

THE BENEFITS OF DIGITAL RADIO from the perspective of DIGITAL RADIO MONDIALE (DRM) Standard

Radio has been going on for over 90 years. About 70 years ago FM was born. It took a long time for FM to take root and it is really in the past 20-30 years that opening up of the FM bands and the surge of commercial FM stations have added to the popularity of the standard. Analogue transmissions on FM provides good quality stereo programme but it is not only inefficient when compared with digital systems but also sufficient frequency spectrum is not available to increase the number of channels in a city.

FM is very spectrum hungry and already the FM stations are placed like “sardines” in many places causing interference and confusion, especially when the content is so similar. The other great disadvantage is that FM is by definition low power and limited coverage. It is really meant for cities or parts of cities. In India, even after the finalisation of the third FM introduction phase, only about 30 to 40 % of the population will have access to FM stations. It also means that once you leave one of the cities covered by FM and you are on the road there is no more FM.

In short FM is a very successful standard but in truth it has reached its spectrum, coverage and improvement limits. It is a 20th century good technology which in time has to be and will be replaced by the digital, compressed, enhanced features of digital radio. As the major media platforms are going digital, for interoperability, feature enhancement and easy access digital radio will replace analogue.

The digital standard already chosen by India, Digital Radio Mondiale (DRM) is the only digital radio standard covering both large areas (DRM30) and offering an FM digital alternative (called DRM+). DRM30 and DRM+, like two sides of the same coin, are known as DRM, a standard recognised by ITU, used internationally and promoted by the non-profit DRM Consortium.

Without a shred of doubt DRM offers the complete solution for digitizing radio in all bands used for radio broadcasting: SW/MW/FM and other VHF bands (band I, II and band III) and can be of use by both public and private broadcasters for national, regional, local and international coverage.

Radio, as a gatekeeper-free, one-to-many broadcasting solution, is here to stay. Audiences are still going up in many countries because radio offers a distinctive, personal, often on the move experience.

So what can digital radio offer that is not available already in the analogue world? From a listener's perspective digital means a wider choice of stations, languages and content, (while not losing the analogue offer). The sound is also better as you can enjoy hiss and crackle-free digital quality sound not only in FM but also in short wave and medium wave. In effect digital sound becomes high quality in all bands, no matter if you listen to a faraway broadcaster or your local station. Also there is no more fiddling with buttons and trying to remember frequencies. You simply have to push a button and your chosen station follows you like a faithful pet, not the other way round. You get to your favourite station just by choosing its name, simple!

Digital radio also give you access to digital features like information on what you are listening to, whether generated by the radio station or from the internet, pictures, video, content in several languages simultaneously, emergency warning in case of disaster and so much more.

DRM+ system is also capable of transmitting 5.1 surround sound signals to enable radio listeners to enjoy the same quality as listening in a cinema theatre.

DRM is a cost efficient solution all along the value chain. It uses spectrum more efficiently, offers extra opportunities for revenue generation and uses less power (by at least a third) so it is a genuinely "green" option.

Digital radio is about making exciting, multi-lingual content available and so compelling that the listener will want to acquire a new digital receiver, whether it will be a new funky standalone, a car one or a digital enabler in mobiles, PDAs or tablets. And broadcasters, manufacturers, regulators and all supporters of digital radio have to be ready with a credible and affordable offer.

Having chosen DRM 30 for the medium wave and short wave transmissions the natural step for India is to opt for DRM+ in FM. There is no either or between FM and DRM+. A careful and wise rollout plan will help with the introduction of digital VHF in a planned and economical way.

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10/12/2012