DAB/DAB+ DIGITAL RADIO | EUROPE AND ASIA PACIFIC



Government policy status

Norway – the digital switchover completed for all national radio Dec 2017 | Switzerland – DSO planned for 2020-2024¹ | United Kingdom – Future UK policy on digital radio to be addressed in Government review as digital listening accounts for 50% of platform share | 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 Q1 2019 | Netherlands – fastest DAB+ launch, backed by Government support | Italy – national coverage to reach 82% by end-2018² | France – four cities on air; six to start broadcasting in 2018/2019³; 15 regional tenders in 2018 and again in 2019; national tender in 2018 | Belgium – Flemish and French speaking governments committed to a digital radio future | Australia – DAB+ in 5 metropolitan areas, permanent services starting in Canberra, Darwin and Hobart in 2018, planning underway for other regions

1 Commitment of the industry; communication of DSO-Date planed for Q1 2019 | 2 End of 2017 the coverage was 78% at 45 dBuV signal | 3 including Lille

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



^{*} including pre 2008 sales | 4 Feb 2018 | 5 including sales starting from 2011 | 6 As of Q2 2017, including sales starting from 2013 | 7 contains only DAB+ sales starting from 2013 | 8 including sales starting from 2009

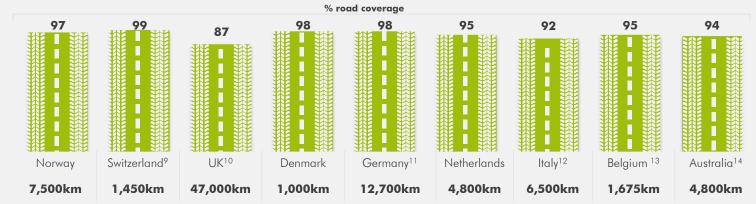
% NEW CARS W/DAB/DAB+



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. | 9 Goal for 2019: All 1st level tunnels longer than 300m with DAB+ | 10 BBC National | 11 National mux only, regional muxes provide further coverage | 12 National and local muxes, no data on 2nd level routes | 13 Road coverage of DAB+ area covered Flanders and Wallonia | 14 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



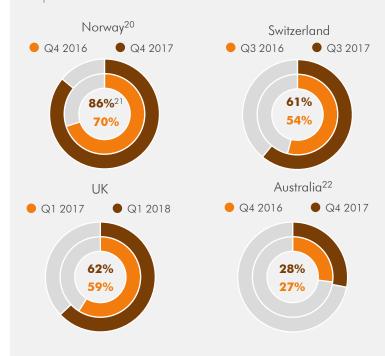
18 No national stations; all stations dedicated to a language region or a region | * exclusive DAB+ stations | ** simulcast DAB+ stations | 19 includes two AM

DIGITAL RADIO REACH ALL PLATFORMS

DAB

FM

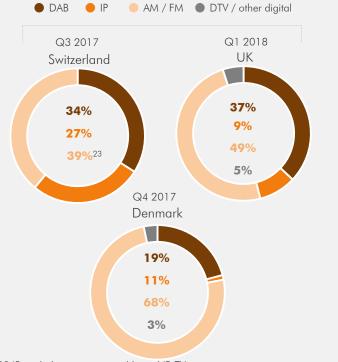
the % of people who listen to digital radio in a given time period



20 Digital reach among daily listeners \mid 21 Feb 2018 \mid 22 Simulcast listening via DAB+ and DAB+ only station listening via DAB+ or internet

DAB/DAB+ SHARE

Total listening hours by platform, % share



23 IP: includes streaming, cable and IP-TV

EMERGING MARKETS



Trial DAB+ population coverage



Regular DAB+ May 2018

Slovenia



Reaular DAB+ 73% population



Regular DAB+ 29% population

coverage Hungary

Trial DAB+ 30% population coverage

South Africa



Trial DAB+ 21.5% population coverage

Belgium

From 2019, regular DAB+ ~99% population

coverage

Indonesia

Trial DAB+ Jakarta 2 million population coverage

Tunisia

(C) Trial DAB+ population

Bulgaria

Trial DAB+

24% population coverage

Kuwait

Regular DAB+ 100% population coverage

Thailand

Planning DAB+ trial 80% population coverage

Croatia



Trial DAB+ 50% population

coverage

Malta

Regular DAB+ 100% population coverage

Turkey

Trial DAB+ 21.5% population

Czech Rep.



