

Eureka!

ISSUE 11 • MAY 2010

REACHING OUT TO THE WORLD DMB COMMUNITY

Convergence in digital radio

In the current "iPhone era", one often hears from those in the radio broadcasting industry that the iPhone is THE future of radio.

Such mobile platforms are very popular, effectively able to offer a wide choice of content, both linear and on-demand, using attractive visual displays with easy to use applications. Applications offer a new source of revenue and mobile platforms also give advertisers the opportunity to personal and target adverts. In this context, the future of terrestrial broadcasting needs to consider convergence with mobile platforms and other media in order to remain relevant to today's consumer.

Looking in the long term a reliance on personal networks and vertical integrations alone could be mistake for the radio industry. The risk being that, broadcasters are locked into an inefficient system, with a maelstrom of operators and manufacturers controlling the market.

The power of terrestrial broadcast networks is still to offer free to air content in a horizontal way (any device can pick up the signal) and efficient one-to-many distribution. Pressure is also increasing on broadcasters to release broadcast frequencies to mobile operators. It is imperative that broadcasters secure existing spectrum allocations and that the radio industry as a whole, including all of the organisations promoting digital radio, show the compelling case for developing digital terrestrial radio. In Switzerland for example, the public broadcaster has recently announced



In this context, the future of terrestrial broadcasting needs to consider convergence with mobile platforms and other media in order to remain relevant to today's consumer. With the release of new receivers such as the PURE Sensia, shown above, radio convergence is becoming a reality.

that they could achieve a distribution cost per programme in DAB/DAB+ that is six times lower than currently in FM - using 15 times less electricity for the same coverage.

But it is not about trying to dismiss broadband networks - convergence between the platforms is currently the way forward. However there are some challenges in achieving this:

- Keep it simple for the listener; people do not care about distribution technologies; they want to access their content in a simple way. Searching for services and automatic handover between platforms must be developed.
- Agree on radio service specification; Services such as visualisation, programme guides, text services should be aligned between platforms to avoid divergent formats.
- Rely on open standards; the jungle of patents is getting denser in a multi-platform context and one must be

careful to keep it under control and avoid proprietary standards.

- Avoid confusion of standards; Standards evolve and new terrestrial or broadband systems are being developed. In the past confusion over standards has been used by digital radio detractors to postpone the deployment process.

- Have the industry integrate broadcast tuners to receive free to air broadcast content in their products.

Convergence is what is happening now and we must work together to ensure that digital radio is relevant, evolves rapidly and grows to compete with an ever-more connected world.

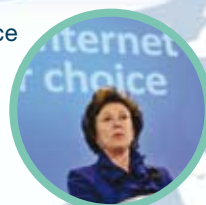
Mathias Coinchon
Vice Chairman of WorldDMB
Technical Committee

If you would like details of WorldDMB membership, including our special academic and small businesses membership schemes, please contact Caroline Brindle at the project office:

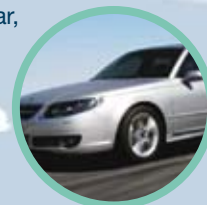
Convergence:
A broadcaster's
perspective,
page 4



Convergence
and the EU,
page 6



DAB in car,
page 9



WORLD
DMB

Letter from the Project Director

In the previous edition of Eureka I mentioned that having visited Australia for the launch of DAB+, my impressions led me to believe that a great deal can be achieved working together! And I am happy to report that WorldDMB's Project Office has been working closely with members.

With input from the Steering Board and the President, the Project Office developed the WorldDMB strategy for 2010 which has already benefited from our 'working together' attitude:

- the European Affairs Committee has been directly affected and with insightful input from key parties is in the process of drafting a policy paper to be launched and presented to the Commission this September
- the new news-ticker on the website, the trial fact-sheets and a new corporate presentation are direct result of the creative collaboration with the Marketing Committee's members
- the work carried out by the Regulatory and Spectrum Committee on the consultation on Report 141 regarding the future of Band II
- the recent work carried out to support the French digital radio industry could not have been done without the close collaboration with our French members

As you see, working together is providing the appropriate level of support and contribution to the Project Office for continuing the successful implementation of this year's strategy.

With this in mind, and with the first quarter of the year complete, I would appreciate your feedback and impressions regarding the running and performance of the Project Office and WorldDMB. Do you think we are doing enough? Should the PO be more or less 'visible'? Should we undertake a more 'marketing/PR' role? I am sure every member has specific needs and interests, but I ask you to please understand that the Project Office has to service all members in a balanced manner.

The financial downturn experienced across the world will continue to be a concern for WorldDMB however membership renewals this year have been



smooth and fast coming with 71 members having renewed including 10 new members, the future looks bright. The ETI Library continues to attract new members from a wide spread of sectors. Many thanks to all members who have contributed with files!

Needless to say that Asia Pacific continues to be of high importance: Malaysia, Indonesia, China, Hong Kong will be the focus of our efforts whilst in Europe, Germany, France and Italy will receive a lot of attention in order to provide as much support as required with their digitalisation of radio.

