

# WorldDAB General Assembly 2016

New content, new markets

9 – 10 November  
 Vienna, Austria

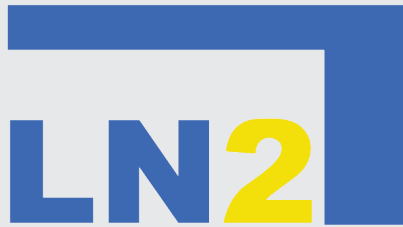
#worlddabga

Major Sponsor



Gala Dinner Sponsors





# SUPERIOR DAB/DAB+ RECEIVER

## Improved Coverage

LN2 receiver modules improve coverage by up to several dBs

## Low Cost & Fast Time to Market

LN2 provides ASIC IP for DAB/DAB+ baseband receiver chips

FPGA/ASIC IP

LN2's Other Products Include:

- Advanced Iterative Receiver for HD Radio
- Best in Art BCH and RS Decoders
- Advance Read Channel Decoder for Magneto-Optical Storage
- Capacity Achieving LDPC Codes

LN2  
1765 Grensboro Station Place  
Suite 900  
McLean, VA 22102, USA  
+1 703 918 4859

Please visit us at:

[LN2dB.com](http://LN2dB.com)



## Welcome to the WorldDAB General Assembly 2016

### Dear colleagues,

Welcome to the WorldDAB General Assembly 2016 in the beautiful city of Vienna.

This year's event comes at an exciting time for the radio industry and particularly for DAB.

We're on the verge of significant milestones and around the world, digital radio is opening up new markets and audiences. That's why we have chosen the theme of "New content, new markets" for this year's event, with speakers across both days discussing the ways in which digital radio has made a significant difference to their programming, audiences and business.

Digital radio roll-outs continue to accelerate and we're on the verge of making history with the world's first digital switchover, starting in Norway on 11 January next year. Switzerland is next in line, with the process due to start in 2020. These two countries are shining a light for other markets and showing what can be achieved with political will and industry collaboration.

Political support for digital radio has been steadily gathering momentum as WorldDAB continues its discussions at the European level.

Senior politicians and broadcasters in Germany are promoting the case that radio receivers which can display a station's name be required to have both FM and digital capability from 2019 onwards. This idea is being argued at both a national and European level.

Germany is not alone in considering the importance of digital capability in receivers. The Dutch Government has made a similar submission to the European Commission. In Italy, the regulator AGCOM is arguing for its introduction. In France, there already exists a law which requires the phased introduction of digital capability once the coverage of digital terrestrial radio exceeds 20% of the population, estimated to be achieved in the second half of 2017.

Globally, over 50 million DAB receivers have been sold, and we've seen DAB digital radios for as little as €12. At the other end of the scale, slideshow and hybrid radio applications are delivering extra content to listeners and enabling new advertising models.

Excellent progress has also been made in automotive. In the UK, 86% of new cars come with DAB as standard with similar figures in Norway and Switzerland. We're seeing good progress in Australia and our objective is to replicate this performance in other markets.

To close I would like to thank Bernie and all the team in the Project Office for their efforts throughout the year and of course for organising this year's General Assembly. We have a strong sense of momentum behind us – but it's only through our collective efforts that we will continue to make DAB digital radio a true success.

Welcome to Vienna!

**Best Regards,**

**Patrick Hannon**  
President, WorldDAB

# PROGRAMME AT A GLANCE

## DAY 1: WEDNESDAY 9 NOVEMBER 2016

12:30	13:30	WorldDAB General Assembly 2016 – Registration and networking lunch
13:30	13:35	Opening welcome – WorldDAB President
13:35	13:50	European Broadcasting Union (EBU)
13:50	14:05	Wireless Group's investment in digital radio
14:05	14:20	DAB+ in smartphones – one down, the rest to go
14:20	14:35	DAB in the bigger picture
14:35	14:45	Industry presentation
14:45	15:10	COFFEE
<b>General Assembly meeting of WorldDAB (Member Only Session)</b>		
15:10	15:20	Report from the WorldDAB Steering Board
15:20	15:30	Report from the WorldDAB Technical Committee
15:30	15:40	Report from the WorldDAB Asia Pacific Committee
15:40	15:50	Report from the WorldDAB Regulatory and Spectrum Committee
15:50	16:00	Report from the WorldDAB Finance Committee
16:00	16:10	Presentation of WorldDAB Award for Outstanding Service
17:00	18:30	Optional tour: ORF Funkhaus, Vienna
19:00	22:30	WorldDAB Networking drinks and gala dinner

## DAY 2: THURSDAY 10 NOVEMBER 2016

08:30	09:00	Registration
09:00	09:15	Opening address – WorldDAB President
<b>SESSION 1 – Keynote speeches</b>		
09:15	10:15	Digital radio in Germany
		Digital radio in Norway
		Digital radio in the United Kingdom
		Digital radio in France
		Digital radio in Europe
10:15	10:30	COFFEE
<b>SESSION 2 – Developed DAB markets – best cases</b>		
10:30	11:45	UK – how to bring all players in the market together
		Denmark – digital radio driving growth in the radio market
		Italy – a diverse market
		Netherlands – best case marketing
		Switzerland – how the DSO plan was devised
		Panel discussion: Germany – collaboration across the Länder
<b>SESSION 3 – Emerging markets – applying lessons learned</b>		
11:45	12:45	Austria
		Belgium
		Czech Republic
		Hungary
		Slovakia
		Slovenia
12:45	13:45	LUNCH
<b>SESSION 4 – Broadcasters – new content and new audiences</b>		
13:45	14:55	United Kingdom – Absolute Radio
		Norway – NRK
		The Netherlands – Radio NewCo
		Australia – Commercial Radio Australia
		United Kingdom – small scale DAB
		Panel discussion
14:55	15:10	COFFEE
<b>SESSION 5 – Next steps for receivers (consumer and automotive)</b>		
15:10	16:30	Advanced DAB/DAB+ receivers – performance and service impacts
		Domestic DAB receiver sales – GfK
		Automotive DAB receiver sales – JATO
		WorldDAB Automotive User Experience Group
		Panel discussion: DAB in the connected and autonomous vehicle
		Closing remarks – WorldDAB President

Kapsch Group

## ***Innovations light up our future.***

Since its founding in 1892, Kapsch has been a technological trendsetter with intelligent solutions in the fields of mobility and communication. The Kapsch Group invests over 10 percent of its revenues annually in application-oriented research and development. This includes collaboration with 13 research and development centers located around the world as well as numerous cooperation projects with universities both at home and abroad. More innovations:

>>> [www.kapsch.net](http://www.kapsch.net)