Regular DAB+ 62% population coverage



Regular DAB+ 56% population

coverage

UAE

Industry consultation on DAB+ receiver specifications



All receivers will have to be DAB+ capable as 20% coverage will be achieved in 2018²⁴

Slovakia



Trial DAB+ 37% population coverage

Ukraine



Trial DAB+ Kyiv 2018-2025

24 Regular DAB+ services in Nice, Marseille and Paris since 2014. Lille will bring coverage above 20% by end 2018

coverage

DIGITAL RADIO MARKETING BODIES

Norway²⁵ - radio.no | Switzerland - dabplus.ch | United Kingdom - getdigitalradio.com | Denmark - mereradio.dk | 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

For a full list of sources attributable to each statistic visit the WorldDAB website. | 25 The digital switchover is completed, DRN is therefore as planned in the process of shutting down.



SOURCES - DIGITAL RADIO EUROPE AND ASIA PACIFIC

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

Sources: Digital radio survey by Kantar Media, February 2018 (Norway), Ofcom Switzerland, GfK (Switzerland); Weer GmbH (Switzerland automotive), GfK* (UK), SMMT/CAP automotive Q4 2017 (UK automotive), Digitisation report 2017 carried out by TNS Infratest (Germany), GfK*, 2011-2017 GfK data for Denmark does not include Tuners and Car Radios and 2011 GfK data for Denmark does not include Clock Radio and Portable Radio (Denmark), JATO Dynamics, DAB+ as standard years 2015 to 2017 (Denmark automotive), GfK* 2013 – 2017 (Netherlands), JATO Dynamics 2017, DAB+ as standard years 2013 – 2017 (Netherlands automotive), GfK Italia CAPI survey (Italy), digitalradio.it (Italy automotive), GfK* (France), JATO Dynamics 2017, DAB+ as standard years 2015 to 2017 (France automotive), GfK* 2013 – 2017 (Belgium), JATO Dynamics 2017, DAB+ as standard years 2015 – 2017 (Belgium automotive), GfK*, data includes Smart/Mobile Phones but excludes Car Radios (aftermarket) & Tuners (Australia), Q4 2017 and Glass's Automotive Business Intelligence Dec 2017 and total sales figures supplied by vehicle manufacturers in Australia supporting DAB+ digital radio (Australia automotive)

% 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 2017 (Denmark, Netherlands, France, Belgium), SMMT/CAP automotive Q1 2018 (UK), Weer GmbH (Switzerland), DAT/VDA report 2018 (Germany), JATO Dynamics 2017 and digitalradio.it (Italy), Glass's Automotive Business Intelligence Dec 2017, 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), Q4 2017. RAJAR/Ipsos MORI/RSMB (62.3% 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 6-8, 2017 (Australia)

NUMBER OF NATIONAL STATIONS ON DAB/DAB+ VS FM

Sources: WorldDAB

DIGITAL RADIO REACH - ALL PLATFORMS

Sources: GfK Australia, Surveys 6-8, 2017 SMBAP, Cumulative audience, Monday to Sunday, 5.30am to midnight (Australia), DigiMig Trendanalyse 01.2018 (Switzerland), Digital radio survey by Kantar Media, February 2018 (Norway), Q1 2018. RAJAR/Ipsos MORI/RSMB (United Kingdom)

DAB/DAB+ SHARE

Sources: DigiMig Trendanalyse 01.2018 (Switzerland), Q1 2018. RAJAR/Ipsos MORI/RSMB (United Kingdom), Q4 2017 Gallup/DR, only available for public service channels (Denmark)

EMERGING MARKETS

Sources: Verein Digitalradio Österreich (Austria), Norkring Belgium and RTBF (Belgium), 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).