

WorldDAB General Assembly 2017

7 – 8 November 2017
Paris, France

#WDAB17

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2
AUTODAB
...digital radio on the move





The new Audi A8

features integrated RadioDNS Hybrid Radio

Interoperable and durable standards

Our open standards are published by ETSI, are free to use, and enable interoperability, allowing you to switch freely between technology providers, or implement RadioDNS yourself.

Open standards are durable; they'll work for ever.

Perfectly aligned with DAB/DAB+

We work closely with WorldDAB to develop great hybrid digital radio functionality.

Enhanced visuals, metadata, interactivity

Standards designed for today's connected devices, with support for high definition visuals and album art, accurate and rich metadata, and interactivity designed for radio listeners.

Automotive, Mobile, Home

Standards that work across connected cars, mobile devices and connected home devices.

About RadioDNS

We're the global not-for-profit organisation that promotes hybrid radio based around open standards. We're funded by our members, who come from all sectors of the radio industry.

Our industry standards work alongside FM, DAB/DAB+ and HD Radio.

Find out about what we do, our regional coverage, and membership, at radiodns.org

radiodns.org

Welcome to Paris for the WorldDAB General Assembly 2017

Dear colleagues,

You join us with France at a critical stage in the development of its digital radio plans with services already on-air in Paris, Nice and Marseille and new services imminent in Lille, Lyon and Strasbourg. Our goal now is to welcome France as a fully active member of the DAB digital radio family.

For inspiration, we need look no further than Norway – due to complete its digital switchover next month. It will be next year before we fully understand the implications of switching off FM services, but it's clear that the dramatic increase in national services is a major benefit to listeners.

One of the most encouraging stories of the switchover has been the collaboration between public and private broadcasters. It's a common theme in many of our discussions, but Norway has taken this to new levels.

Elsewhere, Switzerland is on track for its own switchover starting in 2020; and, in the UK, digital listening is approaching 50%, which will trigger a government review of radio's digital future.

In Germany, broadcaster and political support for digital radio continues to strengthen – with similar progress in Australia, Belgium, Denmark, Italy, the Netherlands and Slovenia. In parallel, a growing number of territories in Europe and the rest of the world are undertaking trials.

A key strand in these developments is the growing number of cars which now come with DAB+ as standard. In all markets, these figures are on an upward track.

At recent WorldDAB events, the energy levels and the quality of debate have been as high as I have ever known them – reflecting the progress we are making around the world. I am confident we will maintain these levels over the next two days – and beyond.

I will close by thanking Bernie and the Project Office team for all their hard work in the last year and in preparing for this year's General Assembly. I hope you all enjoy it.



Best wishes

A handwritten signature in black ink that reads "Patrick Hannon". The signature is written in a cursive, flowing style.

Patrick Hannon,
President, WorldDAB

PROGRAMME AT A GLANCE

DAY 1: TUESDAY 7 NOVEMBER 2017

10:30	11:00	REGISTRATION
11:00	12:30	WorldDAB General Assembly (member only session) Committee reports Steering Board – Patrick Hannon, President Technical Committee – Lindsay Cornell, Chair Asia Pacific Committee – Joan Warner, Chair Regulatory and Spectrum Committee – Hanns Wolter, Chair Finance Committee – Phil Laven, Treasurer WorldDAB Election results WorldDAB Award for Outstanding Service
12:30	14:00	LUNCH AND REGISTRATION
14:00	15:15	SESSION 1 DAB in Europe RNT en Europe
		Patrick Hannon, WorldDAB Ian O'Neill, DCMS, United Kingdom Willi Steul, Deutschlandradio, Germany Jacqueline Bierhorst, Digital Radio NL, The Netherlands Johan Bouciqué, Flemish Government, Belgium Janja Varšek, Agency for Communication Networks and Services (AKOS), Slovenia Graham Dixon, Head of Radio, EBU
15:15	15:45	COFFEE
15:45	17:00	SESSION 2 DAB+ in France RNT en France
		Nicolas Curien, Conseil Supérieur de l'Audiovisuel Alain Liberty, SIRT Jean-Eric Valli, Les Indés Radios Laurent Brochet, Radio Pitchoun Emmanuel Bouterin, SNRL/AMARC
19:00	22:30	GALA DINNER

DAY 2: WEDNESDAY 8 NOVEMBER 2017

09:00	10:15	SESSION 3 Digital switchover – getting the listener to follow
		Norway – lessons learned from the DSO process Regulator: Norwegian Media Authority Public broadcaster: NRK Commercial broadcaster: P4 Radio Hele Norge AS Marketing and information: Digital Radio Norway Automotive sector: Digital Radio Norway Panel discussion Switzerland United Kingdom Denmark
10:15	10:45	COFFEE