**kapsch** >>>  
challenging limits

# Agenda

## DAY 1: WEDNESDAY 9 NOVEMBER 2016

12:30	13:30	<b>Registration and networking lunch</b>
13:30	13:35	<b>Opening welcome</b> Patrick Hannon, President, WorldDAB & VP Corporate Development, Frontier Silicon
13:35	13:50	<b>Creating a digital future</b> Who are the gatekeepers? The marketplace into which digital radio is being introduced is changing, and arguably making DAB more vital than ever. Commercially orientated services will naturally direct consumers towards business partners and favour information which complies with their algorithms, requiring sign-up and possibly subscription. New devices are accentuating these trends. By contrast, radio relies on the principle of universal availability and being free at the point of delivery, supporting plurality of views and societal cohesion. <i>Graham Dixon, Head of Radio, European Broadcasting Union</i>
13:50	14:05	<b>Wireless Group's investment in digital radio</b> Wireless Group owns a number of national and local radio stations in the UK and Ireland, including talkSPORT, runs a number of DAB multiplexes throughout the UK, and is the largest local radio operator in Ireland. In September 2016 Wireless Group was acquired by News Corp, who cited the significant opportunities to grow reach, share talent, cross-promote brands and offer cross-platform opportunities to advertisers and partners. <i>Jimmy Buckland, Director of Strategy, Wireless Group GB</i>
14:05	14:20	<b>DAB+ in smartphones – one down, the rest to go</b> IDAG shares lessons learned in the process of negotiating with LG for the world's first DAB digital radio enabled smartphone, and explains how the industry can convince other handset manufacturers to do the same. They'll explain OMRI (Open Mobile Radio Interface) and showcase various DAB+ apps that are now available to broadcasters. <i>Gunnar Garfors, President, IDAG, Advisor on radio distribution at NRK</i>
14:20	14:35	<b>DAB in the bigger picture</b> Digital radio has come a long way but so has the world of technology. TV, mobile, the internet, social media, radio and society are evolving in ways that no one thought possible when DAB digital radio was developed in the Eureka 147 project. Where does DAB fit in this changing world and what could the future hold for digital radio? An inspirational overview from a member of WorldDAB who has been part of digital radio from the start and who, with his many hats, has a broad overview of radio, TV and other technology developments. <i>Philip Laven, Treasurer, WorldDAB</i>
14:35	14:45	<b>Highest efficiency, smallest footprint – complete solutions for DAB broadcasting</b> Today's network operators are aiming to decrease their total cost of ownership to remain competitive in their markets. The design of the current generation of DAB transmitters significantly contributes to reduce the lifetime costs of a network of broadcasting transmitters. This presentation gives an insight into how this is achieved. <i>Peter Frank, Director Broadcast and Media, Rohde &amp; Schwarz</i>
14:45	15:10	COFFEE
<b>General Assembly meeting of WorldDAB (Member Only Session)</b>		
15:10	15:20	<b>Report from the WorldDAB Steering Board</b> Patrick Hannon, President, WorldDAB & VP Corporate Development, Frontier Silicon
15:20	15:30	<b>Report from the WorldDAB Technical Committee</b> Lindsay Cornell, WorldDAB Technical Committee Chair and Principal Systems Architect, BBC Future Media
15:30	15:40	<b>Report from the WorldDAB Asia Pacific Committee</b> Joan Warner, WorldDAB Asia Pacific Committee Chair and CEO, Commercial Radio Australia
15:40	15:50	<b>Report from the WorldDAB Regulatory and Spectrum Committee</b> Hanns Wolter, WorldDAB Regulatory and Spectrum Committee Chair and Technical Director, Club DAB Italia
15:50	16:00	<b>Report from the WorldDAB Finance Committee</b> Philip Laven, WorldDAB Treasurer
16:00	16:10	<b>Presentation of WorldDAB Award for Outstanding Service</b>
17:00	18:30	<b>Optional tour: ORF Funkhaus, Vienna</b>
19:00	22:30	<b>WorldDAB networking drinks and gala dinner</b> Dachfoyer, Hofburg, Heldenplatz, 1010 Vienna

## Optional tour: ORF Funkhaus (for delegates with pre-reservation)



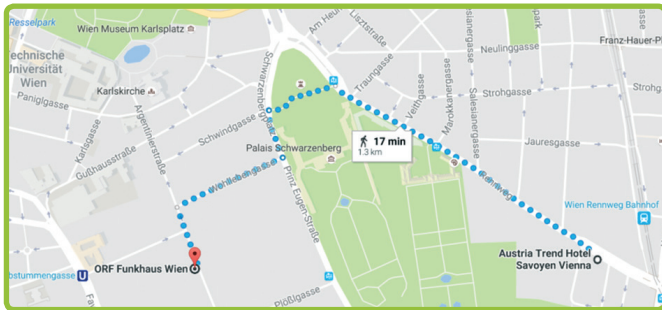
**ORF Funkhaus Wien, Argentinierstraße 30A,  
1040 Vienna, Austria**

The tour of the ORF Funkhaus is an opportunity to take a look behind the scenes and find out more about the unique history and architecture of the Funkhaus. Three radio stations (Ö1, Radio Wien, FM4), one TV studio (Wien heute), the Radio-Newscenter, the ORF Vienna Radio Symphony Orchestra and the ORF RadioKulturhaus reside inside the historic Funkhaus building.

**Wednesday 9 November 2016**

**Tour start time:** 17:15 – 17:30

**Tour length:** 1 hour



Delegates are invited to make their own way to ORF Funkhaus. ORF Funkhaus is a 17-minute walk (1.3 km) from the Austria Trend Hotel Savoyen Vienna.

A bus will depart ORF Funkhaus at 18:45, taking tour participants to the gala dinner. For those who prefer to view Vienna on foot, the gala dinner venue is a 22-minute walk (1.8 km) from ORF Funkhaus.

## Networking drinks and gala dinner

**Dachfoyer, Hofburg,  
Heldenplatz, 1010 Vienna**

Hofburg Palace is the former imperial palace in the centre of Vienna and part of the palace forms the official residence and workplace of the President of Austria.

Dinner will be held in the rooftop Dachfoyer, which provides views of the Michalerkuppel and Vienna's city centre.

**Networking drinks:** 19:00 – 19:30

**Dinner:** 19:30 – 22:30

**Nearest underground stations:**  
Herrengasse (3 minutes) and  
Stephansplatz (6 minutes)

Buses going back to the Austria Trend Hotel Savoyen will depart Hofburg at 22:15 and 22:30.



## DAY 2: THURSDAY 10 NOVEMBER 2016

08:30 09:00

Registration

09:00 09:15

**Opening address:** DAB success factors – international perspectives  
Patrick Hannon, President, WorldDAB & VP Corporate Development, Frontier Silicon

09:15 10:15

### SESSION 1 – Keynote speeches

DAB has established itself as the core future platform for radio across Europe and 56% of European citizens are now able to receive DAB services. With Norway soon to make history as the first country to switch off FM and go fully digital with DAB, and other markets considering potential switchover scenarios, this session looks at the progress of DAB across Europe and the role that the European Commission can play with the Digital Single Market Strategy.

#### Digital radio in Germany

Heike Raab, Plenipotentiary for Federal and European Affairs, for Media and Digital Affairs of the Land of Rhineland-Palatinate

#### Digital radio in Norway

Øyvind Christensen, Deputy Director General, Media Department, Ministry of Culture

#### Digital radio in the United Kingdom

Ian O'Neill, OBE, Head of Radio; Head of Television, Department for Culture, Media & Sport (DCMS)

#### Digital radio in France

Patrice Gélinet, Board Member of the Council, Conseil supérieur de l'audiovisuel (CSA)

#### Digital radio in Europe

Andreas Geiss, Head of Unit – Radio Spectrum Policy, DG CONNECT, European Commission

10:15 10:30

COFFEE

10:30 11:45

### SESSION 2 – Developed DAB markets – best cases

DAB development is now in three phases across Europe: mature markets, developing markets and markets which are pre-launch or in the planning phase. During each stage of DAB roll-out there are ideas, innovations and best practices which can be shared, providing valuable lessons learned to help new DAB market roll-outs.

**Moderator:** Joan Warner, CEO, Commercial Radio Australia

#### UK – how to bring all players in the market together

Digital Radio UK's work has been invaluable to digital radio development not only in the UK but also in other countries emulating the success of the UK. This session looks at how DRUK continues to bring together stakeholders in a diverse and mature market.

Ford Ennals, CEO, Digital Radio UK

#### Denmark – digital radio driving growth in the radio market

In Denmark the consensus is now that FM shutdown is inevitable. Denmark has issued a clear roadmap for digital radio, with a transition to DAB+ by 1 October 2017 and a decision on DSO when 50% of listening is digital.

Lars Kierkegaard, Head of Strategy and Business Development, Teracom Denmark

#### Italy – a diverse market

The Italian radio market is diverse, with each region developing in a way which suits the local radio market. The Rundfunkanstalt Südtirol (RAS) is a public broadcasting service with over 30 Italian, German, Austrian and Romansh services on air.

Georg Plattner, Director, RAS Rundfunkanstalt Südtirol

#### Netherlands – best case marketing

This presentation looks at how the Netherlands is addressing its own unique issues and what their future plans are to ensure the continued success of digital radio roll-out.

Jacqueline Bierhorst, Project Director, Digital Radio Netherlands

#### Switzerland – how the DSO plan was devised

Switzerland has led the way in the roll-out of DAB and has shown how to make a success of switching from DAB to DAB+. Now bringing together a group of players through DigiMig, this session explores how Switzerland are planning DSO.

Thomas Saner, Senior Advisor, SRG SSR



**Panel discussion: Germany – collaboration across the Länder**

With political commitment growing at both federal and state level, broadcaster offerings are getting stronger and listening figures are on the increase. This panel looks at how the German Länder are collaborating to move forward with digital radio including the possibility that DAB will be required in all receivers.

**Panel moderator:** Helmut Bauer, Lawyer, Germany  
 Martin Wagner, Director of Radio Department, Bayerischer Rundfunk (BR)  
 Siegfried Schneider, President, Landesmedienanstalten (DLM)  
 Willi Schreiner, CEO, Digital Radio Deutschland GmbH

11:45 12:45

**SESSION 3 – Emerging markets – applying lessons learned**

The launch of DAB+ in Germany in 2011 was the catalyst for further expansion in the Netherlands and Italy. Core DAB markets are now established, and lessons learned are now being applied in emerging DAB markets. In this session we look at some of these third wave emerging markets.