Convergence is the focus of this issue of Eureka, and it is a topic of particular interest to WorldDMB; convergence is part of the European Affairs strategy; convergence of technologies is key for the car manufacturing industry as well as mobile phones. WorldDMB is working hard to bring these industries to work closer with us for the benefit of digital radio and our members.

By Letty Zambrano
WorldDMB Project Office Director

Italy moves to digital: Trial, Product Certification & Marketing

2010 will be an exciting year for digital radio in Italy. The Council for the Authority of Communications approved regulation setting out steps for the future roll out of digital terrestrial radio broadcasting across Italy.

The market has chosen the DAB family of standards as the optimum platform allowing broadcasters the option to choose whether they use DAB, DAB+ or DMB and all broadcasters will receive equal allocations within the multiplex (72kbits). There will be one national network for the public broadcaster, RAI, and two national networks for commercial radio. An adequate amount of space will also be allocated for local stations and the network operator will be given additional capacity to provide data services. The Ministry of Economic Development will allocate the frequency usage rights to a consortium which will be created from national and local broadcasters.

The final switch off of analogue TV services will be part of the calendar for roll out of digital radio in Band III although L-Band will be used initially. Digital radio in Italy is seen very much as a compliment to current FM services. In the future radio listeners can expect better coverage on digital than is currently available on FM, a wider range of content and improved audio with data services.

There is currently a pilot planned as a joint project between the commercial and public radio stations: Club DAB Italia, EuroDAB and Raiway. This pilot will cover Rome, Torino, Naples and Cagliari by June 2010 approximately nine million people. The project will be extended to cover 50% of the population by 2012 following the switch off of analogue TV and focus on major urban areas and motorways.

The industry has also been working hard to ensure that receivers sold in this

market are suitable for the services which are planned by the broadcasters. To this end the industry is developing a receiver certification process which defines what must be contained in all receiver, the criteria are based on the WorldDMB Receiver Profiles. The receiver certification specifications have been drafted and the market is currently working on developing the testing process which all receivers sold in Italy will have to go through to be certified.

The final part of the mix will be a marketing campaign which will start in September 2010.

Mr. Lorenzo Suraci, president of EuroDAB Italy said "After years of hard work the radio of the future is set to take off, digital will provide new important developments in the radio industry."

Digital Economy Act points to UK Switchover date

On the 8th April 2010 the UK Government passed the Digital Economy Act into law. This historic event was the culmination of the work of the Ofcom Future Radio Project (2007), Digital Radio Working Group (2007), the final Digital Britain Report (2009) and points the way to a potential switch over date in the UK of 2015.

The Act sends a clear signal to the industry as a whole is seen as an enabling piece of legislation allowing not only switch over to be planned but also for Ofcom and all broadcasters can work together to improve and extend digital radio coverage, giving important operational freedom to local and commercial stations and allows for extended licences to broadcasters. Most importantly this piece of legislation was seen as critical for the future of the whole radio industry and is supported by the BBC and commercial broadcasters.

The Act contains seven small but

perfectly formed clauses relating to digital radio:

- The Secretary of State can set digital switchover date(s)
- National licence renewals – including Classic FM, Absolute, TalkSport
- Local licence renewals – all local licences that are also on DAB
- The Secretary of State has the ability to withdraw licence renewals
- Localness deregulation
- Ability for multiplexes coverage areas to be extended/changed
- Renewal of multiplex licences

Radio needs to remain relevant in today's digital, interactive and convergent world where consumers have already embraced digital technology. The UK has ensured investment in a digital future which will offer benefits to consumers including more choice, a better listening experience, functionality and interactivity. The radio industry will also remain

relevant to tomorrow's listeners, able to compete and converge with other digital media in terms of consumers and advertisers time and money. Finally through innovation, manufacturing and retailing the development of digital radio will benefit the economy.

Before final confirmation of a date for switch over it has been agreed that the following conditions have to be met; national and local coverage must be equivalent to FM 98% and 90% respectively and 50% of listening must be via digital platforms this includes DAB and online. It has also been agreed that along with steps for migration of services there must be a focus on the car market where radios will need to be converted or replaced. Work will also continue on reducing the price of receivers and introducing more services on all digital platforms including interactive content. The UK is very much looking to improve the radio sector for the good of everyone.

By Digital Radio UK

Convergence: A broadcaster's perspective

Radio remains remarkably popular with 90% of the UK listening regularly for around 23 hours each week on average. Listening had grown consistently for more than 30 years but the picture has changed over the past 5 years during which radio listening has dropped by around 7%, with a much bigger fall for younger listeners. The reasons are clear. Convergence brings intense competition for people's attention and radio services must embrace digital if they are going to thrive.

All platforms matter for driving digital: Radio broadcast (eg DAB) is efficient for mass broadcast; TV platforms (present in nearly every living room) extend radio's reach; IP is important for on-demand, back-channel services and social media; mobile for portability and convenience. Prominence on these platforms is critical which is why mobile applications and the UK industry working together to develop on the UK Radioplayer matter. The big advance over the next decade will be integration between IP and broadcast technologies fueling a much richer experience for AM, FM and DAB listeners.