PROGRAMME AT A GLANCE

DAY 2: WEDNESDAY 8 NOVEMBER 2017

11:45	11:50	SESSION 4 The evolving business case for DAB New opportunities on DAB+ with a second national multiplex – Germany and Denmark How UK commercial radio is using DAB/DAB+ to grow share and revenue A French radio broadcaster's perspective on DAB+ Italian radio's continued expansion with DAB+ Small scale DAB+ – a complementary solution for community broadcasters in Switzerland
11:50	12:10	SESSION 5 DAB+ for data: hybrid and connected TISA XPERI Continental Corporation R+ Mediamobile
12:10	13:10	LUNCH
13:10	14:10	SESSION 6 The consumer's journey on DAB Video presentation – national DAB marketing campaigns Commercial Radio Australia's confidence in DAB+ for the listener The auto manufacturer and delivering radio to their customers – Fiat Chrysler Automobiles Guidelines for the in-car user experience and the UK's DAB car adaptor pilot study The Belgian national automotive association: getting the message to drivers Audio in transition - digital radio sales and the impact of new trends including multi-room and voice activation
14:10	15:00	SESSION 7 A look further into the future with DAB+ Future and emerging DAB+ markets – Indonesia and Thailand The future of broadcast technologies Working with the car industry on the future of radio CLOSING REMARKS: Patrick Hannon, President, WorldDAB
15:00		NETWORKING DRINKS



Complete Solutions for DAB Digital Radio

PANEDA SW



Paneda 1U HW



Server Platform



Cloud Based

ADAPT
DAB250



ADAPT
DAB350BT



with Bluetooth phone connectivity

www.nextbase.co.uk

NEXT BASE

ADAPT DAB

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in the
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DIGITAL RADIO INTEGRATION



The AutoDAB SWC integrated Digital Radio adaptor is designed to be completely hidden behind the dash in the car for a 'factory look'.

UPGRADE TO DIGITAL RADIO...

SMARTDAB

...digital radio on your smartphone



Digital Radio controlled by your smartphone via FM transmitter



FM

Fully integrated hide-away DAB interface controlled via a RF remote

GO+



A plug & play 4" touch screen device mounted on your dash in minutes



MINI

Small portable DAB interface that can be used in your car or in the home

10:30 REGISTRATION

WorldDAB General Assembly (member only session)

Session chair: Patrick Hannon, President, WorldDAB

WorldDAB's five main committees report on achievements over the last year and the strategic focus for the year ahead. The results of the 2017 leadership election will be announced, as well as the winner of the WorldDAB Award for Outstanding Service.

This session is open to WorldDAB members only.

Committee reports

- Steering Board – Patrick Hannon, President
- Technical Committee – Lindsay Cornell, Chair
- Asia Pacific Committee – Joan Warner, Chair
- Regulatory and Spectrum Committee – Hanns Wolter, Chair
- Finance Committee – Phil Laven, Treasurer



Patrick Hannon
President, WorldDAB

WorldDAB Election results

WorldDAB Award for Outstanding Service



Lindsay Cornell
Chair, TC

12:30 - 14:00 LUNCH AND REGISTRATION



Hanns Wolter
Chair, RSC



Phil Laven
Treasurer



Joan Warner
Chair, APC

WorldDAB – how we work

- **Steering Board** The Steering Board oversees the operational and financial management of WorldDAB and implements strategic measures to ensure the successful roll out of DAB.
- **Technical Committee** The Technical Committee oversees and maintains the DAB family of standards.
- **Regulatory and Spectrum Committee** The Regulatory and Spectrum Committee provides guidance on the advantages of different regulatory approaches needed in countries with varying regulatory needs.
- **Asia Pacific Committee** The Asia Pacific Committee works with broadcasters to provide guidance and advice on the successful roll out of DAB+ digital radio across the Asia Pacific region.
- **Automotive Working Group** The Automotive Working Group works with automotive manufacturers and broadcasters to encourage the growth of digital radio penetration in automobiles, with its primary goal being DAB line-fit as standard.
- **Digital Switchover Group** The Digital Switchover Group provides an opportunity to share best practice, co-ordinate planning and discuss activities in preparation for digital switchover.
- **International Marketing Coordination Group** The International Marketing Coordination Group provides an opportunity to share best practice, encourage collaboration and shared approaches on the marketing and promotion of DAB where appropriate.



DAB IN EUROPE

An ever-increasing number of broadcasters across Europe are choosing DAB+ for new services, while ensuring FM services are also available on DAB+ in preparation for the future. This session looks at their motivations for doing so, the level of political support, and why they see the move to digital radio as advantageous for the listener.

Session chair: Antoine Baduel, CEO, Radio FG

WorldDAB Global Update

Patrick Hannon, President, WorldDAB

United Kingdom

Ian O'Neill, Head of Radio, Head of Television, Department for Digital, Culture, Media & Sport (DCMS), United Kingdom

Germany

Willi Steul, Chairman (and former Director General), Deutschlandradio, Germany

Netherlands

Jacqueline Bierhorst, Project Director, Digital Radio NL, The Netherlands

Belgium

Johan Bouciqué, Head of Media, Department of Culture, Youth, Sports and Media, Flemish Government, Belgium

Slovenia

Janja Varšek, Janja Varšek, Head of Radio Frequency Spectrum Management Department, Agency for Communication Networks and Services of the Republic of Slovenia (AKOS)

European Broadcasting Union

Graham Dixon, Head of Radio

Interpretation French-English and English-French will be provided for this session.



