

WORLD



Defining the future of digital radio



WorldDAB Seminar

In collaboration with Trentino Network
and Club DAB Italia

The digital radio experience: Case studies on going digital

Riva del Garda, Trento Province, Italy
15-16 April 2013

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AGENDA

Monday 15th April, 2013

13:30 - 14:00	Registration Moderator: Patrick Hannon, Frontier Silicon, WorldDMB Steering Board Member
14:00 - 14:25	Welcome: Alessandro Zorer, Chief Executive Officer, Trentino Network
14:25 - 14:40	The support of the Authority for developing digital in Italy Vincenzo Lobianco, Director, Spectrum and Network Planning, AGCOM AGCOM (Autorità per le Garanzie nelle Comunicazioni) has paved the way for a digital radio rollout in Italy. Learn about the next priorities for AGCOM and for the future development for digital radio in Italy.
SESSION 1 Digital radio in Europe and worldwide, a continuous growing success story Moderator: Alessandro Longo, Journalist	
14:50 - 15:05	Digital Radio across Europe - Overview and Update Jorn Jensen, President, WorldDMB DAB/DAB+ have emerged as the digital audio broadcasting standards of choice for radio broadcasters across Europe, and DAB+ is the fastest growing, most popular digital radio standard, now adopted in over 30 countries. This presentation will give an update on the deployment on the deployment of DAB+ globally.
15:05 - 15:20	Germany: DAB+ digital radio - national and regional Michael Reichert, ARD On 1st August 2011 Germany launched broadcast digital radio services on a nationwide network using the DAB+ standard. Fourteen new stations from football to rock, pop, classical, talk and Christian radio can now be heard across Germany, broadcast by both public and private stations. This presentation gives an overview of how the ARD regional broadcasters, the national broadcaster Deutschlandradio, and commercial broadcasters have deployed DAB+ digital radio, and what new content they now bring to listeners.
15:20 - 15:35	Norway: FM switch-off planned for 2017 Gunnar Garfors, NRK, Norway A long-term perspective, courage and collaboration between competing broadcasters and the government secured a clear strategy for a transition to digital radio in Norway. Before end of 2014, the country will have 99.5% DAB / DAB + coverage. This presentation outlines the background for Norway's decision to shut down FM in 2017 and what is being done to ensure a successful digitization.
15:35 - 15:50	UK: Digital radio - from production to audience reach Laurence Harrison, Director of Technology & Market Development, Digital Radio UK Digital radio coverage in the UK is currently 94% for BBC national stations, 85% for national commercial stations, and 66% for local DAB coverage. Progress on digital radio in cars continues with BMW now fitting all new cars with digital radio from January 2013. The UK Government will make a decision on radio switchover later in 2013 and public and private broadcasters are jointly investing in building local digital radio coverage across the UK. This presentation gives an overview of this evolving and dynamic digital rollout in the UK.
15:50 - 16:10	Networking Coffee

SESSION 2**Digital Radio Rollout in Italy****Moderator: Sergio Natucci – Club DAB Italia****16:10 – 16:25****DAB+ services in Italy, a growing success****Stefano Ciccotti, President, Associazione per la Radio Digitale (ARD) & CEO RaiWay**

Trentino as the first fully digital radio area in Italy is the beginning of the standard digital radio transmission of all the national and local broadcasters.

16:25 – 16:40**Rundfunkanstalt Südtirol (RAS): 15 years of DAB****Georg Plattner, Director**

30,000 bilingual families in Bolzano have been listening to DAB digital radio for the past 15 years: This presentation gives an overview of Bolzano's plans for migration from DAB to DAB+.

