

BIF RESPONSE TO TRAI CP ON DIGITAL RADIO BROADCASTING

Summary of issues for consultation

5.1 Is there a need to encourage or facilitate introduction of digital radio transmission at present? If so, what measures do you suggest and in which market?

BIF Response

Yes- We at BIF are of the opinion that there is need to encourage migration to digital radio transmission from analog at present. This is because Radio Transmission would always be more popular than television as a means of providing entertainment, information & education to the masses due to wider coverage, portability, lower set-up costs & affordability. Why Digital Radio technology? Because it has been developed to overcome problems faced with Analog transmission with additional new features , capabilities and faster and more efficient utilization of resources , ability to cover large geographic areas with a single frequency (by using frequency reuse) , efficient reception of radio channels in static, portable & mobile environments viz. moving vehicles , mobile phones, etc

Due to inherent limitations of Analog FM transmissions and lack of availability of adequate frequency slots, Digital Radio Broadcasting may be introduced to provide the existing private FM Broadcasters and listeners exciting new opportunities by introducing host of other value added services, multiple channels & services on a single frequency. This can help it compete with emerging technologies and other Platforms like webcasting, podcasting, Internet streaming, etc. Since there is apparent demand for consumption of a variety of programs and content in the Metros and major cities, such demand can be met by Radio Broadcasters only if they have multiple channels and FM frequency bands in the cities. To meet these demands, it is desired that migration to Digital Radio Transmission may be facilitated in Metros & Large cities

5.2 Is there a need to frame a roadmap for migration to digital radio broadcasting for private FM broadcasters? If yes, which approach, mentioned in para 4.7, should be adopted? Please give your suggestions with justification.

BIF Response

While Digital Radio Transmission is the way to go forward, it has to be ensured that infrastructure is available in the places/locations where it is to be launched. Also it has to be ensured that the Digital Radio ecosystem including availability of Radio Receivers at affordable rates are made available to enable availability of service at affordable cost. To ensure popularity of Digital Radio Broadcasting service and also to ensure adequate Return on Investment for the Broadcasters, a well designed ecosystem and roadmap is absolutely necessary for smooth migration from Analog FM Broadcast to Digital Radio Broadcasting.



It is felt that Approach C) Managed Introduction is perhaps the most relevant. In this approach, full replication of Analog Services would not necessarily be envisaged at the start of a Digital Rollout. In this case, priority access to digital capacity could be provided to incumbent Analog Broadcasters perhaps **on a voluntary basis** (and not mandatorily) who shall gradually replicate their Analog services & facilitate development of innovative services on the Digital Platform. This would involve simultaneous or parallel operation of both Analog & Digital Services during the overlap period. This is also known as the Simulcast Period.

5.3 Should the date for digital switch over for radio broadcasting in India need to be declared? If yes, please suggest the date with suitable justification. If no, please give reason to support your view.

BIF Response

While declaration of the date for analog switch over (ASO) to digital should be declared, it must be ensured that adequate digital infrastructure is available including availability of digital radio receivers at affordable prices. Also till Digital receiver ecosystem is sufficiently well developed and becomes cost effective, it may be required to broadcast both Analog & Digital signals simultaneously (Simulcast period) in order to sustain the broadcasters' revenues till the Digital Radio Broadcasting becomes popular as their advertisement revenue is directly linked to number of listeners.

To facilitate migration to Digital Radio Broadcasting, technology (for Digital Radio Broadcasting) suitable for Indian scenario will have to be decided for transition, besides efforts to quickly develop the receiver eco system. Perhaps a timeline of 2020 could be suggested accordingly.

5.4 Is present licensing framework or regulatory framework is restrictive for migration to digital radio broadcasting? Please explain with justification.