**Moderator:** Jacqueline Bierhorst, Project Director, Digital Radio Netherlands

**Austria**

Gernot Fischer, Managing Director, Digital Radio Austria

**Belgium**

Nicolas Bresou, Digital Radio Manager, RTBF  
 Dominique Lievyns, Chief Sales and Marketing Officer, Norkring Belgium

**Czech Republic**

Karel Zýka, Technical Director, Head of DAB Switchover, Czech Radio

**Hungary**

Maria Kissné-Akli, Head of Frequency Planning and Coordination Unit, National Media and Infocommunications Authority, Hungary

**Slovakia**

Viliam Podhorský, Director, Electronic Communications Department, Ministry of Transport, Construction and Regional Development (MDVRR SR), Slovakia

**Slovenia**

Bojan Ramšak, Head of R&D, Transmitter and Communications Unit, RTV Slovenia

12:45 13:45

LUNCH

13:45 14:55

**SESSION 4 – Broadcasters – new content and new audiences**

A key benefit of DAB over FM is the space to create innovative new content, which has been highlighted by both broadcasters and the automotive industry as something which “sells” digital radio to listeners. This session presents success stories with regard to content creation and innovation from DAB markets around the world from both commercial and public broadcasters.

**Moderator:** Ole Mølgaard, Digital Radio Expert, Denmark

**United Kingdom – Absolute Radio**

Absolute Radio continues to be a leading brand in the digital radio arena and has been cited on many occasions for its work on developing new content, which appeals to both its core audience, and enables it to increase its reach to new audiences.

Paul Sylvester, Director of Content, Absolute Radio

**Norway – NRK**

Early in 2017 Norway will make history by becoming the first country to start shutdown of FM radio. The switchover process starts in January 2017 and takes place over a 12-month period, progressing region by region. How is the public broadcaster creating new content to attract new audiences at this time of change?

Marius Lillelien, Head of Radio, NRK

**The Netherlands – Radio NewCo**

Radio NewCo is the newly created radio group comprising four of the Netherlands’ leading radio networks: Radio 538, Radio 10, Sky Radio and Radio Veronica. The new group has committed to transition from analogue radio to digital audio entertainment in the next seven years. Where does DAB+ fit into their strategy?

Christo Grozev, Supervisory Director, Radio NewCo

### Australia – Commercial Radio Australia

Australia's commercial stations continue to use DAB+ as a test bed for some of the most innovative digital content in the radio market today. Australian broadcasters are taking full advantage of the technology.

Joan Warner, WorldDAB Asia Pacific Committee Chair and CEO, Commercial Radio Australia

### United Kingdom – small scale DAB

Angel Radio is a community station in the UK that recently expanded its coverage from one to four cities, thanks to the ongoing small scale DAB trials. The UK Government has announced it will look at introducing legislation for the regulation of small scale DAB multiplex services, following the successful Ofcom trials, offering local broadcasters the opportunity to upgrade to digital at an affordable cost.

Ash Elford, Digital Development Manager and Trustee, Angel Radio, United Kingdom

### Panel discussion

14:55 15:10

COFFEE

15:10 16:30

## Session 5 – Next steps for receivers (consumer and automotive)

**Moderator:** Lindsay Cornell, WorldDAB Technical Committee Chair and Principal Systems Architect, BBC Future Media

### Advanced DAB/DAB+ receivers – performance and service impacts

LN2 will review the performance gains achievable by advanced DAB/DAB+ receivers, looking particularly at how to achieve improvements in receiver sensitivity, coverage and listener satisfaction, while at the same time achieving reduced broadcast infrastructure expenses and optionally increased throughput.

Branimir Vojcic, CEO and CTO, LN2

### Domestic DAB receiver sales – GfK

An update on the latest GfK sales figures for receiver sales of DAB/DAB+. GfK will also give an update on the status of the CE market in Europe post-Brexit and a view on where the market is heading.

Martina Hürbinger, Manager, GfK

### Automotive DAB receiver sales – JATO

An update on the latest figures for cars with digital radio as standard and for the automotive brands with DAB+ as an option across key markets. A further look at the current trends for infotainment, entertainment and receivers in the automotive sector.

Andreas Kral, Country Manager Austria, JATO

### WorldDAB Automotive User Experience Group

The WorldDAB Automotive User Experience Group brings together broadcasters and the automotive industry to look at how to improve the user interface for in-car digital radio.

Laurence Harrison, Technology and Market Development Director, Digital Radio UK

### Panel discussion: DAB in the connected and autonomous vehicle

The connected car is making automotive manufacturers think more about exactly what their car will connect to in terms of entertainment. Radio is now under threat from the new connected vehicle, and possibly more so in the autonomous car. This panel will discuss its views on DAB+ in the connected car today and the SWOT for digital radio in the autonomous vehicle of tomorrow.

**Moderator:** Roger Lanctot, Strategy Analytics

Marco Carbone, Director, Radio Products, STMicroelectronics

Andreas Goršak, Senior Engineer, Broadcast Development, JVCKENWOOD

Mark Friend, Controller, BBC Radio & Music Multiplatform

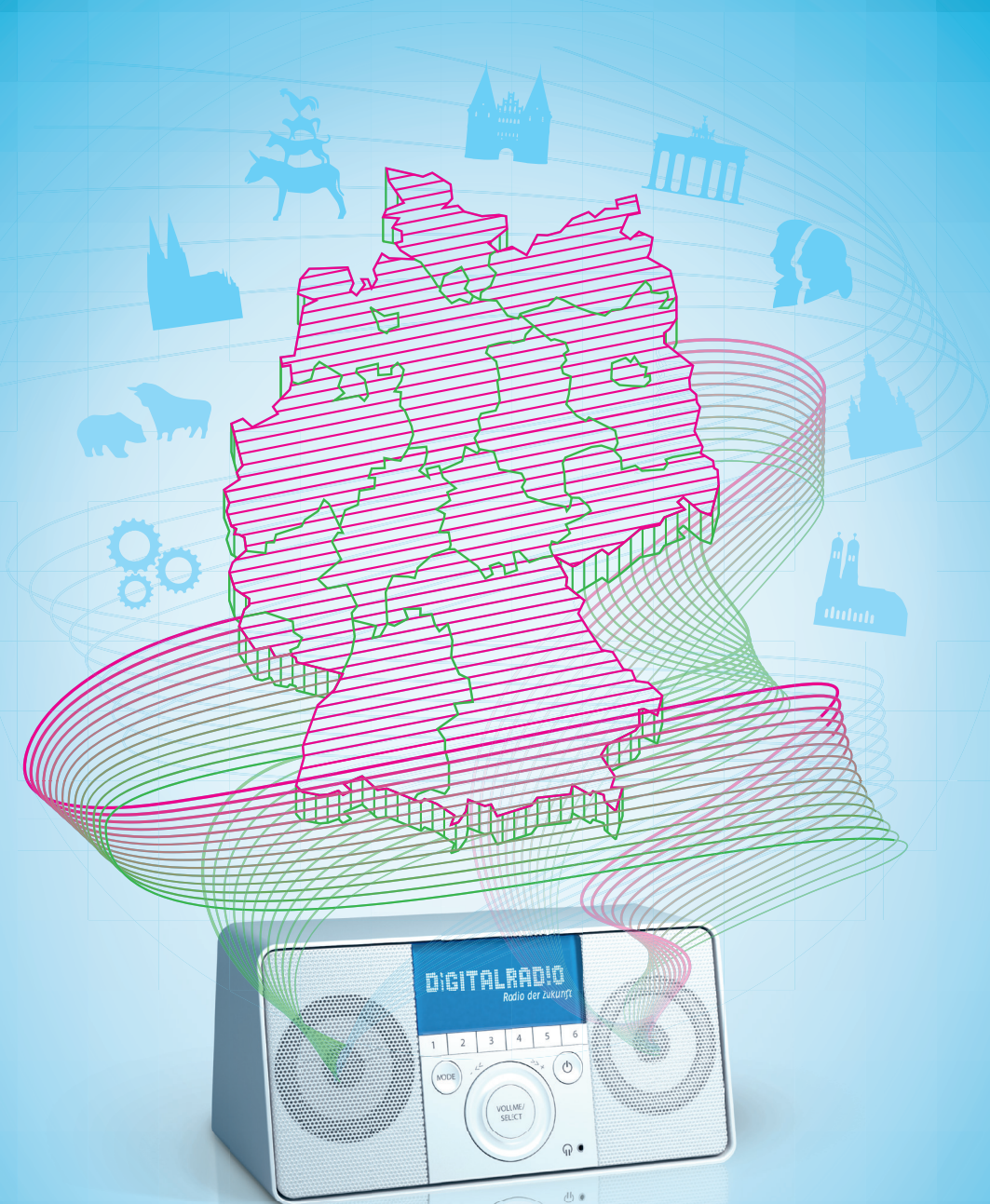
Nick Piggott, Project Director, RadioDNS

Ron Schifferers, Senior Director Programme Management, BL Car Entertainment, NXP Semiconductors

### Closing remarks

Patrick Hannon, President, WorldDAB and Vice President Corporate Development, Frontier Silicon

# BUNDESWEIT GUTES PROGRAMM MIT DEUTSCHLANDRADIO.



Erleben Sie unsere Programme in neuer Qualität im Digitalradio.