16:40 – 17:30**Roundtable: The commitment of the Italian broadcasters: quality, content and marketing****Moderator: Enrico Pagliarini, Radio 24 Journalist**

Bruno Socillo, Director, Radio RAI

Massimiliano Montefusco, Marketing Director, Radio Dimensione Suono (RDS)

Roberta Lai, CEO, Radio 24

Elena Porta, CEO, DiGiloc

Dr. Luigi Seppi, CEO, DBTAA

Tuesday 16th April, 2013**09:00 – 09:30**

Welcome coffee

09:30 – 09:45**Welcome address****Isabella Bressan, DG for Innovation, Province of Trento**

Trentino: first all-digital Italian region; among the first in digital TV switch over, largest regional optical fibre network in Europe, first in Digital Radio. A smart territory case study for introducing TPEG based services.

09:45 – 10:00**Fabrizio Guidi, President, Club DAB Italia scpa**

The continuous effort by Club DAB Italia, the first national network operator for the national commercial radio broadcasters and the launch of Digital Radio services in Trentino and the rest of Italy.

SESSION 3**Growth of the Digital Radio Market****Moderator: Alessandro Longo, Journalist****10.00 – 10:15****The Eurochip concept****Christian Vogg, Head of Radio, European Broadcasting Union (EBU)**

Can the European radio industry influence the mobile phones manufacturers to include a generic receiver for digital radio in all phones – the "Eurochip"?

10:15 – 10:30**Digital Radio: a growing market****Alexander Dehmel, Senior Marketing Consultant, GfK**

17million receivers sold in the UK, over 1 million now sold in Switzerland, Australia and in Germany by end 2013. This presentation will provide updated data illustrating the trends in the uptake of digital radio in markets across Europe.

10.30 – 10.45	<p>Digital is not the competition: The Business Case for Digital Radio Patrick Hannon, Frontier Silicon, Steering Board Member, WorldDMB</p> <p>Commercial broadcasters have been reluctant to launch on digital due to fear of competition, a lack of viable business models and information on the benefits of digital radio. Successful case studies from broadcasters illustrate digital radio business models for commercial broadcasters to adopt that includes extended geographic coverage, new stations, cross promotion, value-added through text, visuals and interactivity.</p>
10.45 – 10.50	Summary and Closing Remarks by Alessandro Longo, Journalist
10.50 – 11.15 Networking Coffee	

SESSION 4

Technology Update & Aftermarket Solutions

Moderator: Laurence Harrison, Director of Technology & Market Development, Digital Radio UK

11.15 – 11.30	<p>Digital radio in-car: Automotive Update from the WorldDMB Technical Committee Hanns Wolter, Club DAB Italia, Technical Management, WorldDMB Regulatory and Spectrum Committee Chairman</p> <p>All major automotive manufacturers offer digital radio either as line fit, or dealer fit options. TPEG, traffic and travel services are on-air in the UK and are planned in Germany and other markets, using DAB+ for TPEG traffic and travel information.</p> <p>WorldDMB Technical Committee has developed an ETSI approved service-following protocol, enabling the user to maintain the same audio or data content in spite of varying reception conditions. This presentation will give an overview of current status of digital radio in-car.</p>
11.30 - 11:45	<p>Connecting platforms – hybrid and what does this mean Laurence Harrison, Director of Technology & Market Development, Digital Radio UK</p> <p>Digital radio is now part of an interactive radio solution. What is interactive radio, and what are the other parts of the interactive radio solution Contents and connected Cost effective line-fit solution</p>
11.45 – 13:00	<p>Aftermarket Solutions Moderator: Laurence Harrison, Director of Technology & Market Development, Digital Radio UK</p> <p>While all the major automotive manufacturers are fitting digital radio as standard, there are many options for adapting existing analogue radios. This session gives an overview of what is available, and coming onto the market.</p> <p>Pure, Giorgio Guana Fiamm S.p.A., Patrick D’arpa Connects2, Graham Johnson Calearo Group, Paolo Tramonte</p>

