



Telecom Regulatory Authority of India
F Block, NBCC World Trade Centre
New Delhi-110029
India

25 October 2024

WorldDAB response to TRAI consultation paper No. 14/2024

“Consultation paper on formulating Digital Radio Broadcast Policy for private Radio broadcasters”

Dear Sir / Madam

WorldDAB is delighted to provide input to the current public consultation on Digital Radio in India as per the consultation paper No. 14/2024.

WorldDAB is the global industry forum for DAB+ digital radio. We facilitate the adoption and implementation of broadcast digital radio based on DAB, the digital radio standard adopted by broadcasters across Europe, Asia Pacific, Africa and beyond.

In our response we provide the rationale for the adoption of DAB+, discuss both the roadblocks to DAB+ and the opportunities that it offers the Indian Government, broadcast industry and general public. We also provide feedback on the questions in the consultation paper.

Introduction

DAB+ is a proven digital broadcast radio technology at a technical and commercial level, with over 31 countries with regular services, 34 with trials and/or regulation and interest from at least 14 more. In 2013, the European Broadcasting Union (EBU) recommended DAB+ for digital radio distribution (EBU recommendation R138) and the technology is now well established in Europe and beyond. Today the vast majority of European countries have either established DAB+ or are in the process of doing so. Norway switched off FM in 2017 and Switzerland is following with over 90% switched off in 2024 and the remaining FM by 2026. There are also a number of FM stations in Germany and Italy who are intending to switch-off FM voluntarily in the next few years.

DAB+ has been adopted in the Asia-Pacific starting with South Korea in 2005, Australia in 2009, and more recently Thailand and Indonesia with several other countries in Trials phase. DAB+ has been widely adopted in the Middle East with Kuwait, Tunisia and Saudi Arabia leading the way and there are multiple countries in Africa now moving forward with DAB+ with South Africa, Ghana and Uganda leading the way.

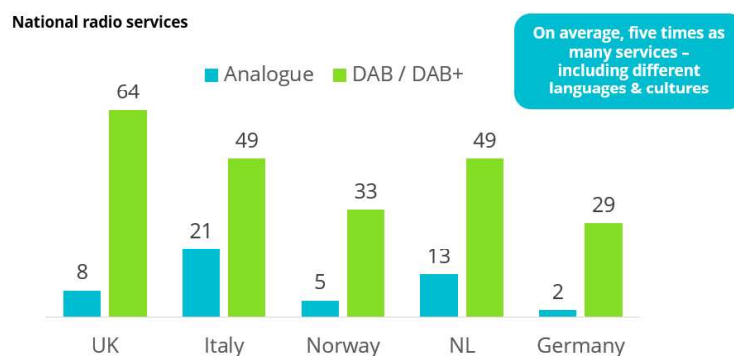
WorldDAB believe that DAB+ has shown it can be a success in India for both broadcasters and listeners. We understand that FM is currently in the final phases of establishment in India and that

there are also Medium Wave services which use the Digital Radio Mondiale system to provide a limited number of services over wide areas of India.

DAB+ is the ideal technology to provide a significant boost to the radio ecosystem through the delivery of additional services. Choice of content has been shown to be the primary driver for listeners to adopt digital radio.

Business case

DAB+ provides increased opportunities for both public service and private broadcasters. In Europe we see that on average there are five times as many national services. DAB+ provides the opportunity for broadcasters to expand their content offerings in terms of music, current affairs and languages to better engage with audiences, especially diverse audiences such as in India. Content and coverage expansion helps to keep the radio ecosystem vibrant and leads to increased listeners and revenues for private broadcasters.



Many studies have been undertaken by broadcasters and supporting organisations alike, all of which show that DAB+ provides the best Digital Radio (DR) solution in terms of Economics, Environment and Emergencies. Economic analysis has shown that the cost of delivering DAB+ services is around 20% of that required for FM. While the FM services are essential and are the backbone of current radio broadcasting in India, DAB+ offers the opportunity for expansion. We note that currently FM services in the major A/A+ cities are typically limited to 11 to 13 services. In Mumbai for instance, a city with over 21 m people currently has 12 FM services, most of which are also present in the other A/A+ cities. As a comparison London has a metropolitan population of around 14 m which is served by around 120 DAB radio services.

