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**U.S.-India
Business Council**

March 23, 2023

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Re: Consultation Paper on Issues related to FM Radio Broadcasting

Dear Shri Anil Kumar Bhardwaj,

Since our inception in 1975, the U.S.-India Business Council (USIBC) has tirelessly promoted an inclusive bilateral trade environment between India and the United States and consistently advocates for a strong, strategic bilateral relationship in support of entrepreneurship, job creation and economic growth. Among other things, we engage in stakeholder dialogues to ensure that India's economic growth flourishes based on light-touch regulation and international best practices. USIBC is an integral part of the U.S. Chamber of Commerce, the world's largest business advocacy organization, operating in over fifty countries to promote free enterprise and advance trade and investment. USIBC represents some two hundred companies of every size from multiple sectors based in India, the U.S., and other like-minded nations.

USIBC members include broadcasters, telecom operators, equipment manufacturers, systems integrations, and companies reliant on secure, trusted, and efficient global communications networks. Our members also include e-commerce, sharing economy, and other digital enterprises, as well as the technology service providers and product producers that support and enable India's rapidly expanding digital economy and telecom manufacturing sectors. In short, USIBC encourages a broad set of digital policies that encourage bilateral trade and commerce, thereby creating a transparent and attractive investment environment, and the general ease of doing business.

USIBC has a long history of working with TRAI. For example, we hosted the TRAI Secretary at our India Ideas Summit in New Delhi last September. We have also engaged the current Chair, Members, and staff in support of telecommunications policy, regulations, and the development of the sector, including around fraud prevention, 5G spectrum auctions and implementation, satellite communications, and other critical and strategic technologies. In addition, as a U.S. co-chair of the U.S.-India Information and Communications Technology Working Group (ICTWG), we also develop strategies for long-term, multi-stakeholder bilateral cooperation in the digital space.



We write today to share our comments to the TRAI's Consultation Paper on Consultation Paper on Issues related to FM Radio Broadcasting, Paper No.: 4/2023 issued on 9th February 2023. Specifically, our comments refer to Q4: Is there a need to mandate that all the Mobile Handset manufactured/ sold in India will require to have an in-built FM Radio receiver? Please provide detailed justification for your comments.

USIBC opposes mandates that impinges on consumer choice without a clear and compelling public interest as we strongly support technology neutrality and a market-based approach. Requiring smart phones to connect to the terrestrial frequency modulation (FM) radio networks is unnecessary as smart phones have internet-based applications that provide access to FM radio content. Further, the requirement adds costs to smart phones meaning fewer Indians will afford them, and hence reduces access to the other benefits of smart phones. In terms of disaster management, India's mobile network is quite resilient and redundant, and impact on the cellular network during an emergency would equally impact terrestrial FM infrastructure. For these reasons and others, USIBC urges TRAI to allow device manufacturers the flexibility to build and compete in the marketplace without government mandates to access FM radio.

Mandates increases the cost of the device: Mandating that every mobile device include an FM chip would raise the cost of producing wireless devices, with the likely outcome being that consumers would pay more for functionality they may not desire or ever use. FM radio support does not appear to be favored by consumers. If they were, manufacturers and mobile operators and original equipment manufacturers (OEMs) respond to consumer demand. Moreover, addition of FM radio chips would reduce battery life and make phones larger and bulky.

Impacts of size and technical design: This requirement doesn't account for the physical space needed to incorporate the comparatively larger antennas in a smart phone. Requiring an FM chip requires a separate antenna to accommodate the significant differences between FM and cellular signals. In many current designs, there is no space for an FM antenna. As devices continue to evolve, chip and antenna space is at a premium. Requiring that devices carry an FM chip may foreclose opportunities to include other functionality that may be more highly valued by consumers. The mandate would also harm competition among device makers by limiting opportunities for differentiation. Design decisions of this nature should be left to the market; manufacturers and carriers will provide services and functionalities that are demanded by consumers.

Furthermore, most major chipset manufacturers of smartphones are excluding FM radio features from their chipsets as the world has moved to 4G and 5G technologies. The inclusion of FM radio feature in smartphones would need a chipset designed separately along with amendments in the design of other components and circuits. This mandate, therefore, would require a fundamental redesign of the mobile handset used in the Indian market.

Finally, as noted in the Consultation Paper, a 3.5mm headphone jack will be required on smartphones since the same is used for plugging in the wired headset that will act as the



antenna for receiving FM radio signals. However, over the years there has been rapid development in the design of smartphones and mobile manufacturers have dropped the 3.5mm audio jack from mobile phone equipment, allowing manufacturers to add new and innovative features such as water resistance, sleeker design, more battery space, more memory, better screens, etc.

Impact on the electromagnetic compatibility (EMC) of the device: It is further noted that putting a long piece of wire onto a set of electronics to act as an antenna causes many issues around EMC, i.e., that impacts other signals into the electronics. EMC filters are costly, and there are geography-specific issues as FM services are not uniform globally. Therefore, specialized, costly geography-specific filters would be required, potentially, increasing the cost, weight and size of the final device as FM services are not the same the world over.

Alternatives for disaster management are in the pipeline: An FM chip would provide a materially inferior means of providing real-time alerts to mobile consumers. The existence of an FM chip in a mobile device does not guarantee that a consumer would be tuned to a station broadcasting an announcement about an impending danger. Furthermore, in terms of alerts, these can be provided via terrestrial mobile network via short messaging services (SMS) or access to the internet.

