

## **ABU – Digital Radio Convention**

### **Possibilities of Value-added Digital Radio Broadcasting**

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The emergence of new multimedia platforms, like iPod, PDA, web-blog, SMS, Internet etc. has changed the habit of information reception. Audiences become producers; they are taking an active role in personalizing their schedule, content and even receiving devices. They are exposed to more sources of information. In face of this digital challenge, what can digital radio services offer to save the guard? What can be best done with this new technology?

The digital radio broadcasting develops rapidly in Europe. In UK, the market is getting mature with 13.6% of adult population has a DAB digital radio at home. A wide variety of digital radio services are now available across the UK. The DAB coverage in Denmark has also reached nearly 100% and there are about 450,000 DAB listeners in Denmark. Other non-European countries including Canada, Singapore, Taiwan and Australia have launched operational or pilot services, China and India have also begun their experimental services. The digital radio technology has already been developed into an irreversible global trend, which has turned a new page for radio broadcasting.

In Hong Kong, Radio Television Hong Kong commenced tests for digital broadcasting in 2004 using Digital Radio Mondiale (DRM), the digital system for shortwave and AM. Last year, the Europe's Eureka 147 Band III system was also adopted. During the trials, 7 RTHK's existing AM and FM channels were tested for the audio, text and image broadcasting with this new technology. Trial points were set up at different locations for the public to experience the high sound quality of this technology. Beside the trials on technology, RTHK also made some efforts in developing programmes with advanced digital technology. The radio drama "Tai Cho" has firstly adopted the Circle Surround 5.1 sound effect to provide the best audio quality comparable to theatre effect. Listeners with digital radio and home theatre set will be able to enjoy the richness of digital audio effect.

The DAB/DMB technology offers a robust form of transmission in the broadcasting industry, using digital compression technology to deliver not only audio but also text, pictures and data by reducing transmission bandwidth requirements, as well as storage requirements. Since the system serves an area by using one single frequency, more radio channels can be accommodated as well. With the digital technology, audience can get far more robust reception and hiss free sound if you are within a good coverage area.

On the other hand, we also notice that the introduction of this digital technology has challenged the concept of radio. The latest development of DAB allows the broadcast of Electronic Programme Guide, which provides 7 days of programme information and allows users to record a particular show automatically like using a VHS for TV service. With a suitable device,

users can pause or rewind live DAB services if listening has been interrupted or something has been missed. After the interruption, users can continue from the point at which they left or rewind to retrieve the missed parts. The time constraint of radio broadcasting is lifted. Similar to the concept of Podcasting, listeners are able to take more control in their own schedule and programme. According to the information of WorldDAB, there are already different models of DAB receivers available in the market. Companies like BT, Hitachi and I-Tech Dynamic are making digital radios with Pause/Record/Rewind functions.

Radio set is also no longer the only listening device; a DAB receiver can appear in a form of set top box of a digital television, like the Freeview in UK, a bedside clock, a CD player, a clock radio, a hi fi tuner, a mobile phone or even a digital camera when a DAB chip is installed. Radio broadcasting is now getting more into people's daily life. People can tune in wherever they like. It's time for broadcasters to think of what we can offer to enrich and color radio experience and to draw attention from the younger generation.

With all these special features of digital radio technology, more value added services for radio broadcasting are now made possible. The function of transmitting audio message together with text, pictures and data with a suitable DAB device has constituted a major breakthrough in the concept of radio service. Producers can jump out from the audio box to think of more creative ideas to enrich their programmes.

Traffic news can now be complimented by text messages showing all the key information and even a map indicating the location to facilitate listeners' understanding on the situation. The scrolling text function can also be used as a plot summary to a radio drama, song's introduction, guests' or presenters' profile, news headlines or financial news updates. Listeners will find it easier to catch up and understand the programme content; especially when they tune-in in the middle of a programme.

More interactive elements can also be added to the radio programme by making use of the screen on the DAB receivers as a communication platform (i.e. screen on a radio, mobile phone or digital TV). For example, a quiz game or a poll can be done via the screen by printing out all the questions and answers or participation methods. Screen dynamic text and graphics for different programmes can also be developed for promotional purpose. The radio experience is getting more comprehensive. However, one should always bear in mind that the value added messages or images should always be supplementary to the content and the audio effect of a radio programme. Turning radio to be a lower grade television is definitely something that we don't want to happen.