[WWW.DIGITALRADIO.DE](http://WWW.DIGITALRADIO.DE)

**Deutschlandradio**

Deutschlandfunk | Deutschlandradio Kultur | DRadio Wissen

## Major Sponsor



LN2 is a privately held company with offices in the Washington DC area and in Athens, Greece. LN2 employs experts worldwide for targeted research and development initiatives and creation of integrated circuits intellectual property. LN2 is providing state-of-the-art designs for communications, broadcast, signal processing and magneto-optical recording/storage systems.

## Delegate Bag Sponsor



Connects2 is Europe's largest supplier of retro fit DAB black box solutions to all the major European vehicle manufacturers. Connects2's SmartDAB and AutoDAB offer a full range of aftermarket solutions to integrate digital radio into any car. Connects2 Ltd is the market leader in Europe for the supply of car audio interfaces, providing electronic boxes that allow aftermarket radios and other audio devices to be fitted seamlessly into most vehicles. The Connects2 brand has become firmly associated with quality and has achieved a position where major vehicle manufacturers and car audio manufacturers regularly commission us to design and develop specific interface solutions for them. To see the full range of DAB solutions visit [www.autodab.com](http://www.autodab.com).

## Gala Dinner Sponsors



HEROLD is a specialist for digital media and marketing services. HEROLD.at is among the most visited websites in Austria. In the B2B segment HEROLD offers cost-efficient solutions for SMEs to win new customers and to increase revenue. In 2015 the company started HEROLD relax radio, a DAB+ and online radio station.

[www.heroldboom.at](http://www.heroldboom.at) [www.ichbinderherold.at](http://www.ichbinderherold.at) [www.herold.at](http://www.herold.at)



Kapsch Group is among the most successful technology companies in Austria and a global player in the future-oriented markets of intelligent transportation systems (ITS) and information and communications technology (ICT).



Radio Technikum is a private radio station of the University of Applied Sciences (FH Technikum Wien) and broadcasts technical and scientific content in a 24-hour full programme with news and weather at the top of the hour. It is a pioneer in the development of DAB+ in Austria.



Television and radio audiences in more than 80 countries enjoy programmes broadcast using transmitters from Rohde & Schwarz. Our transmitters as well as our T&M and studio equipment are advancing the progress of digital broadcasting and the processing of high-resolution video formats around the globe.



RADIO  
TECHNIKUM

more music  
more sound  
more information  
more radio

SCIENCE & TECHNOLOGY RADIO  
ON **DIGITALRADIO** & WEB STREAM  
**DAB+**

 <http://radiotechnikum.at>  
 <http://www.facebook.com/radiotechnikum>  
 <http://twitter.com/radiotechnikum>

# Get ready for the sound of efficiency. VHF transmitters for digital audio broadcasting.

**R&S®THV9** – liquid-cooled high-power VHF transmitter  
**R&S®TMV9** – air-cooled medium-power VHF transmitter

- ▮ Outstanding efficiency of up to 46 % thanks to Doherty technology
- ▮ Support for DAB, DAB+ and T-DMB
- ▮ Smallest footprint – up to 15 kW per rack
- ▮ Unique flexibility – single or multiple transmitters in one rack

Reduce your operating costs significantly with  
the new VHF transmitters from Rohde & Schwarz.

Find your optimal solution.  
[www.rohde-schwarz.com/campaigns/tx9](http://www.rohde-schwarz.com/campaigns/tx9)



  
**ROHDE & SCHWARZ**

## Lanyard Sponsor

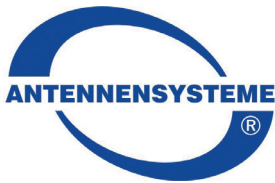


Dension is specialised in the development and production of consumer electronics and IT integration products for the automotive and professional digital signage industry. Our product portfolio consists of in-car multimedia, hands free solutions, DAB radio receivers, Plug&Play devices and professional Linux-based audio players and content management system options.

## Exhibitors



With more than 35 years of hands-on experience, Aldena is one of the leading antenna manufacturers and service providers in the broadcasting industry. ALDENA has developed new antennas for radio/television digital transmissions suitable for medium/high power antenna systems along with a full range of high performance RF accessories and added value services (frequency and coverage planning consultancies, on-field activities, in-factory tests). The company is involved in different projects for new DAB/DVB-T2 networks all over the world. EMLAB software – developed by ALDENA – is an all-in-one software solution for advanced antenna array design, coverage calculation and network planning. It is used worldwide by broadcasting operators, telecommunication authorities and system integrators.



Antennentechnik Bad Blankenburg GmbH develops and manufactures antenna systems according to the highest technological and qualitative requirements and standards of the automotive industry, public authorities, distributive trades and specialised industrial operators. The company is well established and highly respected within the antenna industry.



AVT manufactures high quality audio transmission products and provides complete solutions – also custom-made for you. Besides talk show systems in all variants AVT offers high-duty audio transmission systems and complete DAB/DAB+ head ends. Our systems are all “Made in Germany”. The main focus is set on quality and innovation.



Bmt is the competence centre for the fulfillment of projects in the scope of digital broadcast. The main focus is the development of applications and data services. For years bmt has been active in the specification and implementation of TPEG (Transport Protocol Expert Group) services. This includes both consulting services and products such as TPEG ON AIR, TPEG Analyser, TPEG Editor and TPEG Library.

[www.WEcanTPEG.com](http://www.WEcanTPEG.com)



DIGIDIA has emerged as one of the leading companies for digital radio transmission equipment with DAB and DRM equipment deployed all over the world. DIGIDIA can provide the complete end-to-end DAB and DRM transmission and receiving chain for broadcast and test applications. Products include virtual and real multiplexers and content servers, EDI/ETI IP gateways, monitoring equipment (RF and EDI/ETI), professional receivers and tunnel break-in products. DIGIDIA leads the way with straightforward design for innovative, compact and flexible products.



For 60 years, ELTI has provided TV and radio transmission solutions to leading operators around the globe. ELTI's solutions with high levels of innovation assure reliability and low operational costs. With support to several standards, such as DVB-T/T2/H, ATSC, ISDB-T/TB DAB/DAB+ and complete antenna system solutions and coaxial components, ELTI is your competent and reliable partner.



The European Radio Show undoubtedly marks the middle of the radio season. For three days it's all about celebrating our media and making the 6,000 or so visitors happy. Between 29 and 31 January 2017 in Paris, the trade show is free for industry professionals and answers both technical and programme questions.



Since 1997, Factum and Radioscape have been delivering innovative, reliable and cost-effective products for digital radio broadcasting. Factum Radioscape products cover the full digital radio broadcast signal chain from audio encoding, data insertion, multiplexing, distribution and multiplex management to supervision, monitoring and analysis, as well as an innovative voice break-in system for road tunnels.



Since 1997, the Innovationszentrum für Telekommunikationstechnik GmbH IZT has been providing equipment for signal generation, receivers for signal monitoring and recording, transmitters for digital broadcast, digital radio systems and channel simulators. The DAB-specific product portfolio includes the IZT DAB ContentServer – a highly reliable professional broadcast system for DAB. It combines audio encoding, data service management and ensemble/service multiplex generation in one device. Its reliability has permanently been proven in numerous DAB head-end installations. In addition, the IZT's signal generators and RF monitoring receivers are powerful laboratory tools, for example for DAB signal analysis or for the development DAB receivers.



Neetra is an Italian company working in the DAB, radio and TV broadcasting fields with ad hoc custom solutions. Quality, high technology and innovation are the core values of Neetra that customers can rely on from a team composed of engineers and specialised technicians with more than 20 years' experience in the sector.