BIF Response

There appears to be no incentives or initiatives for Digital Broadcasting by Private FM broadcasters. As per Policy Guidelines for Phase III expansion of FM Radio Broadcasting, any private company who intend to provide FM Radio Broadcast services is required to take part in the auction of FM frequency channels conducted by Ministry of Information & Broadcasting (MIB). Only after successful bidding for FM Channel, does the company become eligible for signing Agreement (GOPA) for providing FM Radio Broadcast services. The Policy guidelines for Phase III auction specifically mentions FM Radio Broadcasting and does not permit use of any digital technology



Also FM Radio Broadcast Services by Private Radio Broadcasters are provided in frequency bands 88-108Mhz. As per NFAP 2011, following frequency bands for Digital Radio Broadcasting

IND23: Digital Audio Broadcasting may be considered in frequency bands 174-230 Mhz initially in 4 Metro Cities and further introduction of Digital Audio Broadcasting could be considered on a case-by-case basis taking into account interference potentiality aspects.

Given this scenario, it may be appropriate to ensure that regulatory & policy framework is aligned to the Spectrum Auction Policy for Broadcasters, so that smooth transition/migration can take place from Analog to Digital Radio Transmission

5.5 Should single digital radio technology be adopted for entire country or choice of technology should be left to radio broadcasters? Support your reply with Justification.

BIF Response

BIF is of the opinion that Digital Radio Transmission technologies should not be imposed but left to the radio broadcasters to choose from in the designated band which is permitted for introduction of Digital Broadcasting technologies.

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

BIF Response

BIF recommends/suggests that DRM30 Digital Radio Broadcast technology be adopted. Reasons in support/justification are mentioned below.

Given the present regulation as imposed by NFAP 2011, IND23 dictates that Digital Broadcasting Technologies can be permitted in the band 174-230 Mhz only. As per the Global development of Digital Audio Broadcasting standards, the technologies that are optimally designed to be used for this application in this band are DAB, DAB+, ISDB-TSB & DRM+.

In most of the countries it has been seen that DAB or DAB+ technologies have been adopted for Digital Broadcasting as a replacement of analog FM broadcasting. In India, All India Radio has adopted DRM 30 technology for replacement of its Medium Wave (MW) & Short Wave (SW) Transmitters. At present, coverage of Medium Wave Broadcasting reaches to approx. 98% of the population whereas FM coverage reaches to only approx. 50%.

In such a scenario, a sizeable population may use DRM receivers in future for listening to MW services of AIR. If the same digital technology (DRM30) is used for replacement of analog FM



Broadcasting, listeners may continue to use same digital receivers which may help existing Radio Broadcasters to sustain their revenues.

5.7 How issues of interference and allocation of appropriate spectrum allocation can be settled in case the option to choose technology is left to radio broadcasters?

BIF Response

NFAP 2011 provides for:

IND23: Digital Audio Broadcasting may be considered in frequency bands 174-230 Mhz initially in 4 Metro Cities and further introduction of Digital Audio Broadcasting could be considered on a case-by-case basis taking into account interference potentiality aspects.

Choice of technology should be left to the Public Broadcasters. Since these bands are licensed bands, the in-band coordination to ensure there is interference free operation shall be the responsibility of the spectrum allocating authority viz. WPC

BIF wishes to state the following:

"However during WRC-15, India identified frequency band 1427 - 1518 MHz vide Sections 5.341A, 5.341B and 5.341C in accordance with Resolution 223 (Rev.WRC-15) and Sections 5.346 and 5.346A in accordance with Resolution 223 (Rev.WRC-15) and Resolution 761 (Rev.WRC-15) of Radio Regulations. Hence any portion of the frequency band 1427-1518 MHz should not be identified for Digital Audio Broadcasting"

5.8 Should the permission for operating FM channel be delinked from technology used for radio broadcasting? If yes, please provide a detailed framework with justification.

BIF Response

As per the current practice, the permission to operate FM channel is signed between the Operator and MIB, and is usually done after the successful bidding for the FM spectrum auction and allocation of spectrum thereof. Since currently the spectrum allocated is only in the FM band, there is no need to link it with the technology used for radio broadcasting.