Good content will remain critical of course with quality, relevance and creative ambition as important as ever. However, the way that we consume, create and interact with this content is being transformed:

- We are increasingly segmenting radio programmes so that people can find key moments they're interested in. For example, a segment from an interview with the leader of a political party, or the session by Green Day rather than having to listen to the whole show;
- We syndicate audio across high reach

parts of BBC Online and the wider web. For example, we embed segments from the Today programme, the Radio 4 flagship programme, containing news, interviews, business, sport and analysis, into the main news website and share clips of football commentary and comment through the 5 Live Football Player;

- We are making archive content more accessible, for example the past 10 years of the radio programme In Our Time which is proving a big hit.



Melvyn Bragg, presenter of In Our Time programme

- We are showcasing the content that our audience creates, for example '5 live Now' pulls together listeners' texts, pictures, emails, blog comments, tweets and Facebook messages, to appear in real-time along with the discussion on-air.

Radio is becoming increasingly visual. We provide basic glance-able content such as now playing information, programme images, news & sports feeds, links to related content. We film key broadcast moments which can be very effective especially on TV platforms, eg Danny Baker's recent interview with Elton John drew an audience of nearly 1m on the red button. We increasingly support

major events, such as the Glastonbury music festival or Wimbledon tennis tournament or a season such as Radio 1's Bullyproof campaign, to stop and educate young people about bullying, with more extensive filming justified by the large audiences that consume it.

We are also making radio more open and social. One minute in every six spent online in the UK is spent on a social networking site, more than double last year. Twitter has seen major growth over the past year and it plays to radio's strengths - live, thriving on participation, portable and a part of your lifestyle. Eighteen of the twenty most followed presenters in the UK are from the BBC and for some it has become a critical way to source stories and see rapid audience response.

All of this is changing how we produce radio. For example, we look at a series such as A History of the World in 100 Objects as a multiplatform commission with strong TV and web presence running alongside national and local radio programmes. We develop it with a major partner, in this case The British Museum. We place increasing importance on the metadata that we wrap around the audio content so that it can easily be found and have long-term value. We make it available on all platforms and downloadable until the end of the series (9 months). Most significantly, we embrace content that our users have uploaded as a critical part of the offer which in turn fuels new radio programming on shows such as Making History and local TV.

By Mark Friend
BBC

Convergence: and the iPad

The recent launch of the iPad has created ripples across the world. Opinion is divided as to whether it's "just a big iPhone" or a revolutionary new device. Whatever your opinion is, and there has been no shortage of views expressed, it is clear that the iPad demands new apps created specifically for it - which opens up a host of new

possibilities and challenges to web app developers.

Apple has consistently made an ongoing effort to remove layers of complexity from the computing process - the single-button mouse, the integration of iTunes and an iPod into a smartphone, and finally, with the iPad, the removal of the keypad. More and more touchscreen

tablets will be released in the coming months too - all with the view of making computing easier and more intuitive for the average consumer.

Radio apps for the iPhone are gaining great popularity already - and it remains to be seen what will be developed for the Android and the iPad.

The convergent radio... Pure Sensia

Sensia is the world's first high resolution digital and internet-connected radio with a unique, large colour touchscreen which delivers a state-of-the-art and intuitive user-interface.

Incorporating PURE's award-winning 'Flow' technology, Sensia is a revolutionary radio with a large 5.7" 640 x 480 high resolution colour touchscreen. Sensia gives users a unique way of interacting with internet and radio content including: podcasts and listen again services; DAB, DAB+ and FM; a growing set of custom PURE 'Apps' such as weather, news, Facebook or Twitter; and new broadcast material



such as station slideshows. Sensia is also a media streamer enabling users to listen to music stored on a home computer or network storage device via Wi-Fi technology.

Using the touchscreen you can view and interact like never before: scrolling and spinning lists, tapping to select, sliding controls and swiping to change views. Sensia also features PURE Clearsound technology for impressive stereo sound, a handy RF remote control and an input for your iPod/MP3 player. There's also an alarm, countdown and sleep timers, and a headphone socket.

Sensia is PURE's most internationally awarded radio to date. With 28 awards so far, PURE's Sensia has received accolades from six countries in total which include France, Germany, Denmark, Australia, USA and the UK.

The quality of these awards is indicative to the commercial success Sensia has enjoyed, winning Sound and Image Digital Radio of the Year 2010 in Australia; Stuff 5 Star Award in France;



CNET 8.5 out of 10 in Germany; GEAR 5 Star Award in Denmark; and was one of Dave's Top 10 on the popular "Into Tomorrow" radio show in the USA.

Sensia has also received a fantastic response back on home ground, receiving awards including PC Advisor's Best Network Entertainment Device 2010 award, What Hi-Fi? Sound & Vision 4 Star Award, Sunday Times {In Gear} Best Buy Award and Hi-Fi World 5 Star Award.

By Pure

Radio DNS

Radio receivers are changing. They're turning hybrid: a typical radio these days might have access to the internet as well as broadcast technologies like DAB or FM.

Broadcast radio is scalable and reliable, particularly for mobile reception. But the internet offers the opportunity for personalisation and feedback. The future of radio needs to incorporate the best of both worlds.