PLISCH – The Transmitter Company is a leading manufacturer of DTV and DAB transmitter systems. The company was founded in 1955 and is located in Viernheim, Germany. We aspire to deliver a continued and growing advantage for our customers and employees. Because of this, 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. We are a privately owned company with a strong ethos in the way we conduct and manage our business affairs and relationships. In doing so, we pride ourselves in our customer relationships and understand our professional responsibilities and duties to foster enduring partnerships.

# Combining broadcast radio and IP to make radio better



RadioDNS is the global standards organisation for hybrid radio, which creates a better experience of radio by seamlessly combining the strengths of broadcast radio (FM, DAB/DAB+, HD) and IP.

We work closely with WorldDAB to create a cost-effective approach to hybrid radio for broadcasters, manufacturers and technology providers. RadioDNS Hybrid Radio services are available in 20 European countries today, and we're continuing to roll out to more European countries, the USA, Canada, Australia and Asia.

**Find out about our work at <https://radiodns.org>**

RadioDNS is the not-for-profit organisation supporting Hybrid Radio. Contact our project office for information on becoming a member of RadioDNS.

[www.radiodns.org](http://www.radiodns.org) | [@RadioDNS](https://twitter.com/RadioDNS) | +441600888335 | +18508888335 | [feedback@radiodns.org](mailto:feedback@radiodns.org)

**Radio**<sup>®</sup>**DNS**  
**HYBRID RADIO**



## HOW ABOUT LISTENING TO QUALITY MUSIC WITHOUT DISTRACTING BACKGROUND NOISES?

### LET US INTRODUCE OUR DENSION DAB FAMILY

Due to growing interest on digital radio around the globe, Dension recognized the opportunity of development to bring Digital Audio Broadcast music to the ones wanting to enjoy music in crystal clear quality.

We offer a wide scale of possibilities: Built-in USB control? Hands free music? Or you'd rather hold a remote controller to make it more comfortable? We have solution for You!

In 2012 we created our first digital radio receiver with wire connection called **DAB+G** which was specialized for our Dension Gateway series. Very soon the DAB+G became really popular and this success led us to new developments.

It seemed that there is a great potential in the USB connected version so we followed this way and advanced to our DAB+U device. Since the car's stereo system has USB control built-in, the **DAB+U** also builds on this feature: it works like a USB flash drive and the digital radio stations appear as virtual mp3 files. Clever and seamless: this product proved to be the most successful in the DAB family.

How about controlling our DAB device with a smartphone via Bluetooth (BLE)? As a solution we created the **DAB+A**, which is capable of showing full DAB information on your smartphone's screen through our application.

Still not enough? Also in need of a hands free solution? We thought of you as well. It's a similar device to DAB+A but with a great difference: **DAB+M** is your best choice if you want to move hands free and music streaming into your car!

# DIGITAL RADIO SOLUTIONS

It's been years since we started supplying DAB products to major OEM and Tier1 companies. Based on positive and encouraging feedbacks now we proudly present our devices to our Partners and everyone who might be interested in the Dension DAB experience.

**You're in need of a DAB solution?**

You came to the best place possible: DENSION the DAB Specialist.

For further and more detailed product information please visit our web page: [www.dension.com](http://www.dension.com)



## Speakers

**Helmut Bauer**  
Lawyer, Germany



Lawyer in Cologne, studied law, journalism, politics and ethnology in Heidelberg and Mainz. He served as managing director in various media companies and is one of the pioneers of private broadcasting in Germany. His current work focuses on broadcasting infrastructure and new media technologies, particularly for DAB+.

**Jacqueline Bierhorst, Project Director,**  
Digital Radio Netherlands



Jacqueline Bierhorst has been a pioneer in commercial radio since 1987, specialising in distribution, marketing and content. Since 2011, she has been Project Leader on the roll-out of the DAB+ network in the Netherlands for all commercial broadcasters, which was launched on 1 September 2013. Since January 2015, she has been Project Director for Digital Radio NL, which represents both public as well as commercial broadcasters and coordinates the joint roll-out and marketing of Digital Radio/DAB+ in the Netherlands.

**Nicolas Bresou, Digital Radio Manager**  
RTBF



After touring sub-Saharan Africa for more than 10 years for a telecommunications company, bringing internet by satellite and radio to very remote places, in 2015 Nicolas joined RTBF, the public broadcasting organisation of the French Community of Belgium, where he is in charge of projects in digital radio broadcasting. This includes the roll-out and promotion of the new DAB+ network managed by RTBF, and digital radio over internet with maRadio.be, the association of public and private broadcasters, using and promoting a common web audio player.

**Jimmy Buckland, Director of Strategy**  
Wireless Group GB



Jimmy is a huge advocate for radio's role in the digital world. After starting his career at industry body Radiocentre, he joined Wireless Group (then UTV) in 2009. Since 2012, Jimmy has led talkSPORT International, which distributes official English Premier League football audio to international radio stations and digital platforms. Awarded a Radio Academy fellowship in 2015, Jimmy oversaw Wireless Group's March 2016 investment in national DAB stations talkRADIO, talkSPORT 2 and Virgin Radio – to strong reaction from listeners and advertisers.

**Marco Carbone, Director, Radio Products**  
STMicroelectronics



Marco Carbone spent the first phase of his professional life at Siemens Telecom working on the design of telecommunications radio systems. Marco joined STMicroelectronics in 1996 to start the development of a product family specifically dedicated to terrestrial and satellite broadcast radio solutions. Over the years he has covered different positions in STMicroelectronics, with wider technical and business responsibilities. He is now responsible for the Radio Product line within the Automotive and Discrete Group based in Agrate Brianza, Italy.

**Øyvind Christensen, Deputy Director General, Media Department  
Ministry of Culture**



Norwegian Ministry of Culture



Øyvind Christensen is Deputy Director General in the Media Department at the Ministry of Culture in Norway. He was project manager for the report that was submitted in 2011 from the government to the Norwegian National Assembly on the digitisation of radio. The report determined the conditions and a target date for switch-off of FM radio services. Subsequently Øyvind has been responsible at the Ministry for the follow-up of the digitisation process.

**Lindsay Cornell, WorldDAB Technical Committee Chair and  
Principal Systems Architect, BBC Future Media**



Lindsay has worked for the BBC for more than 20 years, in a variety of engineering, editorial and leadership roles spanning radio, TV, and spectrum regulation. He has considerable experience of leading collaborative projects through his roles as Chairman of CEPT FM PT51, dealing with spectrum issues for programme making, and as Chairman of the WorldDAB and DRM Technical Committees, managing the stability and development of the respective standards.

**Graham Dixon, Head of Radio  
European Broadcasting Union**



OPERATING EUROVISION AND EUORADIO



Currently Head of Radio at the European Broadcasting Union in Geneva, Graham Dixon was Managing Editor of BBC Radio 3 until 2015, having previously held editorial and production positions within BBC Radio. He has a PhD in research on Italian Baroque music from the University of Durham and an MBA with distinction in 2001, writing his dissertation on transforming radio organisations to meet the challenge of multiplatform delivery. He is a Fellow of the Royal Asiatic Society and the Royal Society of Arts.

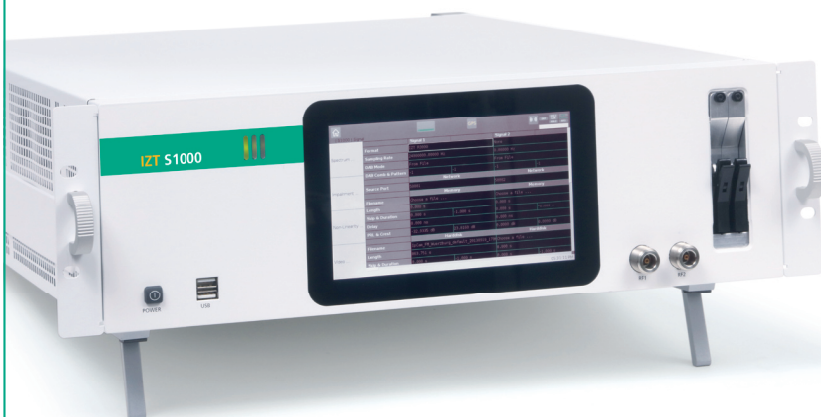
[www.izt-labs.de](http://www.izt-labs.de)

RF Technology and  
Advanced Digital Signal Processing

## Solutions for DAB

### RF Recording and Signal Generation

- High-performance RF receivers
- Recording and data analysis
- Replay of RF signals
- Multi-channel signal generation
- Powerful impairments



### Digital Radio Multiplexer Systems



- Integrated audio encoding and data service management
- Reliable and efficient operation of DAB head-ends
- Developer Edition for receiver testing

**IZT**

Innovationszentrum  
Telekommunikationstechnik

**Ash Elford, Digital Development Manager and Trustee**  
Angel Radio



Ash Elford started working in radio as an Operations Executive for GCap Media managing 20 local DAB multiplexes. Following Global Radio's takeover of GCap, he then worked at Arqiva, who purchased their DAB multiplex subsidiary. Since 2014, Ash has been working for local community station Angel Radio, on the south coast of England. He has overseen the successful participation of Angel Radio in Ofcom's minimux trial, operating the Portsmouth minimux.

