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Cc: "Claudy, Lynn" <LClaudy@nab.org>
Date: Mon, 28 Oct 2024 22:16:40 +0530
Subject: Comments on consultation paper no. 14/2024
===== Forwarded message =====

To: Shri Deepak Sharma, Advisor (B & CS), Telecom Regulatory Authority of India
Subject: Comments on consultation paper no. 14/2024, on formulating a Digital Radio Broadcast Policy for private Radio broadcasters

Please find below some comments from the National Association of Broadcasters, Washington, DC, to questions 1-7 from the subject consultation paper.

Sincerely,

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Q1. Do you agree that single digital radio technology adoption is preferable for entire country? If not, support your reply with justification.

>> The US adopted a single digital radio technology in 2002, the in-band/on-channel (IBOC) HD Radio system licensed by Xperi Corporation. US broadcasters were strongly supportive of having a single digital radio technology, recognizing that the ubiquitousness of broadcast services relies upon having a single transmission standard, and that multiple standards would inevitably result in a fracturing of the broadcast marketplace.

Q2. In case a single digital radio broadcast technology is to be adopted for the entire country, which technology should be adopted for digital radio broadcasting? Please give your suggestions with detailed justification.

>> For the FM band, HD Radio technology has proven to be a robust and capable digital delivery system in the US and would be a smart choice for India, as well. HD Radio allows a broadcaster to fully leverage their existing investment in a station's infrastructure as it operates on the same broadcast frequency and is designed to serve the same coverage area as existing analog services. It also offers a plethora of new services such as multicast channels, private or public data broadcasting, and enhanced emergency alerting. Auto manufacturers worldwide are producing vehicles with HD Radio receivers so it is likely that vehicles in India could quickly deploy this technology.

Q3. In case multiple digital broadcasting technologies are to be adopted, please specify whether it should be left to the market forces to decide the appropriate technologies and what could be the potential problems due to adoption of multiple technologies? Please suggest probable solutions to the problems, with detailed justification.

>> Due to advances in software-defined radios (SDRs) it is possible for a single receiver design to support multiple broadcasting technologies. So, for example, it would be possible for a single receiver to operate with one technology when tuned to the AM band and a different technology when tuned to the FM band. Use of SDRs would be one way for the marketplace to support appropriate and different technologies for each radio band.

Q4. What should be the approach for migration of existing FM radio broadcasters to digital radio broadcasting?

>> The migration from analog to digital services in the FM band is best accomplished using the HD Radio system. Its in-band/on-channel (IBOC) architecture means that listeners are not disenfranchised as digital services are initiated as the traditional analog signal will co-exist with the new digital signal. Then, as market penetration of digital-capable receivers increases, more and more listeners will be able to take advantage of the additional services provided by digital radio.

Q5. What should be the timeframe for various activities related to the migration of existing FM radio broadcasters to digital radio broadcasting?

>> As digital radio technologies are mature at this point, the sooner migration to digital services begins the better. This is especially important for consumers as the earlier the migration begins, the sooner a critical mass of digital receivers will exist in the marketplace, and the sooner broadcasters can deliver enhanced digital services to listeners.

Q6. Please suggest measures that should be taken to encourage existing FM radio broadcasters to adopt digital radio broadcasting.

>> To the extent that the government can subsidize the conversion costs of upgrading analog radio stations to digital, this would be a great incentive for FM broadcasters to support digital radio broadcasting. In the US, many public radio stations were able to convert to digital in the early 2000's as a result of grants awarded by the Corporation for Public Broadcasting (CPB), which is partially funded by the US government.

Q7. What measures should be taken to facilitate the availability of affordable digital radio receivers?

>> Avoiding a prolonged deliberation on which digital radio technologies to adopt and encouraging rapid adoption by broadcasters would contribute to a more rapid deployment of digital radio devices, as the increased demand by broadcasters and consumers to utilize digital radio would increase demand for devices and ultimately lead to devices that are more affordable. This trend has been demonstrated time and again as new digital services have been introduced, and digital radio should benefit in the same way as have, for example, digital TV and digital cellular communications services.