A small piece of technology called "RadioDNS" has been designed to connect broadcast radio with the internet: to allow all the benefits of broadcast, and all the benefits of the internet. It means that a radio tuning into a DAB service, for example, can automatically discover whether that broadcaster offers additional features on the internet. So, a radio equipped with RadioDNS might be able to offer visuals to accompany radio; enhanced programming information; or ways to bookmark pieces of content that the listener enjoys.

While RadioDNS works with all analogue and digital broadcast technologies - usually without any change to the

broadcast chain - RadioDNS is particularly interesting for broadcasters using the DAB family of broadcast technologies: because it works well with the advanced features that DAB offers, and deliberately bases much of its technology on functionality designed for DAB; so it's quick and simple to adapt for RadioDNS.

Using RadioDNS, over 70 stations in the UK (and more in Poland, Germany and others) are providing visuals as accompaniment to radio - delivering the images over the internet, rather than radio.

Radio

This allows for images to be individually personalised, and has been particularly useful in the UK, where bandwidth considerations have made it difficult to implement DAB Slideshow. The PURE Sensia, the touch-screen FM/DAB/Internet Radio, is the first product that supports RadioDNS functionality, though others are under development.

Nick Piggott was voted as Chairperson of RadioDNS in April. Nick is known by many

throughout WorldDMB, and is a driving force in RadioDNS's takeup, as well as ensuring alignment with DAB. Members of RadioDNS include public and private broadcasters in the US, Australia and throughout Europe, as well as internet radio aggregators, technology providers and receiver manufacturers, as well as the NAB and the EBU. RadioDNS is a not-for-profit organisation, and is in the process of being incorporated in Geneva. It's free to include RadioDNS technology in receivers and software applications.

RadioDNS recently had a booth at the 2010 NAB Show in Las Vegas, and was the recipient of a coveted Radio World "Cool Stuff" Award, which celebrates technologies and services that benefit radio broadcast users. The stand had a high amount of interest from US and overseas broadcasters, and was featured in the 'Daily News' conference publication.

RadioDNS is looking for more Members who may be able to help them move forward; and more Users of the technology. For more details and to download all the specifications, come to the RadioDNS website at: www.radiodns.org

Covergence and the EU

We are living in an ever more connected world. Today it is hard to imagine a situation where we don't have instant and immediate access to information via the internet – which was proven by the transition of 'Google' from a noun into a verb.

In 2009 in the UK, 37.4 million adults (76% of the adult UK population) accessed the internet – an increase of 10.3% from 2008. In Germany in 2009 the statistics show that there were 54.2 million internet users which is a 65.9% penetration, and France's 69.3% penetration was equal to 43.1 million users. The rapid adoption of the internet by the people of Europe has ensured that the issue is very much on the agenda of the European Commission and Parliament.



Neelie Kroes, Commissioner,
Digital Agenda, December 2009

The Lisbon Treaty, which entered into force on 1 December 2009, acknowledges that we are living in a fast-moving world. The Treaty aims to create a more democratic and efficient European Union and states that, "In a constantly changing,

ever more interconnected world, Europe is grappling with new issues... (the EU) needs effective, coherent tools so it can function properly and respond to the rapid changes in the world."

It's clear that this ongoing shift towards connectivity is only likely to increase with time. Technological developments are occurring at a rapid pace – as a report commissioned by the European Commission's DG Information Society and Media shows. The report studies the socio-economic impacts of "an emerging ubiquitous Internet Society... the Internet of Things, of Services, and of people. In short... a world where people, objects and machines communicate seamlessly".

The European Commission believes that the three key drivers of growth for the successful recovery of the economy are smart growth, sustainable growth and inclusive growth. Of these, the first, smart growth, encompasses fostering knowledge, innovation, education and digital society. There is no doubt that a digital agenda for Europe is very much part of the EC's 2020 proposals.

As we would expect, the internet of 2010 is not just for emails and Youtube - social networking has proved itself a force to be reckoned with, with Twitter reckoning that in 2007 there were 5000 tweets a day, which rocketed to 2.5 million per day in 2009. The latest figures reflect a huge increase of 50 million tweets per day.

It's no surprise then that convergence has become a by-word in technology development. The definition of convergence is a term which refers to the combination of two or more technologies in a single device – think taking pictures on your mobile phone, or surfing the web on your TV. An increasingly sophisticated range of technologies are now available in one multi-purpose device. With specific regard to radio, the PURE Sensia was the first colour touch-screen radio on the market and features Facebook and Twitter applications.

In real terms, however, convergence is increasingly how people interact with each other, using various media platforms to connect on a global level. In a world where we can control the television with our smartphone and the refrigerator knows when to order milk, the consumer is increasingly in a position of control and able to choose exactly what he wants to listen to or watch, when he wants, on the platform of his choice. Companies must respond to these empowered customers by creating competitive content, and keeping up with a constantly adapting culture. The impact on social and economic factors is huge, and Europe knows it must keep up with the digital revolution in order to successfully prepare the economy for the future.

By Caroline Brindle

WorldDMB, European Affairs Coordinator

10 questions we ask everyone...

Name: Christian Kjeldsen

Age: 44

Job Title: Project Manager

Company: DAB Digital Radio, Denmark

Office Location: Copenhagen

Responsibilities? Marketing and promotion/roll out of digital radio in Denmark.