Antoine Baduel
FG Radio



Patrick Hannon
WorldDAB



Ian O'Neill
Department for Digital,
Culture, Media & Sport
(DCMS)



Willi Steul
Deutschlandradio



Johan Bouciqué
Flemish Government
Department of Culture,
Youth, Sport and Media



Jacqueline Bierhorst
Digital Radio NL



Janja Varšek
AKOS



Graham Dixon
EBU

15:15 - 15:45 COFFEE



Support for DAB from across Europe,
WorldDAB Automotive 2016, Brussels

DAB+ IN FRANCE

Session chair: Antoine Baduel, CEO, Radio FG

The development of digital radio in France is at a critical stage. DAB+ services are on air in Paris, Nice and Marseille, and new services are expected soon in Lille, Lyon and Strasbourg. The French regulator, the Conseil Supérieur de l'Audiovisuel (CSA), is keen to accelerate these developments and has therefore recently undertaken a public consultation: 'Accelerating the local roll-out of DAB+ and how to organise metropolitan applications'.

Keynote

Identifying a path for the future of DAB+ in France: the regulator's role and the commitment of broadcasters.

Nicolas Curien, Board Member, Conseil Supérieur de l'Audiovisuel



Antoine Baduel
FG Radio

Independent commercial radios

Alain Liberty, President, SIRTI

Jean-Eric Valli, President, Les Indés Radios

Laurent Brochet, Founder, Radio Pitchoun



Nicolas Curien
Conseil Supérieur de l'Audiovisuel

Community radio

Emmanuel Bouterin, President SNRL (National Union of Community Radios) and President, World Association of Community Radio Broadcasters (AMARC)

Interpretation French-English and English-French will be provided for this session.



Alain Liberty
SIRTI



Jean-Eric Valli
Les Indés Radios



Laurent Brochet
Radio Pitchoun



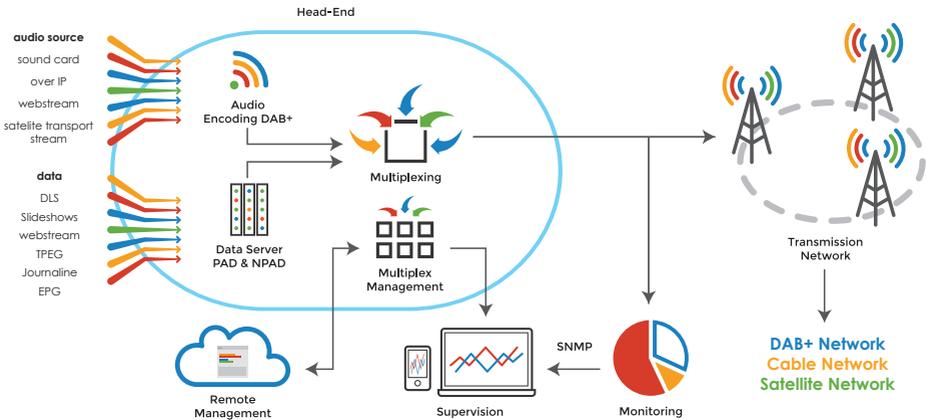
Emmanuel Bouterin
SNRL & AMARC



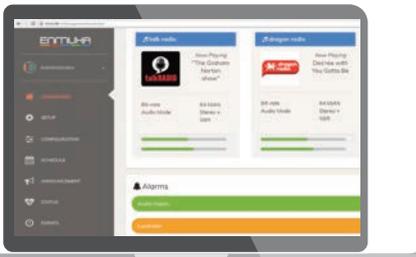
ENMUXA

REDISCOVER A WELL PROVEN SYSTEM

ENMUXA is the most **versatile** broadcasting software for digital radio distribution on the market. Comprised of encoders, multiplexing and system management, ENMUXA is designed to incorporate a wide range of audio and data input options, all adhering to the **latest broadcasting standards**. The software led approach allows complete flexibility in installation including premise-based deployment, **virtualisation** on server and the **cloud**. Utilising over 20 years' experience in worldwide digital broadcasting systems, our highly trained **DAB+ experts** will work closely with you to deliver a cost effective, reliable and easily managed system.



Instant Access via your Web Browser...



ENMUXA features a brand new browser-based user interface built on the industry leading broadcast system currently serving millions of listeners worldwide. The contemporary style makes network management an easy and efficient process. Accessible via tablet and phone, ENMUXA provides everything you need to manage, supervise and control your broadcast ensembles wherever you are.

Tuesday 19:00 - 22:30

NETWORKING DRINKS AND GALA DINNER

L'Hôtel des Arts & Métiers
9 bis, avenue d'Iéna
75116 PARIS

Halfway between the Place de l'Etoile and the Eiffel Tower, L'Hôtel des Arts & Métiers has the charm of the mansions of the late nineteenth century.