**Ford Ennals, Chief Executive**  
Digital Radio UK



Ford Ennals is Chief Executive of Digital Radio UK (DRUK) which is responsible for leading the market and consumer transition to digital radio in the UK. DRUK represents the major commercial broadcast groups and the BBC, and is responsible for digital radio communication campaigns, and working with the vehicle industry to ensure digital radio is fitted in cars. DRUK works with the UK Government and media regulator Ofcom to plan a future digital radio switchover and achieve consumer listening and coverage criteria.

**Gernot Fischer, Managing Director**  
Digital Radio Austria



Gernot Fischer, a trained communications engineer, advises with his company mainly industrial customers and public organisations. The company is active in software development for industrial solutions. Its first contact with broadcasting came about through an advisory commission on the subsidy concept for the nationwide introduction of DVB-T in Austria. Gernot has been managing the company since the founding of the association Digitalradio Austria in 2013. Since 2015, he has also been the managing director of Radio Technikum.

**MIT UNS**

**RELAXEN!**

**FREUEN SIE SICH AUF EINEN ENTSPANNTEN MUSIKMIX: RELAXTE ROCK- UND POP-SONGS VON 1970 BIS HEUTE SOWIE LOUNGE- UND CHILLOUT-SOUNDS AM ABEND.**

Jetzt Reinhören:  
<http://relaxradio.herold.at>

**HEROLD** relaxradio

**Peter Frank, Director Broadcast and Media**  
Rohde & Schwarz



Peter started in Sales at Rohde & Schwarz after finishing his engineering degree. For several years he has been responsible for sales in the broadcasting division in Europe.

**Mark Friend, Controller**  
BBC Radio & Music Multiplatform



Mark runs BBC Radio's digital services and music output across digital radio, desktop, TV and mobile platforms. This includes developing and running iPlayer Radio, major music events, mobile and tablet apps, podcasts, social media and audio archive. Mark is also leading the development of the Ideas Service working across BBC TV, News, Radio and Technology departments and with a wide range of partner organisations to develop the concept. Mark was previously the BBC's Controller of Strategy where he led the Charter settlement in 2005, developed the BBC's new services vision and helped launch BBC iPlayer and mobile services.

**Gunnar Garfors, President of IDAG and Advisor on radio distribution**  
NRK



Gunnar Garfors heads International DMB Advancement Group (IDAG), an organisation working to get DAB+ and DMB in smartphones. He often presents or debates radio at media conferences around the world. Garfors is originally a journalist, but he has worked with media technology since 2001. The 41-year-old is an avid traveller and author, and he has visited all the world's countries and continents. That resulted in 198: *How I Ran Out of Countries*, a book about the journeys. More on garfors.com or Instagram/Twitter: @garfors.

**Andreas Geiss, Head of Unit – Radio Spectrum Policy – Directorate-General**  
**CONNECT (Communications Networks, Content & Technology)**  
European Commission



Andreas Geiss is Head of Unit for Spectrum Policy in DG CONNECT of the European Commission. He is the Chair of the Radio Spectrum Committee. He has been working for the European Commission since 2002 in various positions. His responsibilities have included mobile communications, the Radio Spectrum Policy Programme and negotiations with the Member States in different settings. Before joining the European Commission he worked for the European Radiocommunications Office (ERO), where he was project leader for projects dealing with terrestrial and satellite communications.

**Patrice Gélinet, Board Member of the Council**  
Conseil supérieur de l'audiovisuel (CSA)



Patrice Gélinet began his career as a professor of history and general knowledge. Simultaneously, he was a journalist at *Le Figaro* and *L'Appel*. In 1984, he joined France Culture as a collaborator and producer of programmes and won many prestigious awards. In 1997 he became Director of France Culture and from 1999 he produced and hosted the show "2000 years of history on France Inter". In January 2011, he was appointed Board Member of the CSA, where he is in charge of radio, overseas and French language.

**Andreas Goršak, Senior Engineer, Broadcast Development**  
JVCKENWOOD Deutschland

**JVCKENWOOD**



Andreas holds a Dipl.-Ing. degree from FH Köln, and since 2002 he has been working in the field of automotive tuner development. His main interests are advanced receiver features and data services for digital radio products. He has completed automotive development projects for RDS, DVB-T, DAB and HD Radio. He is involved in the development and testing of all JVCKENWOOD radio products for Europe to both OEM and consumer markets.

**Christo Grosev, Supervisory Board Director**  
Radio Newco



Christo Grosev co-founded the first pirate radio station in Bulgaria in 1989. As of 1994, he joined Metromedia as general manager of its Russian radio operations, where he launched three radio stations. In 2000, Christo became President of Metromedia Radio, overseeing over 25 radio stations in 9 European countries. In 2006, Christo co-founded the first Dutch-music radio network in the Netherlands, 100%NL. In 2013, 100%NL launched a second national network, Radio 10. Since October 2013, Christo has been Supervisory Director at Radio NewCo, the newly created radio group comprising four of the Netherlands' leading radio networks. He is also an investor in media in Ukraine and Bulgaria.



**KeyStone**  
semiconductor

Your reliable partner in DAB solutions  
Ask more with [contact@keystonesemi.com](mailto:contact@keystonesemi.com)  
See more at [www.keystonesemi.com](http://www.keystonesemi.com)

In God we trust

**Patrick Hannon, President, WorldDAB & VP Corporate Development, Frontier Silicon**



Patrick Hannon is VP Corporate Development at Frontier Silicon, the leading provider of technology solutions for digital radio. He was elected President of WorldDAB, the international association responsible for promoting the DAB family of standards, in November 2013. His role is to work with policymakers, regulators and industry players (including public and private broadcasters, network operators, device manufacturers, retailers and automotive manufacturers) to ensure that digital radio is successfully rolled out in as many territories as possible. Before joining Frontier Silicon, Patrick was a strategy consultant focused on broadcast/digital media.

**Laurence Harrison, Technology and Market Development Director Digital Radio UK**



Laurence Harrison is Market Development Director at Digital Radio UK (DRUK). His main responsibilities include working with the vehicle industry to ensure line-fit of digital radio and development of aftermarket equipment, managing the UK digital radio tick mark and minimum receiver specifications and working with manufacturers and retailers to help grow the market for digital radio. Laurence also manages the coordination of Digital Radio UK's public affairs activities and on building partnerships with similar European national organisations.

**Martina Hürbinger, Marketing Manager and Global Audio Lead, Global Consumer Electronics GfK**



Martina Hürbinger started her career at GfK in 2002 after studying economics and statistics in Nürnberg and Dublin. At GfK she has managed various projects and product groups in the POS Consumer Electronics team and since 2009 she has held different management positions in various areas, including as the Leader of global Mobile Consumer Electronics. As of 1 March 2016 she has been responsible for the global GfK POS Audio Team and leads its global business development including Product Group and Key Account Management.

**Lars Kierkegaard, Head of Strategy and Business Development Teracom**



Lars has over 17 years' experience from working at companies such as Ericsson, Terma and Anritsu within the broadcast, telecommunications and public-safety industries. Today, Lars is Head of the Business Innovation Department in Teracom and is responsible for driving new growth initiatives including digital radio. He is also board member of the Danish Consumer Electronics Association and advisory board member of CMI at Aalborg University and a board member of IEEE Danish Chapter.

**Maria Kissné-Akli, Head of Frequency Planning and Coordination Unit National Media and Infocommunications Authority, Hungary**



Maria Kissné-Akli has been Head of the Frequency Planning and Coordination Unit since 2010. She joined NMHH in 1996 where she dealt with planning and coordination issues in the field of television broadcasting. Her main responsibilities were DVB-T network planning, preparation of the Hungarian GE06 digital plan, participation in international working groups and international conferences. From 2007 she worked for the Hungarian network operator Antenna Hungária. The group led by her was responsible for network planning tasks related to DVB-T/DVB-H and T-DAB frequency tender and network implementation.