WorldDAB has recently enhanced the DAB+ Emergency Warning System (EWS) to provide the best DR delivered system available with location targeting from areas as small as 1 square km within a transmission area to wide areas which can be 100s of km in length over multiple transmission areas. This is coupled with the ability to “wake-up” receivers in low power standby mode. A new formal logo has been developed called the Automatic Safety Alert (ASA), which is only available for use on receivers





which comply with formal test specifications as published by ETSI. The adoption of DAB+ will provide the state of the art Automatic Safety Alerts to help keep the Indian public safe in times of crisis.

Features

DAB+ radio has clearer sound due to error protected AAC+ audio encoding. It delivers multimedia content in the form of Text and Images and has a number of advanced features such as Service Linking, Announcements and the world leading EWS/ASA system.

Receiver devices

Receiver device cost and availability are critical to the successful introduction of new radio technologies. There are over 1,000 different DAB+ domestic receivers available with starting prices around \$20 USD. To date over 130 million DAB receivers have been delivered in domestic and vehicle products.

Cars are increasingly including DAB+ with over 96% of new European cars having DAB+ and over 80% in Australia. There are also many after-market DAB+ receivers that can be retrofitted into existing cars that do not have DAB+. The fact that virtually all car brands in the world support DAB+ will make it easy for India to quickly establish a receiver base while establishing DAB+ networks.

Discussions with the broadcast industry in India indicate that radio reception via mobile phones is very popular. DAB+ has been demonstrated to be able to be integrated into smartphones through the LG Stylus 2 product developed in 2018. The primary issue is to get the Mobile Network Operators to sell such phones. To date we have found MNOs reluctant to stock such phones as they see them as a threat which may reduce data usage. A Government initiative however may overcome this. Indeed, such an initiative would be welcomed by many other countries such as Indonesia who are currently pursuing this goal as well. Perhaps India could become the world's leading DAB+ enabled smartphone manufacturer.

Road blocks

DAB+ is a purpose designed radio system with robust performance in mobile and indoor environments. It is designed to be delivered in VHF Band III. WorldDAB research has established that while VHF Band III was originally targeted for Digital Terrestrial Television (DTT) the rollout and use of DTT did not eventuate with consumers favouring the DTH satellite system. Subsequently Doordashan has terminated most if not all DTT services within VHF Band III leaving it unused. Respectfully, leaving this spectrum fallow is not an efficient use of spectrum, one of the primary mandates of TRAI, as discussed by Mr Sanjay Jaju, the Secretary of Information and Broadcasting at the recent TRAI organised symposium on *"Emerging trends and technologies in the broadcasting*

sector”¹. While there may be other competing uses for VHF Band III we see that this could be the perfect opportunity to provide increased radio services for the people of India. Indeed the rollout of services in the A/A+ cities could be developed very quickly. DAB+ transmissions can also easily be coordinated with other users of VHF Band III whether they be DTT or other systems as per Para 3.2 of the consultation paper.

Government support for a receiver base in cars through an initiative similar to the EEC code in Europe which mandates the inclusion of DAB+ in cars will help establish a receiver base quickly. This approach has also been adopted by Saudi Arabia and the UAE and is being considered by a number of other countries.

Opportunities

As Doodarshan currently “owns” VHF Band III spectrum perhaps there is an opportunity for them or Prasar Bharati to re-use that spectrum, at least partially, for the provision of DAB+ services, particularly targeting the A/A+ cities initially. This could use a similar model to what Indonesia has established in their Regulatory approach² where the public service broadcaster Radio Republik Indonesia (RRI) is tasked with the establishment and operation of DAB+ services in Indonesia. While RRI will operate the network at least 50% of the capacity offered in each ensemble must be made available to commercial broadcasters.

Such an arrangement in India will allow Doordashan / Prasar Bharati to be the gatekeeper for DAB+ both from AIR and commercial broadcasters. It will also validate the efficient use of spectrum by Doordashan / Prasar Bharati and potentially offer a new revenue stream for the long term.

In addition there is also an opportunity for TRAI / MIB to receive additional licence fees for DAB+ only services, both the initial establishment fee and the on-going annual fee. This could add substantial revenue to the public purse similar to FM now. We note however that it’s key to make digitisation attractive, assuming this is a policy goal, and therefore – for example - licence fees should not be set higher than existing analogue rates to prevent any deterrent effect, and ideally minimised to lower/remove barriers to entry. Similarly, regulation should be as “light touch” as possible, and relaxation of analogue regulation for stations which adopt digital could be a further incentive. This also has the benefit of levelling the playing when domestic broadcasters are increasingly competing for share of ear against international tech giants on unregulated internet platforms. We offer further discussion and examples in the detailed answers to the consultation questions below.