Best part of your job? Meeting a lot of extremely dedicated and interesting people from all over the world.

First thing you do in the morning when you get in? Switch on my two computers and then surf radio industry news when I have my breakfast in the office.

What do you have for lunch? Salad and water - need to lose 20 kilos.

First job in radio? Radiohost at Radio ANR in Aalborg, Denmark. This is more than twenty something years ago!

Question you have been asked most this week? When do you return from work today – late as yesterday?

What piece of technology would make your job easier? My own private airborne bicycle parked outside my office on 5th floor of DR Byen in Copenhagen.

Biggest achievement to date? Getting the idea to and producing the first RADIODAYS EUROPE ever + going through the 1,000,000 digital radio sold mark in Denmark.



Next big thing in digital radio? DAB in car and DAB on iPhone/phones and introduction of DAB+

What 3 things would you save from a fire? Fire in the office: my wallet, my laptop and my iPhones.

Fire at home: my credit card, a box with Indian memories and a special painting from my collection.



Digital radio data released in Australia

The first official data relating to digital radio broadcasts in Australia has been released. And the news is very pleasing considering we are just six months past the consumer launch in five major Australian cities.

It shows us that there are 449,000 people listening to digital radio in an average week, around 104,000* digital radios in the market and 80% of people who own a digital radio would recommend it to a friend.

The data was compiled from a variety of sources including data from the official radio industry audience measurement survey company, the Nielsen Company; consumer electronics market research company, GfK, and market researcher, the Hoop Group.

The market information has exceeded the industry's initial expectations - initial predictions were up to 50,000 receivers sold in the first twelve months. It also gives the industry a basis from which to work for the continued marketing, promotion, development and growth of digital radio across Australia.

The main findings from the consumer research** commissioned by Commercial Radio Australia (CRA) show:

- 63% of Australians are aware that DAB+ digital radio has launched in Australia
- 38% of people in metropolitan areas are likely to purchase a digital radio in the next 12 months.
- 80% of people who own a digital radio would recommend it to a friend
- 69% of people who own a digital radio believe it has delivered on expectations
- 74% of people are willing to spend between \$50-\$200 for a digital radio device
- 71% of digital radio owners purchased for the digital quality sound

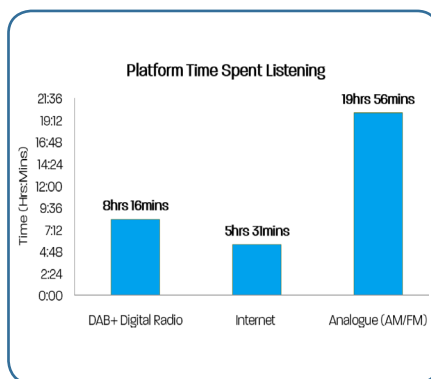
Platform of listening was introduced

to the industry's radio audience measurement system in January 2009 to track listening on analogue radio devices, DAB+ digital radio devices and via the internet. ***

The latest figures show that in an average week nearly 95% of people in the five state capital cities listened to radio. Of those, 3.7% people listened to radio via the DAB+ digital radio platform and radio listening via the internet is 4.2%.

Radio listening on the internet attracted a slightly higher cumulative audience (504,000 people) than digital radio but the time spent listening on the DAB+ digital platform is higher at 8 hours and 16 minutes each week, compared to the internet listening at 5 hours and 31 minutes.

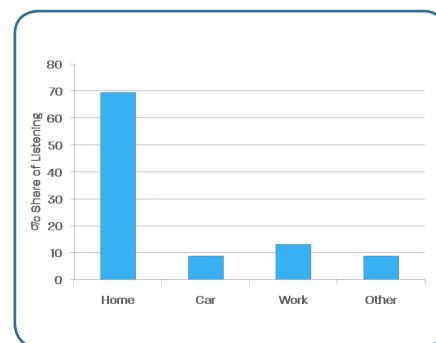
Graph 1: Time spent listening



The fact that time spent listening to digital radio is greater than time spent listening via the internet platform is good news. This is particularly pleasing given digital radio is a new technology, and the internet has been available as an alternative way to listen to broadcast radio for many years.

The data also shows that radio broadcasters in Australia have launched up to 16 new DAB+ only services in each market. Of all the people listening on the DAB+ platform, 20% were listening to the new DAB+ only stations launched by broadcasters.

Graph 2: Where people listen to digital radio



This industry data is being made available very early in the life of digital radio but the industry is keen to ensure that data is measured from the outset, so that we can look back in ten years and see how far we've come.

There are certainly areas that need more work. Things like introduction of digital radio into all cars as standard and the roll-out of digital radio to regional areas so all Australians can access this great medium are both important issues requiring urgent attention. The industry will work hard to ensure these issues are addressed, which will help ensure the future growth of digital radio here and internationally. But we are off to a good start which is good news.

For more information on the data go to www.digitalradioplus.com.au

By Joan Warner
Chief Executive Officer,
Commercial Radio Australia

*In the supply chain (chip maker, manufacturer, retailer) supported by GfK sales data, feedback from manufacturers and recent reports stating Frontier Silicon (80-90% of DAB+ chip market) have shipped more than 100,000 DAB+ chips for the Australian market.