13:00 – 14:00 **Networking Lunch**

SESSION 5

Automotive Sector and Chipsets

14:00 – 14:50	<p>Chip Manufacturers’ Perspective Moderator: Eugenio La Teana, RTL 102.5</p> <p>The DAB Philips patents have now expired and prices are coming down. Chipset manufacturers are planning to ramp up production to offer cost-effective car infotainment systems, enhancing the driving experience, providing access to analogue and digital radio as well as navigation functions. Consumers have freedom of listening choice and up to the minute traffic information.</p> <p>STMicroelectronics, Guido Brasca Frontier Silicon, Patrick Hannon NXP Semiconductors, Mark Steigemann DiBcom DTBU, Yannick Levy Questions & Answers</p>
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14:50 – 15:50

Roundtable: Automotive perspective**Moderator: Giuseppe Braccini, Director of Business Development, Rai Way**

Brief presentation by each of following:

Federico Ferraro, Volkswagen Group

Klaus Bischof, AUDI AG

Gino Alberico, Centro Ricerche RAI Torino

Fabio Pressi, Infoblu

Sergio Antonelli Perino, Magneti Marelli

Pasquale Danzi, Dep Sicurezza Stradale, Ministero Infrastrutture

Eugenio La Teana, RTL 102.5

Panel discussion

Questions & Answers

15:50 – 16:00

Closing remarks and close

EXHIBITORS

**ALDENA TELECOMUNICAZIONI SRL.**

Established in 1979, ALDENA TELECOMUNICAZIONI nowadays is one of the antenna manufacturer and services leaders in the broadcasting industries. ALDENA has developed new antennas for radio & television digital transmissions suitable for medium/high power antenna systems along with full range of high performance RF accessories and added value services (Radio planning Consultancies, On Field activities, In Factory tests). The Company is involved in different projects and trials for new DAB /DVB-T2 networks all over the world.

**Calearo Group**

Calearo Group, established in 1957, is present globally and leader in field of automotive antennas and other wireless communication fields. Calearo Group is the preferred partner for OEMs, Aftermarket, Special and Luxury Vehicles, and TLC players, whenever advanced telecommunications skills are required, from consulting and research projects to mass manufacturing.

**Connects2**

Connects2 was established in 2000 and develops, manufactures, distributes and markets a range of proven technology products that bridge the gap between factory-fit and aftermarket products. The Connects2 range encompasses solutions for all aspects of In-Car Entertainment; from integration of Aftermarket head units into CAN-Bus data systems on vehicles, to the ever increasing demand for in-car use of iPod and hard drive MP3 products.

**CSP**

CSP (www.csp.it - rd.csp.it) is a non-profit ICT Research Centre, recognized by the Italian Ministry of University and Research. CSP operates on a local, national and international level, performing experimental development, industrial research and technology transfer. Its main activity areas are new generation broadband wireless infrastructures, innovative multimedia applications and intelligent, connected and "invisible" objects (IoT) for territorial management.

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DiBcom

DiBcom, a Business Unit of Parrot, designs high-performance chipsets that enable reception of mobile TV and radio reception everywhere. Parrot has launched its second generation Android based solution for Automobiles, called Asteroid. Combined with DiBcom chipsets, it provides the most advanced hybrid IP/DAB car radio in the World.



Digidia

DIGIDIA develops, manufactures and sells digital radio transmission systems and solutions based on three products lines: DAB/DAB+, DRM30/DRM+ and Synchronous FM. DIGIDIA is one of the leading providers for DAB head end (multiplexers and encoders), DAB IP Gateways (EDI/ETI converters), EDI/ETI monitoring tools and DAB Tunnel-break in systems. Our dedicated test product line rebuilds the complete DAB transmission chain including test multiplexers, modulators and test receivers. DIGIDIA has been a WorldDMB member since 2006.



Elber

Elber S.r.l. designs and manufactures microwave links and satellite equipment for contribution to transmitting sites in a TV or radio network. Over 20 years of experience, the care for details and the research for innovation are the keys for high quality and reliable products, characteristics that distinguish Elber on the worldwide market; the craft tradition characterizes the actual production philosophy realizing the products completely inside the Company.