The Gala Dinner venue is a short distance from the General Assembly venue, Pullman Paris Tour Eiffel.

Walking: 16 minutes

Metro Paris Métro Line 6: 17 minutes

Bus No. 82: 9 minutes



Networking drinks sponsored by

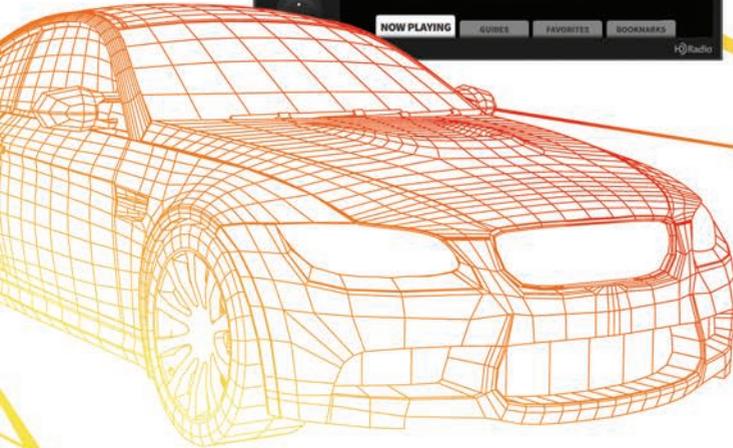
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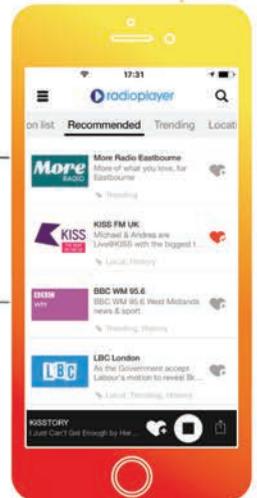
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BROADCAST SOLUTIONS
IN THE VEHICLE AND ON MOBILE



Hybrid Radio Solution
For Automotive



Custom Station
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DIGITAL SWITCHOVER – GETTING THE LISTENER TO FOLLOW

This session gives a report on the impact on listening of Norway's digital switchover from FM to DAB+, and considers the lessons learned from the DSO process. Speakers will share what have been some of the biggest challenges, and explain how the lessons learned from Norway can make digital radio adoption easier in other countries.

Session chair: Helmut Bauer, Media Lawyer, Germany

Norway – lessons learned from the DSO process

Regulator: Line Langnes, Senior Legal Advisor, Norwegian Media Authority

Public broadcaster: Jon Branæs, Acting Radio Director, NRK

Commercial broadcaster: Hans-Petter Danielsen, CTO, P4 Radio Hele Norge AS

Marketing and information: Ole Jørgen Torvmark, CEO, Digital Radio Norway

Automotive sector: Jarle Ruud, Marketing Communications Manager, Digital Radio Norway



Helmut Bauer
Media Lawyer



Line Langnes
Norwegian Media
Authority



Jon Branæs
NRK



Hans-Petter Danielsen
P4 Radio Hele Norge AS



Ole Jørgen Torvmark
Digital Radio Norway



Jarle Ruud
Digital Radio Norway

Panel discussion

Which countries are planning or considering DSO, at what stage are they in that process?

Switzerland: Jürg Bachmann, President, Verband Schweizer Privatradios/Association Suisse des Radios Privées

United Kingdom: Ford Ennals, CEO, Digital Radio UK

Denmark: Rikke Kjølbye, Head of Section, Culture and Media Agency



Jürg Bachmann
Verband Schweizer
Privatradios/Association
Suisse des Radios Privées



Ford Ennals
Digital Radio UK



Rikke Kjølbye
Culture and Media
Agency, Denmark

10:15 - 10:45 COFFEE

Norway DSO caravan, 2017



THE EVOLVING BUSINESS CASE FOR DAB

New developments show how DAB is energising the radio industry while preserving existing radio brands, offering broadcasters the opportunity to grow audiences and revenue, diversify and extend their portfolio, offer data services and give new players the ability to enter the market with more targeted or niche content offerings.

Session chair: Ole Mølgaard, Media Advisor, The Crowd, Denmark

New opportunities on DAB+ with a second national multiplex

Reiner Müller, Technical Director, Bayerische Landeszentrale für neue Medien, Germany

Ole Sloth, Managing Editor, Ekstra Bladet Radio, Denmark



Ole Mølgaard
The Crowd

How UK commercial radio is using DAB/DAB+ to grow share and revenue

Ford Ennals, CEO, Digital Radio UK

A French radio broadcaster's perspective on DAB+

Antoine Baduel, CEO, Radio FG, France



Reiner Müller
Bayerische Landeszentrale
für neue Medien



Antoine Baduel
Radio FG



Ford Ennals
Digital Radio UK



Ole Sloth
Ekstra Bladet Radio

Italian radio's continued expansion with DAB+

Eugenio LaTeana, Head of Research and Development,
RTL 102.5 Hit Radio, Italy
Filippo Solibello, Host, RAI Radio 2, Italy



Eugenio LaTeana
RTL 102.5 Hit Radio

Small scale DAB+ – a complementary solution for community broadcasters

Thomas Gilgen, CEO, Digris AG, Switzerland
René Wehrin, Project Manager, Digitisation and Convergence,
Federal Office of Communications, Switzerland



Thomas Gilgen
Digris AG



René Wehrin
Federal Office of
Communications



Filippo Solibello
RAI Radio 2



Alles von Relevanz.

