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Xperi's Written Comments to TRAI's September 21, 2023
Pre-Consultation Paper on Inputs for Formulation of "National Broadcasting Policy"

BACKGROUND

On 21st September 2023, the Telecom Regulatory Authority of India (TRAI) issued the Pre-Consultation Paper on Inputs for Formulation of "National Broadcasting Policy" ("**2023 Pre-Consultation Paper**"), pursuant to the Ministry of Information and Broadcasting (MIB) 13th July 2023 letter seeking, inter-alia, the TRAI's recommendations on formulating the National Broadcasting Policy for India.

In the 2023 Pre-Consultation Paper, the TRAI sought comments on the structure of the National Broadcasting Policy that would be consistent with India's National Digital Communication Policy 2018. As stated in the 2023 Pre-Consultation Paper, in addition to radio broadcasting, the scope of the National Broadcasting Policy should cover electronic, print, and digital media, along with content creation, delivery, and distribution.

INTRODUCTION

Xperi Inc supports TRAI's consultative process inviting comments/observations from stakeholders for the formulation of "National Broadcasting Policy." Digital radio broadcasting is transforming radio operations across the world. Many digital technologies are providing new services and content to consumers. Analog radio is losing ground to these digital services and losing audience share in many markets. To compete, radio stations around the world are converting to digital radio broadcasting systems.

Xperi has worked with radio broadcasters and digital radio technology for decades. Our HD Radio™ technology, which is used by over 2800 AM/ FM stations in the U.S., Canada, and Mexico, offers many advantages like spectrum efficiency, sound quality, new content services, reliable emergency warning systems, multicast of multiple audio channels, and simulcast transmission of digital radio and analog radio broadcast signals together in the same frequency.

Based on our experience, we think that policy decisions that allow broadcasters to implement analog as well as digital broadcasts on their frequency assignments offer many benefits. For example, TRAI's recommendation allowing stations to voluntarily implement a digital radio transition, in addition to providing new audio channels and enhanced alerting and warning systems, will permit the continuation of analog broadcasting for 900+ million existing mobile receivers and will create the future for digital broadcasting programming.

Xperi agrees with TRAI that digital radio transition for new stations should be implemented in a reasonable time period and without added regulatory burdens. Additional guidance on the questions raised in the Issues for FM Radio Broadcasting, will also prevent other technologies from eroding radio listening. For instance, other jurisdictions have benefitted from considering the following topics:

- Why analog radio is losing ground to digital services and losing audience share in many markets.
- What services and content other digital technologies are providing to consumers.
- How digital broadcasting is transforming radio operations across the world.

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- How to help radio stations compete and increase monetization of the spectrum, by supporting the conversion to digital radio broadcasting systems, like HD Radio, to offer supplemental services and additional audio channels.

RESPONSES TO PRE-CONSULTATION PAPER 2023 QUERIES

Xperi's responses to the specific questions raised in the 2023 Pre-Consultation Paper, as they relate to digital radio, are provided below.

Q1. Stakeholders are requested to provide their comments on the possible structure and content for National Broadcasting Policy, clearly outlining the specifics along with the justification. The comments may explicitly include the following titles/heads:

- ***Preamble***
- ***Vision***
- ***Mission***
- ***Objectives: Goals & Strategies***

The stakeholders are requested that against each suggested objective, possible goals and the strategies may be explicitly provided.

Response 1

As a preliminary matter, Xperi believes that the following approach taken by several key markets (U.S., Canada, and Mexico) that have adopted HD Radio™ broadcasting would be beneficial for Indian digital radio broadcasting:

1. Creating a broadcasting policy that benefits the public interest, which will be served by the introduction of digital radio;
2. Formulating and adopting a government-supported transmission standard that allows universal operability of receivers (including existing receivers) by promulgating a standard that includes all of the technical elements of the In-Band-On-Channel ("IBOC").
3. Facilitating an orderly transition to digital radio by promoting the development of digital radio broadcasting that provides listeners the maximum benefit of digital radio while considering the following benefits:
    - Efficiency of spectrum use;
    - Preservation and promotion of broadcast radio; and
    - Increased diversity of programming and services.

Our specific comments on the titles/heads asked in this question, are given below:

Preamble

Radio signals are presently transmitted in analog mode in India. Analog radio broadcasting, when compared with digital broadcasting, is less efficient and faces some operational restrictions. Digital radio technologies, such as HD Radio, have been developed to overcome the issues faced in analog broadcasting

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while providing additional capabilities. For example, HD Radio provides spectrum efficiency, higher sound quality, and more reliable emergency warning messaging.