Elettronika Group

Elettronika Group is an Italian market-leading designer and manufacturer of Transmitters and Complete Networks for Analogue and Digital Radio-TV Broadcasting. Features more than 35 years of experience and a worldwide Sales & Assistance Network, already historical partner with premium broadcasting networks in turnkey projects concerning digital broadcasting standards worldwide.



FIAMM

Fabbrica Italiana Accumulatori Montecchio Maggiore (Fiamm spa) is a family owned Italian company with headquarters located in Montecchio Maggiore Northern Italy. The company created in 1942 employs 3.000 people worldwide. Fiamm produces and sells lead batteries for both Automotive and Industrial application and is the world leader supplier of Horns to most automotive customers worldwide. Thanks to massive R&D investment Fiamm is now expanding its activities with several new products : Sodium Nickel batteries for motive and power storage, Oled for automotive and furniture application, Smart Antennas with a first application for Digital Radio : SM10.



Fraunhofer IIS

The Fraunhofer Institute for Integrated Circuits IIS conducts contract research for national as well as international industry and public authorities. Fraunhofer IIS engineers and scientists develop microelectronic systems and equipment along with the required integrated circuits and software.



Harris

Harris Broadcast is an industry leader in delivering the most advanced, content-rich media experiences available for a wide spectrum of radio, television and private media networks around the globe. With more than 25 leading brands including Versio™, Selenio™ and Maxiva™, the company enables media organizations to tap into one of the broadest, integrated product and solution portfolios in the industry. Headquartered in Denver, Colorado, the company is widely recognized for its product quality and reliability, engineering excellence and customer service, and has earned nearly 100 technological firsts and more than 50 awards for technical innovation. For more information, please visit harrisbroadcast.com

PURE

Pure

Pure is the UK consumer electronics company that started the DAB digital radio revolution and now dominates that market worldwide. From pioneering video, graphics and sound products in the early days of PC multimedia to cinema surround-sound systems and best-selling DAB digital radios, Pure has consistently delivered consumer electronics products with an acclaimed mix of high performance and ease of use. Pure's innovative and award-winning products use technologies developed by its UK-based parent company Imagination Technologies.



Rohde & Schwarz

Rohde & Schwarz is a leading supplier of solutions in T&M, Broadcasting, radiomonitoring and radiolocation, secure communications. The Broadcasting division holds the highest share in the global market for the supply of terrestrial transmitters, both for TV and sound. Established in Munich almost 80 years ago, R&S has a global presence and a dedicated service network in over 70 countries.



Screen

Screen Service was founded in Brescia in 1988 with the coming together of technical staff, systems experts and sales staff with many years of experience in the telecommunications sector and is now one of Italy's leading producers of television broadcasting equipment. The aims of the company are on-going research and experimentation in new technologies and new quality standards so as to produce innovative, reliable equipment, the distinguishing feature of which is an excellent quality-price ratio.



STMicroelectronics

ST is a global leader in the semiconductor market serving customers across the spectrum of sense and power technologies and multimedia convergence applications. From energy management and savings to trust and data security, from healthcare and wellness to smart consumer devices, in the home, car and office, at work and at play, ST is found everywhere microelectronics make a positive and innovative contribution to people's life. By getting more from technology to get more from life, ST stands for life.augmented.



Telsat

Telsat is a company operating since 1998 with high capabilities to manage strategic areas as broadcast station engineering (included executive design), complex area coverage analysis, designing, realization and installation of elaborate Radio and TV antenna systems, provision of "turnkey" complete solutions for broadcast systems and highly specialized technical assistance (including on-site customers support).



VDL

VDL deliver broadcasting technologies for Radio and Mobile TV. As both an experienced network operator and broadcast equipment manufacturer, VDL are in the unique position to offer innovative solutions for the development and operation of DAB, DAB+ and DMB networks. VDL are represented in Italy by COMSYTEC COMMUNICATION SYSTEM TECHNOLOGY.



