

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 2020-2024 | United Kingdom – Future UK policy on digital radio to be addressed in Government review, details to be confirmed, now that 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 | Netherlands – fastest DAB+ launch, backed by Government support | Italy – From 2020 it will be mandatory for all radios sold to have DAB+ | France – all receivers will have to be DAB+ capable as 20% coverage should be recognized in 2018²; metropolitan (main roads) tender closes Nov 21st 2018 | Belgium ³ – Flemish and French speaking governments committed to a digital radio future with DAB+ at its core | Australia – DAB+ in 5 metropolitan areas 65% population coverage; planning underway for other markets

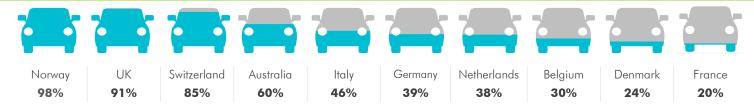
1 Commitment of the industry; communication of DSO-Date planned for Q1 2019 | 2 Regular DAB+ services in Nice, Marseille, Paris and Lille, Lyon and Strasbourg should bring coverage above 20% by end 2018 | 3 Belgium FI: DAB+ official launch 1/9/2018. Belgium Fr: estimated official start of DAB+ June 2019

CUMULATIVE DAB/DAB+ RECEIVER SALES (INCLUDING LINE FIT AUTOMOTIVE) 2008 - H1 2018

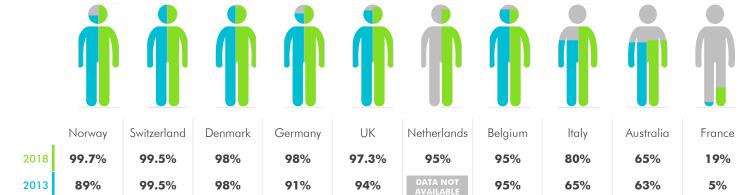


^{*} including pre 2008 sales | 4 As of Q2 2018, including sales starting from 2013 | 5 Feb 2018 | 6 including sales starting from 2009 | 7 automotive line-fit sales up to Q4 2017 | 8 contains only DAB+ sales starting from 2013 | 9 including sales starting from 2011

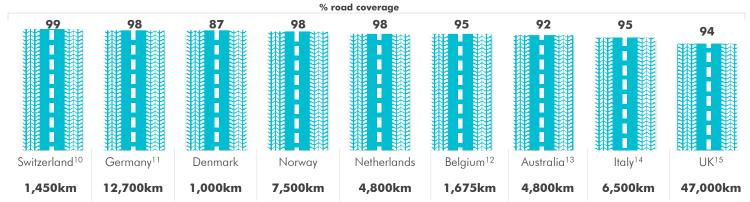
% NEW CARS W/DAB/DAB+



TOTAL DAB/DAB+ NETWORK COVERAGE (% OF POPULATION) 2013 VS 2018



DAB/DAB+ 1st LEVEL ROAD COVERAGE *

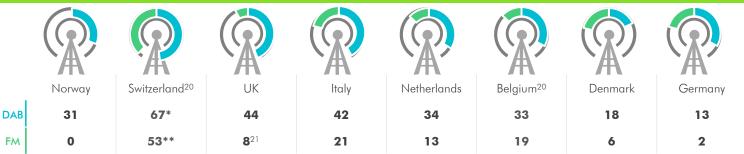


*KM 1st level road coverage (motorways, autobahns, autostrade, autostradas, autoroutes). However most countries also have equivalent coverage on 2nd level routes. | 10 Goal for 2019: All 1st level tunnels longer than 300m with DAB+ | 11 National mux only, regional muxes provide further coverage | 12 Road coverage of DAB+ area covered Flanders and Wallonia | 13 Road coverage of DAB+ area covered in five metropolitan capital cities | 14 National and local muxes, no data on 2nd level routes | 15 BBC National

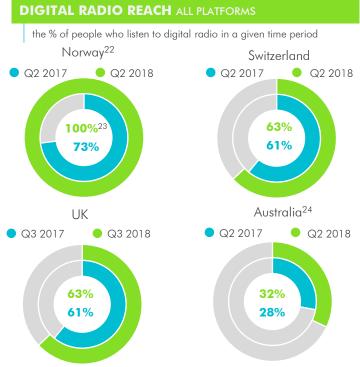
DAB/DAB+ HOUSEHOLD RECEIVER PENETRATION



NUMBER OF NATIONAL STATIONS ON DAB/DAB+ VS FM

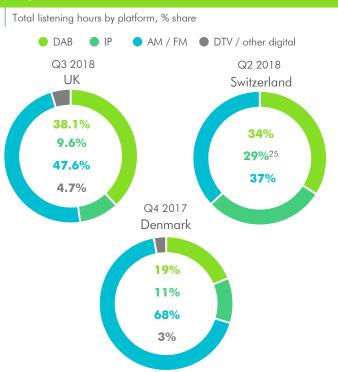


20 No national stations; all stations dedicated to a language region or a region | * exclusive DAB+ stations | ** simulcast DAB+ stations | 21 includes two AM services



22 Digital reach among daily listeners \mid 23 Reach among daily listeners of national radio \mid 24 Simulcast listening via DAB+ and DAB+ only station listening via DAB+ or internet

DAB/DAB+ SHARE



 $25\ ln$ Switzerland, 'IP' listening includes streaming, cable and IP-TV

EMERGING MARKETS



26 From15 November 2018 | 27 Population coverage of Regular national DAB multiplex. A small scale Trial DAB multiplex launched in Cork in August 2018 | 28 Regulator launched consultation draft on granting licenses for digital radio frequencies September 2018 | 29 Population coverage of Regular national DAB multiplex. The first National commercial DAB+ multiplex in Sweden will launch on 1 January 2019 with 15 programmes.