5.9 Should the existing operational FM radio channels be permitted to migrate to digital broadcasting within assigned radio frequency? If yes, should there be any additional charges as number of available channels in digital broadcasting will increase? Please provide a detailed framework for migration with justification.

BIF Response



Yes-existing operational FM radio broadcasters should be encouraged and facilitated to migrate/transit to Digital Radio Transmission. Since Digital Radio Broadcasting technology permits use of multiple channels on a single frequency unlike in the case of Analog Broadcasting technologies, so any efficiencies arising out of adoption and use of latest and more efficient technologies should be encouraged and not penalized. Hence no additional charges due to increase in number of channels should be charged.

Detailed framework for migration is already included in response to Q5.4 above

BIF wishes to state as mentioned in response to Q 5.7 above the following:

"However during WRC-15, India identified frequency band 1427 - 1518 MHz vide Sections 5.341A, 5.341B and 5.341C in accordance with Resolution 223 (Rev.WRC-15) and Sections 5.346 and 5.346A in accordance with Resolution 223 (Rev.WRC-15) and Resolution 761 (Rev.WRC-15) of Radio Regulations. Hence any portion of the frequency band 1427-1518 MHz should not be identified for Digital Audio Broadcasting"

5.10 Should the future auction of remaining FM channels of Phase-III be done delinking it from technology adopted for radio broadcasting? Please give your suggestions with detailed justification.

BIF Response

Yes-BIF is of the opinion that remaining 804 channels in Phase III maybe auctioned for Digital Radio Broadcasting. Since existing permission to Private Radio Broadcasters are specifically given for FM Broadcasting technology only, therefore for permitting use of Digital Radio Transmission technology, the existing Phase III Policy guidelines may be required to be amended.

5.11 In case future auction of remaining FM channels of Phase-III is done delinking it from technology, should the present auction process be continued? If no, what should be the alternate auction process? Please give your suggestions with detailed justification.

BIF Response

In Phase III, ascending e-auction of channels has been adopted which is underway. After completion of auction of 2 batches of channels in Phase III, 162 channels have been successfully bid. Based on the above information, there is perhaps no need to look at the alternate auction process for the channels already bid for and closed.

5.12 What modifications need to be done in FM radio policy to use allocated FM radio channels in technology neutral manner for Radio broadcasting?



BIF Response

Please see response to Q 5.10 wherein modifications have been suggested to FM Policy guidelines. In this scenario, appropriate framework including Terms & Conditions for such migration may also need to be framed. Such modifications to Policy guidelines will be applicable not only to Radio channels that would be auctioned in future but will also be applicable to FM channels presently in operation. This will allow the Radio Broadcaster, depending on the business model and need, the freedom to start migration using the allocated frequency. The Broadcaster will also have the freedom to simultaneously broadcast in both formats i.e. FM & Digital Radio Broadcast (Simulcast mode)

5.13 What measures should be taken to reduce the prices of digital radio receivers and develop ecosystem for migration to digital radio broadcasting?

BIF Response

To facilitate migration to Digital Radio Broadcasting, Digital Radio Receivers for standalone, receivers in the Passenger vehicles and receivers integrated with Mobile handsets would need to be made available in abundance and at affordable prices. Subsequent to deployment of digital technology in the AM band by All India Radio, standalone Digital receivers have become available in the country. A Standalone portable Digital Radio receiver is also being manufactured in country. Also some automobile manufacturers have started fitting Digital Radio Receivers in new models of their vehicle.

To proliferate Digital Radio Broadcast Technology, some additional measures are perhaps required to be taken to reduce the prices of the Digital Radio Receivers. For making them affordable for the masses, the following actions would be required viz.

- -Clear decision on adoption of technology
- -Long Term Roadmap for Migration to Digital Radio Broadcasting
- -Creation of Core Group to look at all issues and support development of ecosystem

5.14 Stakeholders may also provide their comments on any other issue relevant to the present consultation

BIF Response

N/A.