**Andreas Kral, Country Manager Austria**  
**JATO**



Andreas Kral started his career in sales at Porsche Bank Leasing before becoming an importer at Porsche Austria, responsible for rent-a-car/fleet business. He subsequently moved back to Porsche Bank, with responsibility for fleet management, before moving to Sixt Leasing, spending two years as Managing Director for Austria. He then joined car leasing company ARVAL Austria spending three years as commercial director, and then seven years as managing director. While working at JATO, he regularly lectures on fleet/damage management and cost reduction programmes.

**Roger C. Lanctot, Associate Director, Global Automotive Practice**  
**Strategy Analytics**



As Associate Director in the Global Automotive Practice at Strategy Analytics, Roger Lanctot has a powerful voice in the definition of future trends in automotive safety, powertrain, and infotainment systems. Roger draws on 25+ years' experience in the technology industry as an analyst, journalist and consultant. He has conducted and participated in major industry studies, created new research products and services, and advised clients on strategy and competitive issues throughout his career.

**Philip Laven, Treasurer**  
**WorldDAB**



Philip Laven has played an active role as a member of the World DAB Steering Board since 1997 and has been Treasurer since 2005. He was also Chairman of DVB from 2008 until July 2016. Between 1997 and 2007, he was Technical Director of the European Broadcasting Union. Before joining the EBU, he worked for the BBC in various senior posts including Chief Engineer R&D and Controller of Engineering Policy, thus playing a leading role in the development of the BBC's policy on technical developments, such as the introduction of DAB and digital television.

**Dominique Lievyns, Chief Sales and Marketing Officer**  
**Norkring Belgium**



Since February 2010, Dominique Lievyns has been active as Chief Sales and Marketing Officer for Norkring België. His responsibility is sales and market development. With a strong business and marketing knowledge of the high-tech industry, he is fully committed to the development of DAB+ in the Flemish-speaking part of Belgium. Previously, he was responsible at Siemens for managing a cross-functional team deploying the first IPTV solution in Belgium.

**Marius Lillelien, Radio Director**  
**NRK**



Marius Lillelien is Radio Director at the public service broadcaster NRK. Lillelien started his career as a DJ in local radio in the 80s. He has been the head of music and station manager at the youth stations NRK P3 and NRK mP3 and been in charge of the development of NRK's digital radio strategy since 2005. He has been the Radio Director at NRK since 2009 and is a member of the board of Radiodays Europe.





A World of Experience in  
**DIGITAL RADIO**

## Encoding & Multiplexing

Virtualised Server Broadcast Systems



Component Broadcast Systems



## Monitoring and Analysis

OBSERVA Field Monitor



OBSERVA Multiplex Supervisor



## Emergency Messaging for Road Tunnels

DETS Voice Break-in System



[www.factumradioscape.com](http://www.factumradioscape.com)

**Ole Mølgaard**  
Digital radio expert



Ole Mølgaard is an expert in business development and media, with more than 20 years' experience in print, radio/TV and internet, and is now involved in a number of businesses and organisations within and outside the radio industry. He has worked with both commercial and public service media and is deeply involved in the digitisation of radio in Denmark and the rest of the Scandinavian countries.

**Ian O'Neill, OBE, Head of Radio; Head of Television, Department for Culture Media & Sport (DCMS)**



Ian O'Neill is currently Head of Radio and Television Policy at the Department for Culture, Media & Sport (DCMS) and is responsible for all aspects of UK radio policy and the UK's Digital Radio programme. Ian was a member of the UK Digital TV Switchover project from 2003 to 2008, leading on the socio-economic aspects of television switchover and later on the BBC's digital purposes for BBC's current Royal Charter. In 2008, Ian moved to the Government Olympic Executive (GOE), successfully delivering a number of unique projects supporting the delivery of the 2012 Olympic Games and Paralympic Games.

**Nick Piggott, Project Director**  
RadioDNS



Nick has spent the majority of his career working in the radio industry, initially in programming and then moving to digital radio and online innovation. Nick is one of the founders of RadioDNS Hybrid Radio, the open technology project that lets broadcast radio and IP work together, combining the power of broadcasting to reach many people and the power of the internet to deliver enhanced or personalised content.

**Georg Plattner, Director**  
RAS Rundfunkanstalt Südtirol



Georg Plattner is currently Director at RAS Rundfunkanstalt Südtirol, overseeing the deployment of DAB/DAB+ throughout Italy. He has worked at RAS since 1995 in a number of roles focusing on the planning and commissioning of regional DAB, broadband and digital television networks in Italy. He is also an advisory member in the Commission of the Ministry of Communications. Georg studied Electrical Engineering at the Technical University of Graz and at the TU Munich.

**Viliam Podhorský, Director, Electronic Communications Department**  
Ministry of Transport, Construction and Regional Development of the Slovak Republic



Viliam Podhorský is Director of the Electronic Communications Department at the Ministry of Transport, Construction and Regional Development of the Slovak Republic. He holds a master's degree in Telecommunications (1981) from the Slovak University of Technology – Faculty of Electrical Engineering, where he worked for 10 years as a lecturer in the Telecommunications Department in the area of Data Transmission, Telecommunications Networks and Digital Transmission Systems.



**PLISCH**

POWER AMPLIFIER UNIT PAU 5000

**PLISCH**

POWER AMPLIFIER UNIT PAU 5000

**PLISCH**

# Broadcast Innovations

DVB-T/T2/lite, ISDB-T/Tb, ATSC 3.0, ATV, DAB(+)/DMB

**PLISCH**

THE TRANSMITTER COMPANY

[www.plisch.de](http://www.plisch.de)



- **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

## Heike Raab, Plenipotentiary for Federal and European Affairs, for Media and Digital Affairs of the Land of Rhineland-Palatinate



Heike Raab is responsible for media and digitalisation policies within the government of Rhineland-Palatinate. As a State Secretary at the State Chancellery of Rhineland-Palatinate she coordinates the regulation of Public Broadcast Services between all 16 State Governments for the head of the Public Broadcast Committee, Prime Minister Malu Dreyer. Between 2011 and 2015 she was State Secretary in the Ministry of the Interior of Rhineland-Palatinate and along with this position the Chief Information Officer (CIO).

## Bojan Ramšak, Head of R&D, Transmitter and Communications Unit RTV Slovenia



Bojan Ramšak is head of R&D in the Transmitter and Communications Unit at RTV Slovenia. He has been working in the area of digital broadcasting for more than 20 years. His team of engineers has set up DVB head-ends, DVB-T networks, various satellite uplink and receive stations, RDS distribution, DAB+ head-end with transmitter network and IP backbone. Because of education and knowledge share in his team, open source solutions are often used in in-house applications.

## Thomas Saner, Senior Advisor SRG SSR



Thomas Saner is Senior Advisor at SRG SSR, the Swiss Public Broadcaster. In this role he develops technology strategies for production and distribution and coordinates projects for Radio, TV and Online. Thomas is a member of the steering board and chairman of the technical group of the Swiss Digital Migration Project (DigiMig). He is a member of the Audio Engineering Society (AES) and the Society of Motion Picture and Television Engineers (SMPTE).

## Ron Schiffelers, Senior Director Programme Management NXP Semiconductors



Ron Schiffelers works for NXP within the Business Unit Automotive. NXP is a semiconductors company and a leader in the Car Infotainment IC market. Having a total experience of 21 years in the semiconductors industry Ron has been working on car radio products with his main focus on digital radio. Besides this he is also active as member of the WorldDAB steering board.

## Siegfried Schneider, President Bavarian Regulatory Authority for Commercial Broadcasting (BLM) in Munich, Protection of minors, media policy

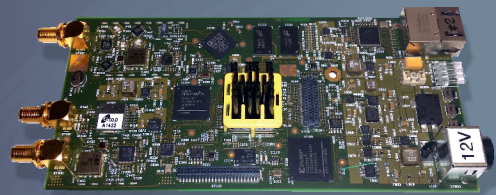


Siegfried Schneider has been President of the Bavarian Regulatory Authority for Commercial Broadcasting (BLM) in Munich since October. In January 2016, he took over the function of Chairman of the Association of the German Regulatory Authorities (ALM), after acting as Chairman of the Commission for Protection of Minors in the Media (KJM) of the regulators during the period December 2011 until the end of 2015.