These revolutionary changes in radio services have enriched the radio experience in many ways. However, as stated by BBC in its *DCMS Review of DAB Digital Radio -The BBC Submission* in 2004, "the extension of listening choice is fundamental to driving take up of DAB, with wider choice consistently cited by digital radio owners as the main reason for buying sets". Content choice is still listeners' major concern.

In UK, upon the introduction of DAB technology, more radio channels could be accommodated, which also makes room for the rise of more commercial broadcasters. Now, there are already more than 50 radio channels in London. However, surprisingly, the types of programme haven't been diversified in the same rate. Except the 11 channels provided by BBC, most of the commercial radio channels are dedicated for music and entertainment programmes, only a few of them provide minority programme services like culture, children, classical music or gay programmes. It can mainly be explained by the commercial nature of the broadcasters. They are profit-driven with focus on the audience size and the subsequent advertisement revenue of each programme. Programme quality is not their main concern. They are not "selling programme"; they are "selling audience size" to their clients. As a result, there is a greater degree of concentration on profit making programme, like music, despite the expansion of radio services.

Under this condition, the role of public broadcasters is very important. It shall take the lead to balance and diversify the types of programme in order to meet the needs of a broad spectrum of audience. In the case of UK, BBC has 11 channels providing diversified services from pop to fine music, news to entertainment, literature to pop culture, education and sports etc. Out of the 11 channels, 6 are its existing analogue networks, 5 are the newly established digital radio stations to meet audiences' needs. The introduction of the digital technology makes room for more channel possibilities. Broadcasters should make efficient use of the spectrum to provide high quality and diversified programmes; so that the interest of the minority group can also be addressed. More importantly, listeners will only tune in when there are quality programmes.

The rise of new multimedia platform is always seen as a threat to the public's affection for radio broadcasting; however, on the other hand, we can always make use of their special features and popularity to add value to, break the time limit and extend the reach of radio service. Cross media convergence is emerging as a new form of power in the broadcast industry. A radio programme can be repackaged as a podcast version or archived online for listeners to download to their iPod, MP3 or computer for later enjoyment. More interactive elements can be added into the programme as well. Topics raised in a radio programme can be further discussed in an online chatroom. Listeners can have a direct interaction with presenters by inputting their questions, ideas or feedback via SMS, Messenger or Internet during the programme. Presenters can also develop a special webpage or a web-blog to communicate with audience off-air. By doing so, radio can break its restrictions in time and presentation format to offer more comprehensive and interactive services.

Multimedia platforms are popular communication channels among the younger generation. It is easier for radio extend its reach to youngsters by using their common language and hence getting rid of the "old-fashion" or "outdated" image. With the help of Internet, radio programmes can even break the geographical limits to enter overseas markets. Overseas listeners can easily listen to the live webcast of the programme or download it later to their multimedia devices. It's a good channel for broadcasters to build connection with overseas listeners.

In 1990s, RTHK noticed a rapid growth of multimedia industry and understood that it's

important for broadcasters to keep abreast of the times. We launched our Internet radio service in 1994, the front-runner in Hong Kong online media industry. Since then, the website has become an important platform for RTHK to bridge with local and overseas web-surfers. Now, we have got over 26 millions hits per day, with 30% from overseas. In 2002, RTHK-on-Internet rolled out a PDA version. Short excerpts of TV programmes and News in SMS have been launched on 3G mobile phones services in 2004. In 2005, we started a PodCast Corner with dozens of video and audio podcast feeds targeted at compatible devices. Listeners can then choose their own listening schedule and programme. Special webpage has also been set up for individual programmes to offer more supplementary information, games, programme archives to the public, for example the “Go Go Korea” and “Mad About Mozart” programme.

The rapid development of digital technology has offered more rooms for technological possibilities to enhance the radio experience. However, broadcasters should never forget the essence and uniqueness of a radio. Why radio can survive among the existence of TV, printed media and recently the multimedia platforms for so many years? It may be mainly because of the magical connection between listeners and presenters in this simple audio world, at where you can have your own imagination and privacy, at where you can participate without disclosing your identity, at where you can listen to the music, updated news and other useful information wherever you are. The unique multi-tasking nature of radio allows you listening to the radio programme when you are cooking in the kitchen, bathing, jogging, driving, reading or eating. Value-added digital services are only supplementary and complimentary to the radio programme itself. Broadcasters shall get prepared for the digital challenges and improve its services from time to time. However, they shall always remember that content is still the king. Only quality programmes can draw listeners’ attention. Let radio be radio. This shall always be our greatest weapon to save the guard.

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