**Research conducted by Hoop Group in late 2009 and early 2010 which surveyed nearly 2,000 metropolitan radio listeners.

***Nielsen Company radio Survey, survey 1,2010, five metro markets

Exciting digital future for Hong Kong

On 11 February 2010, the Secretary for Commerce & Economic Development, in Hong Kong, Ms Rita Lau, launched a call for all interested parties to apply for digital radio licenses using the DAB family of standards. At an accompanying press briefing she said 'in view of the extensive application of digital technology and the recent successful launch of digital terrestrial television services, the Government will now implement digital audio broadcasting'. This application process is based on services using Band III providing either seven services on a DAB multiplex or thirteen services on DAB+. The regulation will not require specific service conditions for example it will not include minimum requirements for services such as special language, religious and arts based programming. Broadcasters receiving licenses however must carry government and public service announcements.

Consideration has already been given to the possibility of operators sharing facilities and network costs while still using the existing seven FM sites. Radio Television Hong Kong has been tasked, as it is currently for FM services, with co-ordinating use of spectrum and will be the network operator in terms of transmitter sites and management of digital radio equipment.

The application period runs until 30 April 2010 and is open to current FM broadcasters as well as any new incumbents. The recommendations on the applications will be made by the Broadcasting Authority to the Chief Executive in Council who will grant the licenses, it is hoped that services will be on-air as early as the end of 2010 or early 2011.

The Digital Broadcast Corporation, Wave Media Limited, (DBC) started a trial using DAB and DAB+ in Hong Kong in December 2009. This trial uses

two transmitters, one at Mt Gough and the other at Beacon Hill, to cover the main urban areas of Hong Kong Island, Kowloon Peninsula and Shatin, reaching approximately 40-50% of the population. This test is currently broadcasting seven audio and some text and visual services, the company hopes to be awarded at least one multiplex operator license.

The future looks bright in Hong Kong for digital radio using the DAB family of standards and it is hoped that the development is continues to the timescales currently anticipated.



Photo © james.cridland.net

WorldDMB@the ABU, Digital Broadcasting Symposium, Kuala Lumpur, Malaysia

The Asia-Pacific Broadcasting union (ABU) held a Digital Broadcasting Symposium in Kuala Lumpur, Malaysia on 9–11 March 2010.

A feature of the symposium addressed how digital technologies enable broadcasters to conduct more efficient operations and provide a wide range of tools to plan future services. The symposium also gave information on how the digital advantage could be harnessed by broadcasters to consolidate operations and to plan for the future considering the current and uncertain economic climate affecting not only the Asia-Pacific region but the whole world.

The symposium offered a unique forum for the broadcasting industry and its key players in the region to not only share knowledge and experience but also a fantastic opportunity for networking and increasing their contacts.

The industry keynote speech addressed the topic of the new face of the broadcaster reminding all attendees of the varied role they all play.

There were several presentations of interest to radio broadcasters with active and focussed participation from some WorldDMB members: system enhancements, new technologies including new features in the DAB family; new opportunities in digital radio services which covered effective radio transmitter technologies and offered attendees some practical considerations in building and operating digital transmission infrastructures; applications powered by new technologies where digital radio delivery of surround sound and receiver technologies for new multimedia applications in the DAB family where discussed; hybrid broadcast broadband, IPTV and online services were discussed covering topics such as why should radio



broadcasters go for digital transmissions; digital implementation by broadcasters and the industry with a good example given on the Australian DAB+ rollout and mobile TV implementation in Europe.

The symposium also had several workshops running simultaneously thus allowing attendees to tailor their day according to specific interests.

For WorldDMB the highlight was the presentation of a special award presented to Joan Warner, CEO of Commercial Radio Australia for the work done in successfully launching digital radio in Australia. WorldDMB congratulates Joan on this achievement.

The symposium also provided a good opportunity for the WorldDMB President and the Vice Presidents to meet in order to discuss and refine strategic plans for the Asia-Pacific region which needless to say continues to be highly important for the organisation.

Letty Zambrano
WorldDMB

DAB in car

Saab says that the all-new 9-5 is the most technically advanced car ever produced by the company. As well as offering a DAB radio, the range of high-tech features on offer includes: an aircraft inspired head-up information display (HUD), adaptive headlights (Bi-xenon Smart Beam), MP3/iPod integration, Harman Kardon audio system, adaptive cruise control, DriveSense adaptive chassis with continuous damping control, keyless entry and starting, dual-zone climate control, adaptive parking assistance, and XWD with electronic LSD.



The new 2010 **Audi A8** is built entirely of aluminium and features some very cool gadgets inside, and the promise from Audi that the A8 will be the sportiest luxury saloon in its class.

The latest generation MMI system has 3D graphics, there's a DAB radio fitted as standard and the multimedia system stores your music on its hard-drive and then displays your albums in the same style as an iPod. The new A8 features night vision with pedestrian recognition, adaptive headlights that work in sync with the sat-nav, adaptive cruise control, speed limit detection, lane change warning devices, parking cameras, and a Bang & Olufsen sound system with 19 speakers.