Need a solution for DAB+ reception in buildings?

Here is the DAB-Repeater from SUMATRONIC.

In car parkings, shopping centers or offices the reception of DAB+ is by no means self-evident. Especially in buildings with thick concrete or metal facades there is often no DAB+ reception. The DAB-Repeater developed by SUMATRONIC solves this problem. Buildings can be retrofitted at low cost so that the reception can be guaranteed in best quality.

Find out more:

www.dab-repeater.com



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SANGEAN

SANGEAN is a high quality radio expert for over 44 years. Having radios as a core competence, SANGEAN has a remarkable wide assortment! There is a radio for every use and every lifestyle. Use them to travel, during your sports, any outside occasion, or keep them inside for a warm welcome home. Each SANGEAN device has great sound quality and excellent reception. The DDR-66 BT is a flagship model with all possible features you would like to have, for example radio via DAB+, FM and Internet, options to play your own music via CD, Spotify or USB and you can use the record function. Use it in your living room and connect other devices to host via Multiroom! The perfectly tuned wooden cabinet will be an enjoyment for your ears.

SANGEAN will design new products in the next years in Europe. It is possible to contact the company via sales@sangean.eu, for all your questions, suggestions and other inquiries.



DAB+ FOR DATA: HYBRID AND CONNECTED

Mobile networks are often overloaded and the consumption of data is skyrocketing. DAB's one to-many transmission of content offers a promising solution for data. In vehicles, DAB+ is already used for traffic and travel information and emergency announcements. Hybrid systems with DAB+ can also be used to provide additional information to drivers.

Session chair: Ronald Haanstra, CEO, MTVL and Vice President, IDAG, The Netherlands

Panellists:

Thomas Kusche, Senior Editor, Westdeutscher Rundfunk/President of TISA, Germany

Gereon Joachim, VP Business Development, Europe, XPERI, Germany

Jean Sbaldi, Programme Director, Broadcast, Continental Automotive, France

Michel Reneric, Vice President, R+, France

Vincent Godec, CEO, Mediamobile, France



Ronald Haanstra
IDAG



Thomas Kusche
TISA / WDR



Jean Sbaldi
Continental Automotive



Michel Reneric
R+



Vincent Godec
Mediamobile



Gereon Joachim
XPERI

12:10 - 13:10 LUNCH

Small-Scale DAB+ Headend

MAGIC DABMUX Go Ensemble Multiplexer

- ▶ Worldwide smallest DSP-based Ensemble Multiplexer
- ▶ Particularly cost-effective solution for your program distribution via DAB+
- ▶ Easy configuration even without DAB expert knowledge
- ▶ Up to 20 Audio Encoders can be connected
- ▶ Full 19" version available
- ▶ Secure Streaming via AVTMUX protocol

NEW



MAGIC AE1 DAB+ Go Audio Encoder

- ▶ Audio via LAN to Ensemble Multiplexer
- ▶ Compatible with FhG MuxEnc, EDI, ODR
- ▶ Secure Streaming via AVTMUX protocol



MAGIC AE4 DAB/DAB+ Audio Encoder

NEW

- ▶ Monitoring Decoder
- ▶ Quad encoder



THE CONSUMER'S JOURNEY ON DAB

This session looks at how the consumer is at the centre of digital radio, from developing the listener's awareness and buying a DAB radio, through to finding new stations at home and in the car.

Session chair: Ole Jørgen Torvmark, CEO, Digital Radio Norway

Commercial Radio Australia's confidence in DAB+ for the listener

Joan Warner, CEO, Commercial Radio Australia

The auto manufacturer and delivering radio to their customers

Robbert Van Den Heuvel, Communication Manager, Fiat, Alfa Romeo, Lancia & Jeep, FCA Netherlands BV

Guidelines for the in-car user experience and the UK's DAB car adaptor pilot study

Laurence Harrison, Market Development Director, Digital Radio UK



Ole Jørgen Torvmark,
Digital Radio Norway



Robbert Van Den Heuvel
Fiat Chrysler Automobiles



Laurence Harrison
Digital Radio UK



Joan Warner
Commercial Radio Australia

The Belgian national automotive association: getting the message to drivers

Joost Kaesemans, Communication Director, FEBIAC, Belgium

Audio in transition - digital radio sales and the impact of new trends including multi-room and voice activation