Vision

The TRAI has the rare opportunity, through this present initiative, to ensure that the advantages of new technologies, such as digital radio, are made available, accessible, and affordable to everyone in India in a non-discriminatory manner. By introducing digital radio in India through a proven solution like HD Radio/IBOC the TRAI would facilitate the creation of an ecosystem of digital radio broadcasting services through policy formulation, regulatory intervention, and fiscal incentives.

Mission

The TRAI should promulgate a policy that (a) ensures a smooth roll out of digital radio in a phased manner without causing disruption or high cost while ensuring quality of service; (b) enables an eco-system that propels digital radio technologies through IBOC to harness the power of this sector; and (c) secures and safeguards the interest of the users.

Objectives: Goal and Strategies

Analog radio is losing audience share to emerging digital services in many markets. To compete, radio stations around the world are converting to digital radio broadcasting systems. In our experience, plans that allow broadcasters to implement analog as well as digital broadcasts provide efficiency and flexibility to keep radio successful.

We believe that TRAI should recommend a policy that supports the transition of FM operations from analog to hybrid analog-digital broadcast services because it will ensure the least disruption and a smooth transition to digital radio broadcasting. This approach can be introduced in simulcast mode initially while reducing the analog transmission gradually. This will also ensure sustainable revenues for the existing radio broadcasters thereby encouraging them to adopt digital broadcasting.

The digital radio ecosystem may take some time to gain scale and some additional investment is required for broadcasters to grow their businesses. Accordingly, we believe that any licensing policy be thoughtfully considered to encourage adoption of digital radio.

Q2. Stakeholders may provide specific comments and suggestions for identifying objectives, goals and strategies for National Broadcasting Policy

Response 2

Based on our experience working with regulatory agencies in multiple countries that have created national policy for digital radio operations, we suggest the following topics and goals for consideration in the National Broadcasting Policy:

- Digital Radio Broadcasting is in the Public Interest
- Digital technology possesses significant advantages over current analog broadcasting
- Digital radio services should ensure a seamless transition from analog to digital
- Digital radio services which facilitate the introduction of enhanced auxiliary services

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- Digital radio services which minimize regulatory burdens on MIB
- Establish interference protection criteria to ensure the compatibility of all radio stations, both analog and digital, during and after the transition period.
- Establish, *ab initio*, a transition plan that provides appropriate protection for analog radio for an interim period but also fosters the transition to an all-digital environment.
- Adopt a digital radio broadcast transmission standard that will ensure that all digital radio broadcast receivers in India are compatible with all digital radio broadcast transmitters, and will enable the continuation of a ubiquitous and free radio service in India.
- A digital signal must have minimal impact on co- and adjacent analog and digital stations.
- A digital signal must have minimal impact on the host analog station.
- A digital signal must serve an area comparable to a station's current analog coverage.
- The digital radio broadcast system should be able to accommodate future upgrades and features.

These recommendations are derived from specific questions and wording from policy documents in other markets. Addressing these topics in the National Broadcasting Policy will set a clear roadmap for the adoption of digital radio operations in India.

Q3. Stakeholders may also suggest any other issues which should be considered for formulation of National Broadcasting Policy, along with detailed justification.

Response 3

Xperi supports modernizing the emergency alerting infrastructure in India and encourages TRAI and MIB to include digital technologies in any future emergency alerting guidelines. As the originator of HD Radio technology, we have witnessed how compatible digital radio broadcasting can enable further emergency alerting development.

Digital emergency alerting is available today and rapidly becoming an essential part of the emergency alerting ecosystem. The government's efforts to improve the nation's emergency alerting system should consider enhancing individual elements of the alert, such as readability of the visual component, sound quality of the audio component, alert information conveyed, accessibility for persons with visual and hearing disabilities, and accessibility by persons from other language groups.

Other countries and regulatory agencies are addressing how to relay visual information through emergency alerts. TRAI and MIB should continue using digital radio broadcasting technology as a model for the future emergency alerting infrastructure and should actively incorporate the digital radio emergency alerting protocol into its enhanced emergency alerting plans.

SUMMARY

Xperi believes that a national broadcast policy should address the standardization and regulatory guidelines for digital radio operations in India. We encourage dialog between government stakeholders and the radio industry to adopt a policy which addresses the interests and concerns of the industry for sustainable operations and growth. Our comments are offered in the context of promoting a successful transition to digital radio based on the experiences from other markets.

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Respectfully submitted,

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