The new **Lexus F-Sport** grade sports 18-inch wheels and a Lexus IS F-style front grille and rear bootlid spoiler. Features include rain-sensing wipers, HID headlights with AFS, 13-speaker audio system and memory settings for the front seats and door mirrors.

The fast-responding navigation system uses a 40GB hard disc drive, provides Europe-wide coverage and is able to gather live local traffic intelligence in each country to help plot the most efficient route. A further benefit of the HDD system is its 'sound library' function. Up to 10GB of disc space is available for owners to store audio tracks from CD - room enough for about 2,000 songs. All Lexus IS audio systems are upgradeable to receive DAB digital radio.



is proud to bring you
10th ANNUAL

TELEMATICS DETROIT 2010
CONFERENCE, EXHIBITION & AWARDS

COMING SOON! JUNE 8 & 9,
THE ROCK FINANCIAL SHOWPLACE, NOVI, MI, USA

For more information visit

www.telematicsdetroit.com

or contact Telematics Update Team

on detroit@telematicsupdate.com

TEL US t/f 1 800 814 3459 x 7585

TEL Global +44 (0)207 375 7585

- ✓ 1,000+ senior-level executives
- ✓ 85+ expert speakers
- ✓ 40+ vital industry topics
- ✓ 4 focused conference tracks
- ✓ 100+ exhibition booths
- ✓ Interactive workshop sessions

Professional Equipment

New Product - VDL Introduces ETI Monitor for Digital Radio Networks

DABSTOR-E Monitor

VDL (Lyon, France) has introduced a new ETI (Ensemble Transport Interface) monitoring product in its DABSTOR product range. Designed for DAB, DAB+ and DMB applications, the new DABSTOR-E monitors the ETI data stream at the multiplexing centre, or at transmitter sites.

Audio programmes in the data stream are monitored and an individual programme can be extracted and decoded. The Audio signal can be output as an analogue signal or monitored using headphones. All available programmes are shown in list form on the front panel display. Selecting an audio programme displays all relevant information for the VDL (Lyon, France) has introduced two new Data Service Content Managers for DAB, DAB+ and DMB.



PAD-Manager

PAD-Manager processes Programme Associated Data (PAD) content for use with VDL D-AUDIENCE Digital Audio Broadcasting (DAB and DAB+) Audio Encoders. The scalable PAD-Manager server can be used by single stations broadcasting a single DLS service, through to large multi-station installations. The new PAD-Manager provides extensive control over DLS and Slideshow messages. This enables broadcasters to build combinations of DLS and Slideshow services, combining now playing information with news, travel, weather, advertising and competition messages.

EPG-Manager

EPG-Manager provides control over an Electronic Programme Guide (EPG) for use in Digital Audio Broadcasting (DAB and DAB+) and Digital Multimedia Broadcasting (DMB) networks. The scalable EPG-Manager validates, manages, stores and outputs the data in DAB EPG format to a VDL D-VAUDAX Ensemble Multiplexer's NPAD (Non-programme Associated Data) Inserter.



Receivers for Eureka! April 2010

DMB

Pantech Sky Dupont

The Sky Dupont joins the league of luxury mobile phones, with DMB TV, a music player and email capability. With a 3 inch touch screen, GPS navigation, a 3 mega-pixel camera and gold-plated accents, the Sky Dupont is commercially available in South Korea and retails at approx €620.



Cowon J3

With a 3.3-inch AMOLED touch screen with a resolution of 480x272. The J3 features stereo Bluetooth, a DMB tuner, voice recorder and TV-output. With a depth of less than 1cm, it also has inbuilt speakers and a microSD slot. This portable multimedia player is currently available in Korea, from between €125 and €250.

LG KU2100 Mobile Phone

Weighing 121 grams, the KU2100 display has 240 x 400 resolution with 3 inch touch screen and a TFT 256 colour screen. With a DMB tuner, the phone also features Microsoft Windows Mobile 6.5 Professional, and offers Pocket Office, and a 5 mega-pixel camera. Available now, price unknown.





Motorola Motoroi

Korea's first Smart phone powered by Android offers a 3.7 inch high-definition touchscreen, an 8 mega-pixel camera with Xenon flash, a HD camcorder, DMB tuner, and an MP3 player. The Motoroi is Korea's first HDMI capable phone meaning you can play your HD video from your phone directly to your HDTV. Available in Korea, price unknown.

Iriver NY Mini Bike Edition

The Gener8 Rechargeable DAB+ Radio has 10 hours battery life, and its features include 20 station presets, iPod connectivity via auxiliary input and a D-Class amplifier which provides high power efficiency with low energy loss and less power waste. The Grundig is available now from €138.



DAB

Receivers for Eureka! April 2010

PURE Move

This rechargeable radio is a limited edition radio featuring DAB and FM radio, and will run for 40 hours on a full charge. With 20 presets available, textSCAN which offers the ability to pause and control the scrolling text and an auxiliary input for connecting a music player, the PURE Move is commercially available from €100.



Naim UnitiQute

This compact all-in-one home audio unit features DAB, FM and Internet radio, as well as streaming music over a WiFi or Ethernet network. With an iPod connection, the UnitiQute plays WAV, MP3, Windows Media-formatted content, AAC and FLAC from any suitable UPnP device together with WAV, AAC, MP3 and Apple Lossless from an iPod. Commercially available now, retailing from approx €1540.