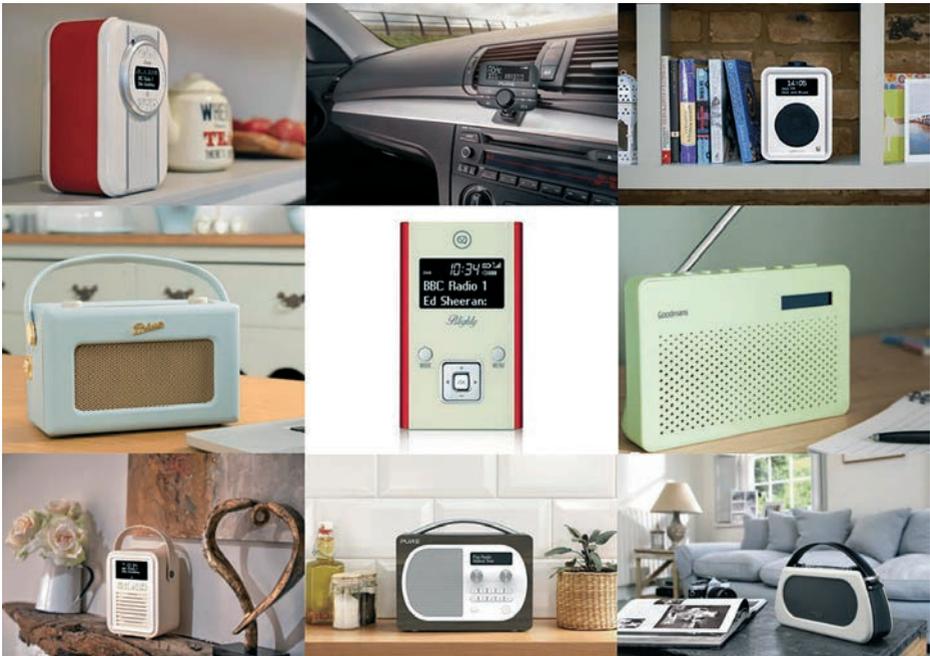
Martina Hürbinger, Marketing Manager and Global Audio Lead, GfK POS, Germany



Joost Kaesemans
FEBIAC



Martina Hürbinger
GfK POS



A LOOK FURTHER INTO THE FUTURE WITH DAB+

The radio market is evolving and more importantly the future of radio in the car is changing. What do the experts from different markets, and from different parts of the industry see as the future for DAB+? How can digital radio innovate to stay prominent in the car alongside different competing platforms? This session looks at some of the future developments that can be expected in different parts of the DAB+ world.

Session chair: Gunnar Garfors, Chairman, IDAG / Radio Distribution, NRK



Gunnar Garfors
IDAG / Radio
Distribution, NRK

Future and emerging DAB+ markets

Joan Warner, CEO, Commercial Radio Australia in conversation with:

- Dr Colonel Sukonrat Natee, Chairman Broadcasting Committee, The National Broadcasting & Telecommunications Commission (NBTC) Thailand
- Dr Frederik Ndolu, Member of Executive Board, Radio Republik Indonesia (RRI)



Joan Warner
Commercial Radio
Australia

The future of broadcast technologies

Marcello Lombardo, Project Manager, EBU
Ben Poor, Project Manager, Digital Radio, EBU



**Dr Colonel Sukonrat
Natee**
NBTC

Working with the car industry on the future of radio

Nick Piggott, Project Director, RadioDNS

Closing remarks: Patrick Hannon, President, WorldDAB

15:00 NETWORKING DRINKS



Marcello Lombardo
EBU



Ben Poor
EBU



Nick Piggott
RadioDNS



Dr Frederik Ndolu
RRI

DAB-XPlorer – DABRF

DAB test receiver with integrated modulator

- ▶ Test receiver and modulator rolled into one
- ▶ RF recording with 1.6 MHz bandwidth
- ▶ Can be combined with software components of the DAB-XPlorer family
- ▶ COFDM modulator for simultaneous generation of up to four DAB blocks
- ▶ GPS receiver integrated
- ▶ Gigabit Ethernet interface



MAGIC TBR – DAB Tunnel Break-in Rebroadcast System

- ▶ Receiver/Demodulator
- ▶ Modulator output
- ▶ Replacement of all subchannels in case of emergencies
- ▶ DLS, Slideshow and prepared announcements
- ▶ Optional break-in via VoIP





- **DAB**
- **DAB+**
- **DMB**



/// **DAB BI2.0**

DAB Tunnel Break In Product
for up to 4 ensembles

/// **FlexiDAB**

Multi Multiplexing and
Multi-Encoding Platform

/// **EasySPY**

RF and EDI/ETI Monitoring Platform
with SFN capability

/// **EasyDAB**

Test Multiplexing Platform
with multiple ETI/EDI or RF output
(amplifiers and attenuators on demand)

/// **EasyCAPT**

Professional Receivers
on USB or MiniPC platform
with complete ETI and IQ Recording

/// **EasyWAY**

EDI/ETI Gateway



Common Features:

HTTP Interface, SNMP, SFN Capability, NTP
Server, EDI/ETI output/Input, RF output/Input

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With over 15 years of experience in auto electronics, **Nextbase** is one of the UK's leading manufacturers in aftermarket electronics. Building on the tremendous success in dash cams, the new range of DAB adapters are enabling more customers than ever to enjoy DAB radio on the move. www.nextbase.co.uk

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Paneda is divided into three business segments. 150 tunnels in Norway are equipped with Paneda's Break In System and 165 DVBT2 sites located all over Norway are owned by Paneda. Many local and public European broadcasters are using Paneda DAB Head-End systems with a complete range of products including multiplexing, audio encoders, data insertion and content management. www.paneda.no

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Xperi and its brands – DTS, FotoNation, HD Radio, Invenzas and Tessera – are dedicated to creating innovative technology solutions that enable extraordinary experiences for people around the world. Xperi's solutions are licensed by leading global partners and have shipped in billions of products. www.xperi.com

Programme Brochure Sponsor



AutoDAB is Europe's largest manufacturer/designer of retrofit DAB black box solutions, supplying many of the major European vehicle manufacturers. AutoDAB offers a full range of aftermarket universal add-on solutions as well as fully integrated hidden away adapters which work off the vehicle's steering wheel controls or handy RF remote. www.autodab.com

Delegate Bag and Lanyard Sponsor



Sahaga is the owner of the POP brand, representing the widest range of DAB+ radios in Norway. We offer in-car solutions, personal protection equipment with DAB+ and radios for in the home and on the move. Sahaga is looking for partners all over Europe for launches in 2018. www.sahaga.com

Translation Sponsor



Les Médias Francophones Publics is a forum for public French-speaking broadcasters, combining collaboration, production and monitoring activities between the organisation's members: Radio France, France Télévisions, France Médias Monde, Radio-Télévision Belge de la Communauté Française, Radio Télévision Suisse, TV5Monde, Radio-Canada, TV5 Québec Canada, Télé-Québec and Groupe Média TFO. www.lesmediasfrancophones.org

Media Partner



La Lettre Pro de la Radio is published by the organiser of the European Radio Show, which takes place annually at the end of January. This monthly magazine features 20 pages devoted to the radio industry, offering an exclusive overview of news linked to the radio broadcast industry in France and abroad. Linked to the magazine is lalettre.pro, a daily news website with a newsletter sent to more than 10,000 B2B contacts. www.lalettre.pro



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An AM/FM/DAB antenna with a short 23 cm mast and shallow mounting depth. Can be used to replace an existing whip antenna. This active antenna gives outstanding reception, delivering a clear crisp sound.



A high performance sleek active AM/FM/DAB sharkfin antenna with fully optimised digital radio reception. A series of separate seal adapters are available for use with new Mercedes and VW/Audi vehicles.
*NEW version 3785.01 has just been released with added GPS receiver.



Our classic "matchbox" 15 dB DAB gain amplifier/splitter for use with passive antenna. This unit needs a separate 12 volt supply, the output side of the amplifier will supply this voltage to the cable centre core.



Active radio splitter designed for use with existing rod antenna. A simple and cost effective splitter for legacy vehicles upgrading to digital radio. For simple installation the splitter is available with a range of connectors.

Headquarters:



In der Buttergrube 3-7
99428 Weimar Germany



info@atbb.eu



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+49 3643 4771-100



www.atbb.eu



UK:
+44 798 335 39 27



Exhibitors



ALDENA is one of the world's leading antenna manufacturers in the broadcasting industry. The company is involved in different FM/DAB/DTV network roll-outs all over the world thanks to an increasingly vast array of professional, high-quality "on-field" services. Operators and authorities worldwide are using EMLAB software for antenna design/controlling. www.aldena.it



German innovative design and high-quality production are the hallmarks of **Antennensysteme** antennas and "WiCAR" routers. Antennentechnik products perform according to the highest quality requirements and standards from the automotive industry, public authorities and other industrial customers. We are a well-established and highly respected company within the antenna industry, famous for top-quality DAB antennas and splitters. www.antennensysteme.de



AutoDAB is Europe's largest manufacturer/designer of retrofit DAB black box solutions, supplying many of the major European vehicle manufacturers. AutoDAB offers a full range of aftermarket universal add-on solutions as well as fully integrated hidden away adapters which work off the vehicle's steering wheel controls or handy RF remote. www.autodab.com



Since 1996, **AVT** has been the leading manufacturer of DAB system components such as audio encoders, redundancy switches, ETI/EDI converters and monitoring decoders. Together with the DAB specialist **IB-Mulka** the tunnel break-in system MAGIC-TBR and the DABRF test receiver with integrated modulator were developed as the first cooperation between both German companies. www.avt-nbg.de www.ib-mulka.de



Bmt is the competence center for the realization of projects in the scope of Digital Broadcast. For years the bmt has been active in the specification and implementation of TPEG (Transport Protocol Expert Group) services. This includes both consulting services and products like TPEG ON AIR, TPEG Analyser, TPEG Editor and TPEG Library. www.VVEcanTPEG.com



