Shri Deepak Sharma Advisor (B & CS) Telecom Regulatory Authority of India

Subject: Industry comments on formulating a Digital Radio Broadcast Policy.

Reference: Consultation paper on formulating a Digital Radio Broadcast Policy for private Radio broadcasters released by TRAI on 30.09.2024.

Dear Shri Deepak Sharma,

Greetings from Centre of Excellence ? a project at CDAC Noida under the aegis of MeITY and UP Government. We are a design and development lab working on the area of Electronics Accessories and products like Powerbanks, Chargers, Wearables, Hearables and Digital Radio.

You can find more about us at <u>https://www.coenoida.com/</u>

The objectives of Centre of Excellence are :

- 1. To set up appropriate infrastructure for R&D, design, development and testing of products related to mobile handset accessories and other electronic items based on Li-ion cells
- 2. To provide an ecosystem for innovation to thrive and embrace entrepreneurship by providing facility for validation and incubation for start-ups, entrepreneurs and SMEs
- 3. To build industry capable talent by conducting trainings & workshops as per the industry requirements
- 4. To energize research mind-set and reduce costs in research and development by providing neutral and interoperable, multi-technology stack laboratory facility
- 5. Standardization and Testing support for in-country and global needs

Our mission is to develop local capability and ensure lower import dependence . In this regard we approached all digital radio standards and finding available solutions of Soc from HD Radio worked extensively to develop products and test them.

We thank you for initiating this consultation paper and believe the right choice is critical especially from the point of view of mass adoption or rollout. These are critical choices and given our extensive experience on working with hardware and software solutions for Mobile and Accessories including Audio we are primed to provide input.

The following are our comments on the concerned matter for your perusal:

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.

We at CoE advocate for a single-standard digital radio technology across the country. The technology should be scalable globally to provide a valued domestic and export market to Indian players . It needs to be mature, proven, implemented, and have compatibility across devices like Bluetooth speakers, and mobile devices.

We have worked with HD Radio chipset and modules, and it qualifies for the above parameters and should be implemented in India . Its important for Policy makers to give a definitive choice of platform so that development costs and supplier ecosystem can embrace and absorb the initial costs.

A single standard and in this case HD Radio will benefit because of a) Faster ramp of device ecosystem due to their mature Soc and Solutions available in the world b) Lower costs as HD FM device Solutions are shipping in various form factors globally. C) Large mature export markets available for the Indian manufacturer.

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.

The decision for multiple or single technology adoption is nuanced basis the sector. FM Radio is the only analogue medium and delays in scale of AM due to ecosystem development has further stymied the adoption. Usually market forces are the best to decide, however we believe that without a clear choice in this case the sector and policy will lead to a still-born execution. The potential problems would be a) Huge cost escalation and choices that lead to no adoption by broadcasters and devices ecosystem b) Development of solutions are more complex and thus design development suffers c) Certain categories like Smartphones and Mobile phones have limited real estate and would not invest in a unclear technology d) The HD Radio ecosystem is mature and can lead to immediate export market leading to higher volumes and thus lower costs of solutions for the Indian consumer.

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

We recommend the following :

- **Subsidy to adoption** of Digital radio solution with in products. Eg if a BT speaker incorporates Digital Radio solution it stands to earn higher design and production incentives.
- Standardisation and certification ? Ensure that domestic designs and supplier ecosystem is protected from predatory practices from neighbour country practices. This maybe done by global best practices of certification being adopted.
- Collaboration with chipset manufacturers: By ensuring economies of scale and offering compatible chipsets at a low cost, manufacturers can easily integrate the technology into various form factors. These actions will make HD Radio receivers accessible to a larger population.

We at Centre of Excellence have created a robust ecosystem of BT Speakers ranging from 5W portable solutions to 100W Tower speakers for a small party combining existing designs and UI that?s all India developed . These are ready to rollout at affordable prices and look forward to contribute to this technology adoption.

<u>Thanks & Regards</u> Ramashish Ray CEO, Centre of Excellence (CoE)