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The new line of Elettronika transmitters devoted to the radio field is the result of the knowledge acquired in the field of Digital TV, where the several installation, the excellent performances and the great reliability found have been the parameters on which our research department has developed the new DAB+ products.

The DAB+ transmitters line, with air cooling, allow to establish low-, medium-, and high-power transmission sites with optimized space requirements.

In a single 42U 19" rack it is possible to assemble a DAB+ Transmitter with power up to 2.3kW RMS before the output band-pass filter.

The high modularity, high power density, reduced weight, fully comply to the strictest installation requirements.

Besides, the high efficiency grants an easily-assessable and fairly contained operation cost.

Thanks to the unsurpassed Digital Pre-correction system of the MAIA DAB+ exciter, and to the high linearity of the amplifiers - obtained through the use of latest-generation 50V devices - the coverage and quality performances of the irradiated DAB+ signal are simply excellent.

An accurate design - with oversized components and the use of at least two separate elements for each critical component - allows the realization of the "native redundancy" concept (power devices, power supply, cooling system) keeping low encumbrances and maximizing the MTBF values.

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About WorldDMB

WorldDMB is responsible for defining the digital radio standards DAB and DAB+ for digital radio and DMB for radio and mobile TV.

Our goal is to promote the standard around the world. We work with sound and data broadcasters, network providers, car, receiver, chip and equipment manufacturers, governments and official bodies to encourage international co-operation and a smooth, coordinated roll-out of services.

Through our network of more than 85 companies and organisations from across the industry and from over 25 countries, WorldDMB is in the best position to assist the transition from analogue to digital radio.

WorldDMB Member Representatives – Linking the Experts on Digital Radio

Member Representatives are the backbone of WorldDMB membership. They are key staff from member organisations involved in digital radio – country or regional managers, sales, technical, strategic, marketing, press- who are connected to the WorldDMB network. Member representatives receive regular industry updates, discounted or free registration to WorldDMB events and access to valuable members only information via the WorldDMB website.

WorldDMB Committees – Involving Members

Only WorldDMB members can join and attend WorldDMB Committee meetings and access all current and past committee documents. The committees provide opportunities for international networking, sharing information and skills and making valuable professional business contacts. They are core vehicles for issue-based interaction on technical, regulatory and spectrum issues. The committees are member-led and self-managed, each with its own programme of meetings, task forces and internal communications.



WorldDMB Technical Committee

- oversees the standardisation of the DAB family of standards
- ensures that receiver equipment and broadcast technologies are compatible
- upgrades and advances the standard in line with technical developments
- looks to the future-proofing of receiver and broadcast equipment

WorldDMB Regulatory and Spectrum Committee

- lobbies to ensure the availability of sufficient frequencies for digital radio
- identifies problems related to frequency availability and works to resolve them
- provides guidance on what works best in the regulatory framework

WorldDMB Asia Pacific Committee

- supports the implementation of digital radio in the Asia Pacific region
- advises on regulation, licensing, technical trials, network build out, marketing and production of new digital radio content
- offers information on business case scenarios, retailers & manufacturers, affordable receivers, marketing & PR strategies

