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**Subject: MAIT inputs on TRAI Consultation Paper on issues related to FM Radio**

Respected Sir,

***Greetings from MAIT!***

This bears reference to Consultation Paper on “Issues related to FM Broadcasting” by TRAI released on Feb 9, 2023 where you have invited comments. First, we thank you for putting the Consultation Paper for public comments and counter comments.

MAIT is happy to provide you with its comments which are as below:

**In response 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.**

**MAIT is not in favour of any proposal and efforts to impose an FM technology mandate on Smartphones** and urges TRAI to resist such efforts. The reasons are as follows:-

**First, It increases the cost of the device:** Mandating that every mobile device includes 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 favoured by consumers. If they were, manufacturers and mobile operators and OEMs alike would respond to that demand.

**Second, there is no further space to incorporate the comparatively larger antennas in a Smartphone.** 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 and harm competition among device makers by limiting opportunities for differentiation. Additionally, requiring an FM chip would require a separate antenna in order to accommodate the significant differences between FM signal wavelengths and cellular signal wavelengths. Design decisions of this nature should be left to the market; manufacturers and carriers will provide services and functionalities that are demanded by consumers. There is no space for such an antenna, the only way for mobile phones to have this would be to use the wired headset as an antenna, these days are gone and would make accessing this feature a real challenge if one has to have this headset each time one wanted to use it. Practically, no one would be carrying a headset for use with a Smartphone in a disaster area.

**Third, it would impact the 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 with EMC. i.e. Immunity (RF, ESD, etc.) where the headset antenna would conduct all these signals into the heart of

the electronics, So special costly filters would be required, geography-specific potentially, increasing cost, weight and size as FM services are not the same the world over.

**Fourth, consumer utility is ill-served.** 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.

**Fifth, alternatives for Disaster management are in the pipeline.** While certain proponents of an FM chip mandate couch their call for dictated design decisions as necessary to enhance public safety and disaster situations, such claims are not true. DoT and MeitY have been working with the industry and other stakeholders to develop a mobile broadcast emergency alerting system (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 mobile OEMs to implement India's satellite-based navigation system, NavIC, to improve navigation and also aid in disaster situations among others.

**Sixth, such calls are coming from vested groups to further their own agendas.** Calls for an FM chip mandate are not about public safety but are instead about propping up a business which consumers are abandoning as they avail themselves of new, more consumer-friendly options.

**Seventh, decisions to avail a feature will be forced upon consumers and market forces.** There's no reason for the authorities to tell device manufacturers which features to include on their phones. If consumers wanted to listen to FM Radio on their smartphones, manufacturers would include the necessary hardware – just like any other feature. Phone manufacturers might be dragged into the fight between the FM industry and the intellectual property rights of musicians.

**Eighth, the focus of the industry on innovation and new technology will be hampered.** 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.

**Ninth, Apps are available in the app stores** that allow mobile users to access to FM programs. Users may download and use it at their discretion and interest.

**Tenth, goes contrary to DoT and TRAI's sustained efforts to improve mobile 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 USO Fund projects. Today's mobile networks have much better coverage of the country and TRAI itself monitors and publishes the Quality of the mobile networks on a regular basis. The mobile networks serve ordinary consumers, and businesses and help in disaster management.

**Last and not the least, the references to Mexico and Brazil are misleading.** Mexico for instance says that in the event that the mobile equipment has all the components that allow offering the functionality of a sound broadcasting receiver in Frequency Modulation (FM) at manufacturing, it must be enabled and activated for the user with no blocking or restriction for

its operation. Nowhere has Mexico mandated all Smartphones to have FM support<sup>1</sup>. The same is true for Brazil<sup>2</sup>.

Including FM radio is a complete redesign of the cellular device product (and its antennas) on a product that was never created for FM radio. It is like asking an electric vehicle manufacturer by regulation that he also must offer a gas engine functionality just because the cars drive through the same lanes. To cite another analogy is to impose Mobile manufacturers to offer 2G on all new devices just because it is an infrastructure that some people still use. It will be impossible to have space to introduce new telecom generations of services like 5G, 6G, Satellite, etc. if OEM needs to support legacy technologies indefinitely.

On behalf of our respective members, we urge you not to mandate compulsory FM in the mobiles as it would not be a good precedent to impose the design of functionalities by regulation. The mobile industry must be able to decide freely what technologies are included in their products to not block the advance of technology and innovation.

Look forward to your favourable consideration of MAIT's recommendations.

Warm regards,



Col. AA Jafri, Retd.  
Director General

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

<sup>2</sup> <https://informacoes.anatel.gov.br/legislacao/atos-de-certificacao-de-produtos/2021/1605-ato-1003>