Magicbox Nocturne XP-2

The Nocturne has recently been upgraded from the original XP-1, and now features DAB, FM and Internet radio. Featuring an integrated iPod dock, the XP-2 can also stream music wirelessly from your PC. Available now, the Nocturne has sleep and snooze functions and retails for approx €170.



Roberts Stream 83i

The Stream 83i offers DAB, FM, Internet tuners and USB playback. The three way speaker system features a built in bass woofer wooden cabinet, and there is an auxiliary input socket for iPod or MP3 play playback. Commercially available from approx €155.

Revo Domino

The D3 has a retro look with an OLED display, and functions include DAB, DAB+, FM and internet radio. Wireless streaming of music files from a PC is offered, and there is an iPod dock. The Domino comes with a free 30 day subscription to Last.fm and is available now from €148.



Grundig Gener8

The Gener8 Rechargeable DAB+ Radio has 10 hours battery life, and its features include 20 station presets, iPod connectivity via auxiliary input and a D-Class amplifier which provides high power efficiency with low energy loss and less power waste. The Grundig is available now from €138.

Kaiser Bass

The Kaiser Baas is a portable, battery powered DAB+, FM digital radio offering radio. It can show the music artist, song title, and other information on the 2-row backlit digital display. With stereo headphone output, auto and manual scan, and Dynamic Range Control that allows you to change the audio output for different listening conditions, the Kaiser Baas is available from €89.



News in brief...

Radiodays Europe 2010

The first Radiodays Europe was held in Copenhagen on 18-19 March 2010 highlights included the keynote by Tim Davies, BBC on the Future of Radio. Peter Sunde the co-founder of Pirate Bay caused a stir on the second day with his call to arms against the traditional music industry and the Belgian trend watcher Herman Konings delivered a thought provoking presentation on the consumer / human. If you missed this year's conference, though with 400 people from 35 countries this is hard to believe, the dates for Radiodays Europe are 18-19 March 2011.

Bayerischer Rundfunk, Bavaria

Bavaria's public broadcaster, Bayerischer Rundfunk (BR), is launching its own DAB transmitter network in Channel 11 allowing all of its ten radio programmes to go digital. The first transmitters will serve the Munich and Nuremberg regions with expansion over the remainder of Bavaria also planned. BR is planning to migrate all of its programmes to the new Channel 11D using the DAB+ format in the future.

EmiTel, Poland

Trials of the DAB family of standards continue with the Polish network operator EmiTel including DAB+ (digital radio) and T-DMB (mobile TV) to Poland. A joint venture has been launched between public and commercial broadcasters, the trial broadcast comprises five public radio stations: Jedyńska, Dwojka, Trojka, Radio EURO and Radio dla Ciebie; seven commercial stations RMF FM, RMF Classic, Radio ZET, Chilli ZET, Tok FM, Radio ESKA and Radio Maryja, plus a DMB mobile TV service from Radio EURO. The trial in Warsaw, Poland's capital city covers approximately 2.5 million people for mobile reception and 2.1 million people for indoor reception.

London 2012 Olympic stations

Special Olympic stations will only be available on digital. The UK regulator Ofcom confirmed that a lack of capacity has ruled out use of the FM or AM networks stating that the majority of services could potentially be on DAB. A 'preliminary expression of interest' was sent out by Ofcom to broadcasters

interested in licences for the London 2012 Olympic games and Paralympics it was felt that demand for short-term licences would be high. By 'gauging the level of demand' the regulator will be able to set out possible designs for the licensing process.

Digital Radio reports, France

In France two reports have been released which show the future of radio is digital via terrestrial broadcast networks. The Hamelin Report from the French Ministry of Culture and Communication written in 2009 was released to the public and clearly states - the future of Radio is digital and DMB-A is a good choice - although it has to be launched at least before the end of 2010. A further report from the network operator TDF also states that listening to radio via mobile networks will result in prohibitively expensive costs for broadcasters and service providers. The study is a clear indicator that mobile networks cannot compete against a dedicated broadcast transmission system such as the DAB family of standards.

Upcoming events 2010

11 May 2010

TPEG-Workshop "Getting in touch with TPEG," Munich, Germany

12 May 2010

EBU-Cognitive Radio Webinar (Online), EBU Members only, Geneva, Switzerland

25 - 26 May 2010

RadioTv Forum 2010, Rome, Italy

8 - 9 June 2010

Telematics Detroit, Detroit, United States

15 - 18 June 2010

Broadcast Asia 2010, Singapore, Singapore

15 - 18 June 2010

KOBA, Seoul, South Korea

3 - 8 September 2010

IFA, Berlin, Germany

9 - 14 September 2010

IBC, Amsterdam, Netherlands

13 - 15 October 2010

Medientage 2010, Munich, Germany

15 October 2010

Radiofest, National Radio

Conference, Melbourne, Australia Show, Jakarta, Indonesia

October 2010

ABU General Assembly, Tokyo, Japan (TBC)

19 - 21 October 2010

Seil and Satis Le Radio, Paris, France

21 - 23 October 2010

Broadcast India 2010, Bombay, India