Furthermore, the Government of India via the Department of Telecommunications (DoT) and the Ministry of Electronics and Information Technology (MeitY) have been working with the industry and other stakeholders to develop a mobile broadcast emergency alerting system (aka Cell Broadcast) compatible with present and future mobile air interfaces that will allow for the targeted real-time delivery of government-approved alerts. A widely available Cell Broadcast platform will soon be a reality in the country. Further, DoT and MeitY are in discussion with the OEMs to implement the Navigation with Indian Constellation (NavIC) to improve navigation and also aid in disaster situations among others.

Any future hardware mandates in the FM broadcast space would consequently conflict with DoT and TRAI's sustained efforts to improve mobile network coverage for normal and disaster management. The mission of DoT is to develop a robust and secure state-of-the-art telecommunication network providing seamless coverage with a special focus on rural and remote areas for bridging the digital divide and thereby facilitating socio-economic development. To this end, DoT has over time made various policy interventions through Minimum Rollout Obligations, National Broadband Mission, and Universal Service Obligation Fund (USOF) projects. Even the Prime Minister's Wi-Fi Access Network Interface (PM-WANI) project to provide data connectivity through wireless in *gram panchayats* could also be used for disaster management.

Today's mobile networks also have much better coverage in the country. Mobile networks serve ordinary consumers and businesses, not only for the purposes of disaster management but also on a regular day-to-day basis. Networks are now more resilient in terms of system and network architecture and power supply. Mobile core and data centres have built-in



redundancy and even if some base stations or towers are impacted, multiple other towers may still be radiating. In disasters, moreover, operators and maintenance staff will move quickly to restore lost connectivity and have clear disaster recovery plans and contingencies.

Focus on consumer choice and market forces: TRAI doesn't offer a compelling reason to mandate device features without a clear public interest such as safety, national security, et al. If consumers wanted to listen to FM radio on their smartphones, manufacturers would include the necessary hardware or provide internet-based apps that users may download and use it at their discretion and interest. Multiple apps are available in the app stores that allow mobile users to access FM programs and users may download and use them at their discretion and interest. Compared to FM radio, internet radio offers a wide variety of choices to customers by giving them access to radio stations across the world along with better sound quality. If the interest of the consumer is kept in mind, the FM service providers should push for this medium as an option to extend the scope of FM programs to listeners rather than pushing for a mandate to include FM as a technology in phones.

Unwarranted interference with market forces: If consumers demanded the functionality of listening to FM radio on their smartphones, manufacturers would include the necessary hardware (just like any other feature). However, forcing such a functionality through mandates in hardware design, negatively alters market forces and impedes innovation and technological growth. Also, such a mandate might lead to phone manufacturers being pulled into the issues pertaining to music royalty and intellectual property rights between the FM industry and authors and composers.

Hampers innovation and new technology: The mobile phone marketplace has been a historic technology success story – in part because the government has wisely allowed consumers to pick the functions and features of their devices. These new technologies have helped drive the economy and drive innovation. The last thing that is needed is ill-considered technology mandates that choke innovation and raise prices on consumers. Including FM radio could require a major redesign of the cellular device product (and its antennas) on a product that was never created for FM radio.

Use of misleading international examples: The Paper references to Mexico and Brazil are inaccurate. In both countries, the regulations prevent blocking the access of FM signal by cellular operators in those instances where the handset has the functionality. That is quite different than mandating that cellphones have that functionality.

Specifically, Mexico does not mandate hardware requirements for providing FM support in all mobile phone equipment. Rather, the regulation states that if the Mobile Terminal Equipment has all the components that allow it to offer FM functionality, then it must be enabled and activated for the user so that there is no blocking or restriction to its operation. Therefore, in Mexico FM receivers are only required to be activated if the mobile equipment allows it. An English translation of the regulation from Mexico's Instituto Federal de Telecomunicaciones states, "In the event that the ETM has all the components that allow to offer the functionality



of sound broadcasting receiver in Modulated Frequency (FM) from its manufacture, it must be enabled and activated for the user, so that there is no type of blockage or restriction for its operation.”¹² Brazil follows a similar framework.³

Undermines India’s Exports Potential: Aligning Indian standards with global trends will enhance the country’s export potential for mobile device designed for the global market. The design and manufacture of mobile phones unique to Indian, e.g., must support FM broadcast, will adversely impact the country’s mobile manufacturing efforts.

For the reasons outlined above, USIBC opposes mandates include of FM radio capability in smart phones. Should you have any enquiries, please do not hesitate to contact me or my staff: Aditya K. Kaushik, akaushik@usibc.com, USIBC’s Director of Digital Economy in India. USIBC is committed to enhancing commerce and investment between India and the United States and appreciates your attention in this matter.

Warm Regards,

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¹ <https://www.ift.org.mx/sites/default/files/industria/temasrelevantes/17429/documentos/22-09-13dof-diariooficialdelafederacion.pdf>

² https://www.dof.gob.mx/nota_detalle.php?codigo=5480872&fecha=27/04/2017#gsc.tab=0

³ <https://informacoes.anatel.gov.br/legislacao/atos-de-certificacao-de-produtos/2021/1605-ato-1003>