DIGITAL RADIO MARKETING BODIES

Norway³⁰ – <u>radio.no</u> | Switzerland – <u>dabplus.ch</u> | United Kingdom – <u>getdigitalradio.com</u> | Denmark - <u>mereradio.dk</u> | Germany – <u>dabplus.de</u> | Netherlands – <u>digitalradio.nl</u> | Italy – <u>digitalradio.it</u> | France – <u>dabplus.fr</u> | Australia – <u>digitalradioplus.com.au</u> | Austria – <u>dabplus.at</u> | Belgium – <u>dabplus.be</u> | Czech Republic – <u>rozhlas.cz/digital</u> & <u>digitalradiodab.cz</u> | Poland – <u>polskieradio.pl</u> | Slovenia – <u>rtvslo.si/dab</u> |

DAB/DAB+ RECEIVER SALES (INCLUDING LINE FIT AUTOMOTIVE) 2008 – H1 2018

Sources: Digital radio survey by Kantar Media, February 2018 (Norway), Ofcom Switzerland, GfK (Switzerland); Weer GmbH as per per Q4 2017 (Weer GmbH is only evaluating once a year) (Switzerland automotive), GfK* (UK), SMMT/CAP automotive Q2 2018 (UK automotive), Digitisation report 2018 carried out by TNS Infratest (Germany), GfK*, 2011 – H1 2018 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 2018, DAB+ as standard 2015 – H1 2018 (Denmark automotive), GfK* 2013 – H1 2018 (Netherlands), JATO Dynamics 2018, DAB+ as standard 2013 – H1 2018 (Netherlands automotive), GfK Italia CAPI survey (Italy), digitalradio.it (Italy automotive), GfK* (France), JATO Dynamics 2018, DAB+ as standard years 2015 – H1 2018 (Belgium automotive), GfK* 2013 – H1 2018 (Belgium), JATO Dynamics 2018, DAB+ as standard years 2015 – H1 2018 (Belgium automotive), GfK*, data includes Smart/Mobile Phones but excludes Car Radios (aftermarket) & Tuners (Australia), Q2 2018 and Glass's Automotive Business Intelligence Sep 2018 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 H1 2018 (Denmark, Netherlands, France, Belgium), SMMT/CAP automotive Q3 2018 (UK), Weer GmbH (Switzerland), DAT/VDA report 2018 (Germany), JATO Dynamics 2017 and digitalradio.it (Italy), Glass's Automotive Business Intelligence Sep 2018, 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 2018

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), Q3 2018. RAJAR/Ipsos MORI/RSMB (64.1% of adult population claim to have access to a DAB set in their home) (United Kingdom), Digitisation report 2018 carried out by TNS Infratest (Germany), DR 2014 (Denmark), "Observatoire de l'équipement audiovisuel des foyers de France métropolitaine 2017"- Médiamétrie / CSA (France), digitalradio.it (Italy), GfK Radio Ratings, Surveys 4-6, 2018 (Australia)

NUMBER OF NATIONAL STATIONS ON DAB/DAB+ VS FM

Sources: WorldDAB

DIGITAL RADIO REACH - ALL PLATFORMS

Sources: GfK Australia, Surveys 2-4, 2017 SMBAP and GfK Australia, Surveys 2-4, 2018 SMBAP Cumulative audience, Monday to Sunday, 5.30am to midnight (Australia), DigiMig Trendanalyse 08.2017 / 08.2018 (Switzerland), Q2 2017 Kantar Media, Q2 2018 WorldDAB (Norway), Q3 2018. RAJAR/Ipsos MORI/RSMB (United Kingdom)

DAB/DAB+ SHARE

Sources: DigiMig Trendanalyse 30.08.2018 (Switzerland), Q3 2018. RAJAR/Ipsos MORI/RSMB (United Kingdom), Q4 2017 Gallup/DR, only available for public service channels (Denmark)

EMERGING MARKETS

Sources: TDA (Algeria), Verein Digitalradio Österreich (Austria), OiV (Croatia), Czech Radio, RTI cz s.r.o., TELEKO s.r.o. (Czech Republic), ERT (Greece), National Media and Infocommunications Authority Hungary (Hungary), RRI (Indonesia), RTÉ (Ireland), Ministry of Information Kuwait (Kuwait), Radio Television of Serbia (Serbia), Polish Radio (Poland), Radio Romania (Romania), VÚS (Research Institute of Posts and Telecommunications, Slovakia (Slovakia), RTV Slovenija (Slovenia), ICASA (South Africa), Swedish Radio (Sweden), WorldDAB (Tunisia), Polskie Radio (Poland), TRT (Turkey), Telecom Regulatory Authority & Emirates Standardization and Metrology Authority (United Arab Emirates), National Council of Television and Radio Broadcasting of Ukraine (Ukraine)

*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).