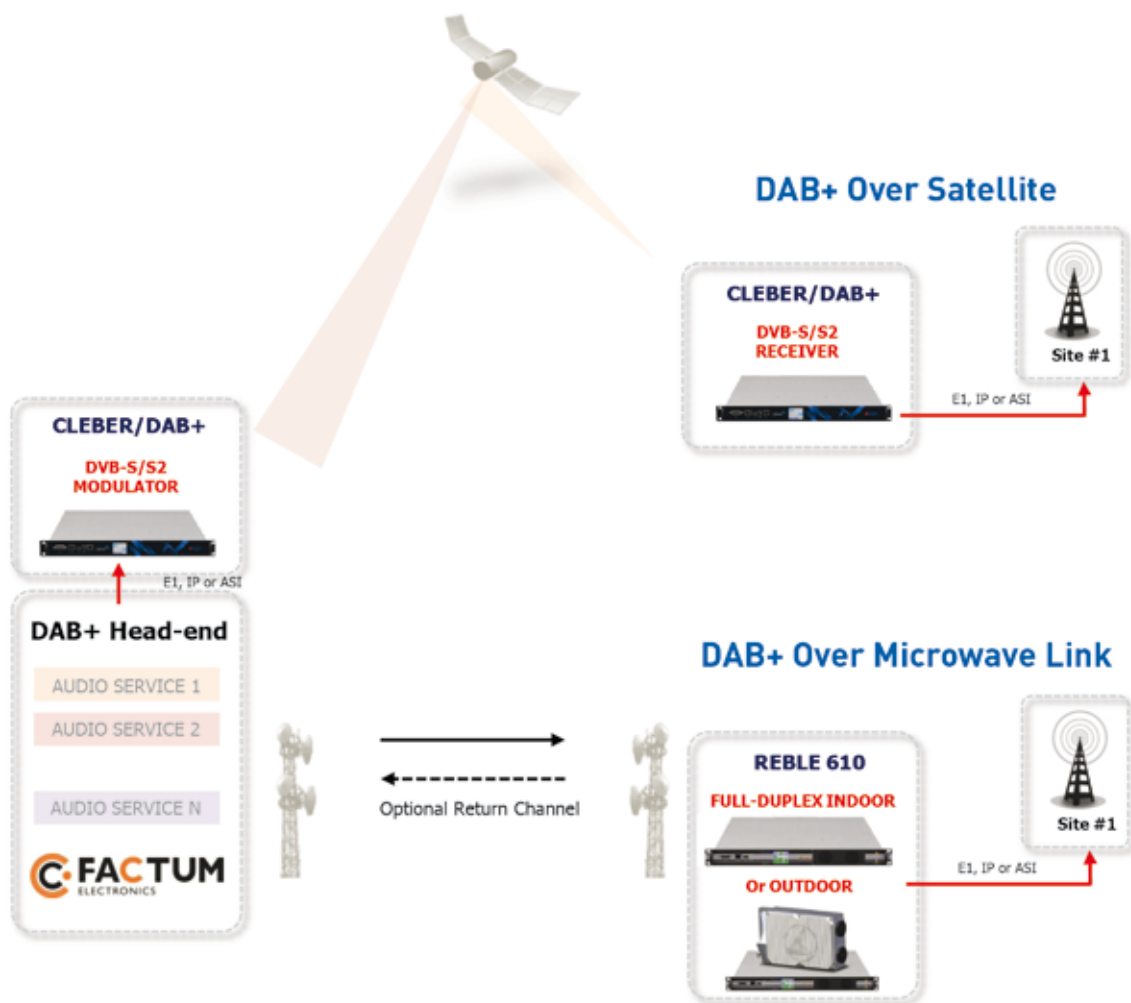
WorldDMB Events

Facilitating exchange on best practice for rollout of digital radio Every year WorldDMB organises over 20 events, conferences, tailored workshops and seminars bringing together industry stakeholders for information exchange and valuable networking opportunities. These include the WorldDMB General Assembly, our automotive workshops in Europe and Asia Pacific and several digital radio workshops that are a part of the industry's major global events and exhibitions (IFA, GSMA, IBC, Telematics Munich, Broadcast Asia). Through these events WorldDMB offers members the opportunity to share best practise, sponsor and promote their products and services.

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WorldDMB Members



t +44 (0) 20 7010 0740 e projectoffice@worldddb.org w www.worldddb.org

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Both technologies combined make Asteroid the most advanced Car Radio in the World.



DAB
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