# 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
- ▶ GBit 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



**Willi Schreiner, Managing Director**  
Absolut Radio



In 1988 Willi became the first chairman of the Association of Bavarian Local Broadcasting (VBL). In 1991 he became co-founder of the joint venture of private broadcasting APR, was a member of the board. Since 1995 Willi has been manager of Die Neue Welle GmbH & Co. KG Nuremberg where he has been responsible for the digital radio stations Absolut Radio and Absolut relax. Since August 2011 he has been Managing Director of the DRD Digitalradio Deutschland GmbH.

**Paul Sylvester, Content Director**  
Absolute Radio, UK



Paul Sylvester is an award-winning radio programmer with a decade of experience in radio production, management and talent coaching. As Content Director of the Absolute Radio network he has led the team to four consecutive sets of record ratings as well as creating some of the most exciting, innovative and talked-about radio in the UK. In May 2016, the station was crowned Radio Station of the Year at the Arqiva Commercial Radio Awards.

**Branimir Vojcic, Founder, CEO and CTO**  
LN2



An internationally recognised expert in wireless communications, Dr Branimir Vojcic is an Emeritus Professor and past Chairman of the Department of Electrical and Computer Engineering at The George Washington University. He has written extensively on numerous aspects of digital communication technology, and has extensive experience in product development and creating cutting-edge technologies for academia and industry, including leading telecommunications companies in the communications equipment and chipset space.

**Martin Wagner, Director General of Radio**  
BR



Martin Wagner started his career as a journalist with BR in 1979, from 1982 onwards at its headquarters in Munich. In 1989, Martin was sent to Tel Aviv, where he acted as Middle East correspondent for ARD. Returning to Munich in 1996, he was appointed Deputy Head of Radio News. In his next assignment he was ARD's US correspondent in Washington DC (2001–2006). Before being elected Head of Radio in 2014, he was in charge of several radio departments.

**Joan Warner, WorldDAB Asia Pacific Committee Chair and CEO**  
Commercial Radio Australia



As CEO of Commercial Radio Australia (CRA) Joan was responsible for the planning, roll-out and implementation of DAB+ digital radio in the five metropolitan capitals covering over 60% of the Australian population, and continues the DAB+ implementation for commercial radio broadcasters across regional Australia. She oversees the whole of industry marketing campaign, Radio Codes of Practice, audience survey contracts and industry copyright agreements. She is responsible for the annual National Commercial Radio Conference, Siren Creative Awards and Australian Commercial Radio Awards.

# The industry's most trusted brand and highest performance for VHF TV and DAB Radio



Unrivalled power efficiency, flexible system configurations and a very compact design

## Maxiva™ VAX with PowerSmart® 3D

- The highest efficiency VHF Band III transmitter on the market
- Digital power levels up to 12 kW ATSC, 10 kW DAB/DAB+/DMB and 6.4 kW COFDM TV
- Single-engineer maintenance, seamless on-air serviceability



CREATE



TRANSPORT



TRANSMIT  
TELEVISION



TRANSMIT  
RADIO




Connecting What's Next

[www.gatesair.com](http://www.gatesair.com)


Since 1922, GatesAir has remained the industry's most trusted supplier for the over-the-air TV and radio networks worldwide. World-class engineering and industry-leading innovation marry outstanding performance with the industry's highest reliability and operational efficiency. Our impeccable sales and service bring it all together for our valued customers.











## Driving antenna technology forwards


 An AM/FM/DAB antenna with a short 23 cm mast and shallow mounting depth. Can 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.

 ADDRESS  
Hermann-Petersilge-Strasse 10  
D - 07422 Bad Blankenburg

 PHONE  
+49 367 41 369-0

 MAIL  
info@atbb.eu

 WEB  
www.atbb.eu



**Hanns Wolter, WorldDAB Regulatory and Spectrum Committee Chair and Technical Director  
Club DAB Italia**



Hanns has been working in the DAB world for 16 years since joining Club DAB Italia as a Product Manager and has worked on all issues regarding DAB, at both a national and international level. He is involved in network planning and spectrum issues and also works closely with hardware manufacturers for the deployment of a comprehensive DAB environment. He is responsible for the management of the ongoing roll-out of DAB Italia's network and all issues related to the creation, distribution and transmission of the multiplex.

**Karel Zýka, Technical Director, Head of DAB Switchover  
Czech Radio**



Karel Zýka works as the Technical Director of Czech Radio. He has also been the Head of the DAB+ implementation strategy in the Czech Republic, which has successfully started the process of digital switchover in the country. Before joining Czech Radio, he worked as Director of regional TV network (part of MTG), as Director of Sales and Marketing at Czech Radio and as Managing Director of APA. He is also a member of the Operations Council of EBU.

WORLD

# DAB

Digital Audio Broadcasting



## 1,000+

Industry experts in the WorldDAB network – accessible to all members



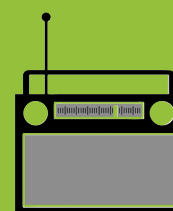
WorldDAB Committees and Task Forces provide frameworks and standards in operational and technical matters that help drive the digital radio industry

## 95



Members from broadcasters to governments, regulators, automotive and manufacturers

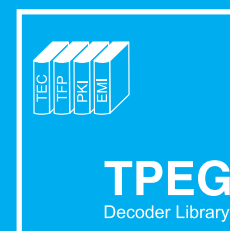
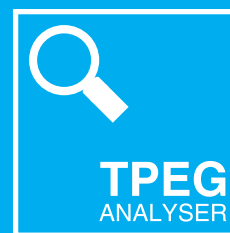
WorldDAB is the global industry forum responsible for defining and promoting DAB digital radio. By bringing together radio industry professionals, WorldDAB provides knowledge and expertise that helps countries successfully adopt and implement broadcast digital radio



## 470 million+

People within reach of DAB services worldwide

# WEcanTPEG.com



Bayerische Medien Technik GmbH · Pfälzer-Wald-Straße 32

81539 München · Germany · info@bmt-online.de



...digital radio on the move



...digital radio on your smartphone



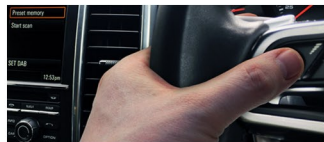
# Seamless DAB Integration



AutoDAB interfaces allow plug and play Digital Radio integration with your OEM head unit. Digital Radio can be controlled directly from the steering wheel controls or via the RF remote control.

## Features

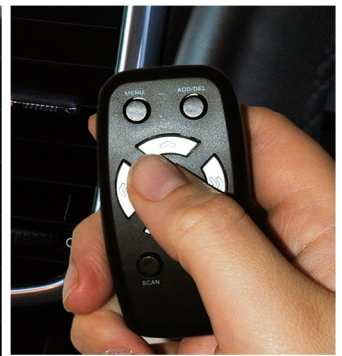
- Plug and Play installation
- Stores favourite stations
- 100's of new radio stations
- No box on view
- No wires on view
- Fully integrated
- Maintains FM stations
- Controlled from Steering wheel controls
- Uses car's current display
- Voice prompt menu system
- Displays: radio text, song & artist information



DAB functions are controllable from the steering wheel control



DAB station name transmitted via RDS text



RF Remote



FM



SMARTDAB



SMARTDAB

UNIVERSAL WORKS WITH ANY VEHICLE

The **AutoDAB FM** is a universal in-car adapter which upgrades your existing FM radio system to receive DAB and DAB+ digital radio. Music is transmitted to your car radio via its built-in FM transmitter. It is controlled using its dedicated RF Remote control and displays Digital Radio information on the Factory Stereo display.

The **AutoDAB** has a voice prompt menu system, for added safety. Once installed there are no wires or boxes on view.

The **SmartDAB AUX** connects to your smartphone to give Digital Radio in any car with Aux-in. It is a plug & play solution that you can fit yourself in minutes. The station name, logo, song title and artist information are displayed on your smartphone. Slide-show images are also displayed if transmitted by the radio station. Music is transmitted to your car radio via the 3.5mm aux lead.

The **SmartDAB FM** connects to your smartphone to give Digital Radio in any car. It is a plug & play solution that you can fit yourself in minutes. The station name, logo, song title and artist information are displayed on your smartphone. Slide-show images are also displayed if transmitted by the radio station. Music is transmitted to your car radio via the built-in FM transmitter or 3.5mm aux lead. In addition the station name and radio text are also displayed on your car radio.



## AutoDAB Partners



[WWW.AUTODAB.COM](http://www.AUTODAB.COM)  
Contact sales for more information: +44 (0) 121 522 5588

WorldDAB Members