Dension is a black belt specialist in DAB receiver integration, DAB product development and production. We offer our solutions for the automotive aftermarket businesses, but also to all participants in the digital radio community as we are capable of developing and producing OEM, semi-OEM and white label products for specific needs. www.dension.com



DIGIDIA can provide the complete end-to-end DAB transmission and receiving chain for broadcast and test applications. Products include multiplexers and content servers (on IPC or virtual platforms), EDI/ETI IP gateways, monitoring equipment (RF and EDI/ETI), professional receivers and tunnel break-in products. DIGIDIA leads the way with straightforward design that is innovative, compact and flexible. www.digidia.fr



Factum Radioscape is the market leader for digital radio broadcast systems worldwide, deploying thousands of services on over 180 ensembles to millions of listeners. Our experience and proven expertise allow us to tailor solutions to meet our customers' needs, as well as providing friendly and efficient after-sales support. www.factumradioscape.com



GatesAir provides the industry's most energy-efficient radio (including DAB) and TV transmitters, supporting all standards with low total cost of ownership, helping broadcasters to optimise their services. With nearly 100 years of experience in broadcast equipment manufacturing, servicing and support, GatesAir stands ready to provide guidance to assist its customers. www.gatesair.com



Innovationszentrum für Telekommunikationstechnik GmbH IZT provides equipment for signal generation, receivers for signal monitoring and recording, broadcast systems and channel simulators. The portfolio includes solutions for DAB head-ends. IZT's signal generators and RF receivers are powerful tools for the analysis of broadcast signals and for the development of radio receivers. www.izt-labs.de



With over 15 years of experience in auto electronics, **Nextbase** is one of the UK's leading manufacturers in aftermarket electronics. Building on the tremendous success in dash cams, the new range of DAB adapters are enabling more customers than ever to enjoy DAB radio on the move. www.nextbase.co.uk



Paneda is divided into three business segments. 150 tunnels in Norway are equipped with Paneda's Break In System and 165 DVBT2 sites located all over Norway are owned by Paneda. Many local and public European broadcasters are using Paneda DAB Head-End systems with a complete range of products including multiplexing, audio encoders, data insertion and content management. www.paneda.no



Plisch is a leading manufacturer of DTV and DAB transmitter systems, founded in 1955 and located in Viernheim, Germany. We deliver innovative products and services to the broadcasting equipment industry – using our scientific and technological expertise – to give a clear technical and economic advantage to our customers. www.plisch.de



Sahaga is the owner of the POP brand, representing the widest range of DAB+ radios in Norway. We offer in-car solutions, personal protection equipment with DAB+ and radios for in the home and on the move. Sahaga is looking for partners all over Europe for launches in 2018. www.sahaga.com

PURE

As the pioneers of digital radio and the first to fully embrace the technology in 1999, **Pure** has become the world's leading digital radio manufacturer. Passionate not just about radio, but quality audio and stylish design, our award-winning products for the home and the car are digital tick approved with an industry-leading three years' warranty. www.pure.com



In 2017 **Roberts Radio Limited**, UK market leader in portable radios, celebrates 85 years of business. From the iconic Revival retro radio through to cutting-edge wireless speakers with multi-room capabilities, and with multiple industry endorsements and two Royal Warrants, Roberts products are proven to stand the test of time and are truly loved by listeners the world over. www.robertsradio.com



For more than 80 years, **Rohde & Schwarz** has stood for quality, precision and innovation in all fields of wireless communications. Rohde & Schwarz is among the technology and market leaders in all of its business fields, including wireless communications, EMC and TV test and measurement. www.rohde-schwarz.com

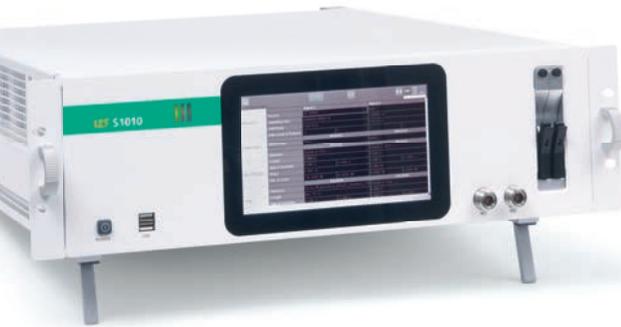


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Xperi and its brands – DTS, FotoNation, HD Radio, Invensas and Tessera – are dedicated to creating innovative technology solutions that enable extraordinary experiences for people around the world. Xperi's solutions are licensed by leading global partners and have shipped in billions of products. www.xperi.com

Solutions for DAB Testing and Head-end installations



RF Recording and Signal Generation

- High-performance RF receivers
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- Multi-channel signal generation
- Powerful impairments



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- Reliable and efficient operation of DAB head-ends
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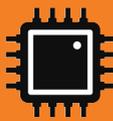
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