics, DAB+ as standard years 2015 to H1 2017 (Denmark automotive), GfK* 2013 – H1 2017 (Netherlands), JATO Dynamics 2017, DAB+ as standard years 2013 – H1 2017 (Netherlands automotive), GfK* (Italy), digitalradio.it (Italy automotive), GfK* (France), JATO Dynamics 2017, DAB+ as standard years 2015 to H1 2017 (France automotive), GfK* (excludes sales of aftermarket DAB+ devices in vehicles) (Australia), Q2 2017 and Glass's Automotive Business Intelligence June 2017 and total sales figures supplied by vehicle manufacturers in Australia supporting DAB+ digital radio (Australia)

% NEW CARS W/DAB/DAB+

Sources: Estimate by national broadcasters and Digitalradio Norway, based on general info on DAB+ availability from each car importer. Currently no local official statistic is available to track DAB+ ratio in the Norwegian market for new cars. Cars without line fit DAB-radios are given retrofit solutions locally. The estimate includes private cars only (Norway), JATO Dynamics H1 2017 (Denmark, Netherlands, France), SMMT/CAP automotive Q2 2017 (UK), Weer GmbH (Switzerland), DAT/VDA report 2017 (Germany), JATO Dynamics H1 2017 and digitalradio.it (Italy), Glass's Automotive Business Intelligence Sep 2016, Commercial Radio Australia (Australia)

All figures standard fit except Norway, Germany and Italy which also includes cars with DAB+ taken as an option.

TOTAL DAB/DAB+ NETWORK COVERAGE (% OF POPULATION) 2013 VS 2017

Sources: Norkring AS (Norway), BBC (UK), OFCOM (Switzerland), Media Broadcast (Germany), Teracom (Denmark), Digital Radio NL (Netherlands), digitalradio.it (Italy), WorldDAB (France), RTBF and Norkring Belgium (Belgium), Commercial Radio Australia (Australia)

DAB/DAB+ 1st LEVEL ROAD COVERAGE*

Sources: Norkring AS (Norway), BBC (UK), SRG, SSR, OFCOM (Switzerland), Media Broadcast (Germany), Teracom (Denmark), Digital Radio NL (Netherlands), digitalradio.it (Italy), Estimation RTBF and Norkring Belgium (Belgium), Commercial Radio Australia (Australia)

DAB/DAB+ HOUSEHOLD RECEIVER PENETRATION

Sources: Digital radio survey by Kantar TNS May 2017 (Norway), Q2 2017. RAJAR/Ipsos MORI/RSMB (59.5% of population claim to have access to a DAB set in their home) (United Kingdom), Digitisation report 2017 carried out by TNS Infratest (Germany), DR 2014 (Denmark), digitalradio.it (Italy), GfK Radio Ratings, Surveys 2-4, 2017 (Australia)

NUMBER OF NATIONAL STATIONS ON DAB/DAB+ VS FM

Sources: WorldDAB

DIGITAL RADIO REACH - ALL PLATFORMS

Sources: GfK Australia, Surveys 6-8, 2016 SMBAP, Cumulative audience, Monday to Sunday, midnight to midnight, all people 10+, Surveys 2-4, 2017 (Australia), DigiMig Trendanalyse 01.2017 (Switzerland), Digital radio survey by Kantar TNS January 2017 (Norway), Q2 2017. RAJAR/Ipsos MORI/RSMB (United Kingdom)

DAB/DAB+ SHARE

Sources: DigiMig Trendanalyse 01.2017 (Switzerland), Q2 2017. RAJAR/Ipsos MORI/RSMB (United Kingdom), Gallup/DR, only available for public service channels (Denmark)

EMERGING MARKETS

Sources: Verein Digitalradio Österreich (Austria), Norkring Belgium and RTBF (Belgium), dab.bg (Bulgaria), Czech Radio, RTI cz s.r.o., TELEKO s.r.o. (Czech Republic), Estonian Public Broadcasting (ERR) (Estonia), WorldDAB with industry inputs (France), National Media and Infocommunications Authority Hungary (Hungary), RRI (Indonesia), Ministry of Information Kuwait (Kuwait), LVRTC (Latvia), WorldDAB (Malta), RTV Slovenija (Slovenia), VÚS (Research Institute of Posts and Telecommunications, Slovakia (Slovakia), ICASA (South Africa), WorldDAB (Tunisia), Polskie Radio (Poland), TRT (Turkey), Telecom Regulatory Authority & Emirates Standardization and Metrology Authority (United Arab Emirates)

*GfK Point of Sale DAB+ Fusion Reporting, including coverage extrapolation. The DAB+ Fusion report includes the product categories: Audio Home Systems, Tuners, Receivers, Clock Radios, Portable Radios, Radio Recorders and Car Radios (aftermarket).