¹ See <https://radioinfo.asia/conference/trai-discusses-digital-radio-at-symposium-on-emerging-technologies-in-broadcasting/>

² See REGULATION OF THE MINISTER OF COMMUNICATION AND INFORMATICS NUMBER 5, 2023

Consultation questions

WorldDAB has carefully considered the questions posed by TRAI to better understand the radio ecosystem and how to better support it through updated regulatory measures. Below we provide input to most of those questions with a view to help increase the productivity and vibrancy of the Indian radio ecosystem.

We summarise a number of the key issues discussed in the consultation paper:

- Q1-3: WorldDAB believes that multiple DR technologies should be supported, using the technology which is most fit for purpose, that is DAB+ for areas with high radio service demand and DRM30 for wide area coverage for essential public services.
- Q8: WorldDAB supports the ability of broadcasters to simulcast their services on broadcast radio and the internet. This is a widely supported practice and occurs in most countries.
- Q20-21: WorldDAB supports multiple services from broadcasters to provide a diversity of content. Content diversity provides increased choice for consumers and is a key driver for adoption and take up of DR. Usually existing analogue stations are best placed to provide that initial diversity at the launch of DR capabilities.
- Q24: News and current affairs programs are essential for public information delivery subject to the rules of common decency and information accuracy. Broadcasters should be able to self-determine the duration of different content types subject to commercial viability.
- Q30: as discussed above VHF Band III should be reassigned for DAB+ use. That reassignment could allow Prasar Bharati and commercial broadcasters to establish both simulcast and new services.

WorldDAB support

World DAB stands ready to support TRAI, the MIB and the Indian radio industry in general to further consider DAB+ adoption in India. We will be very happy to have discussions with TRAI, MIB and broadcasters staff and experts and to assist with demonstrations and trials, and to provide case studies from other countries that have successfully deployed DAB+.

Through this consultation we hope to be able to engage in meaningful ways to help the radio ecosystem in India. Please feel free to reach out to me and my team at the WorldDAB project office who can be contacted at projectoffice@worlddab.org.

Yours sincerely,

A handwritten signature in black ink, appearing to be "Jacqueline Bierhorst".

Jacqueline Bierhorst
President, WorldDAB

Responses to the questions in the consultation document are provided below.

Q1. Do you agree that single digital radio technology adoption is preferable for entire country? If not, support your reply with justification.

Yes, the radio ecosystem must move forward into a digital distribution age. However, broadcast technologies are developed for specific purposes. DAB is the most cost effective method of delivering many radio services to an area. We note that DRM in Medium Wave as established by All India Radio (AIR) is a good method to deliver a limited number of services to wide areas. DAB+ is purpose designed to robustly deliver large numbers of services in mobile and indoor environments.

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.

The DRM and DAB DR systems were developed for different purposes. DRM in MW spectrum is designed to deliver a few services to very wide areas as demonstrated in India by AIR. DAB+ on the other hand was developed to cost effectively deliver many services, particularly to well populated areas of which India has many. The two standards are complementary.

Indonesia has recently adopted both the DAB+ and DRM systems and is now working on multi-mode receivers. By working together WorldDAB believes that affordable multimode receivers can be developed and widely deployed.

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.

Market forces should be consulted on their preference for the method of delivery of radio services. In particular they should also be able to make commercial decisions on the introduction of new services which will provide new content to listeners, e.g. niche music, multi-language, news.

As discussed above DAB+ and DRM complement each other with DAB+ being the most cost effective delivery method for high population areas and DRM the best method for very wide area service delivery.

This is also the approach taken by Indonesia, see footnote 2.

Q4. What should be the approach for migration of existing FM radio broadcasters to digital radio broadcasting?

Experience has shown that the migration from FM to DR needs to be driven by the industry in a timeframe that is commercially acceptable. This should also be supported by government initiatives which should focus on the eco-system health and the provision of content to the public.

Governments have a responsibility to encourage “green” technology, DAB+ has been shown to be such a green radio technology through many studies. We now see a number of broadcasters moving towards full migration the DR in a self-determined way, for example in Germany and Italy.

Q5. What should be the timeframe for various activities related to the migration of existing FM radio broadcasters to digital radio broadcasting?

Generally, we see that the initial establishment of new services is necessary to build the DR receiver base. Once this is done and is on an upward trajectory broadcasters may consider migrating from simulcast to full DR delivery. This is a very difficult step and needs considerable support from the Radio industry as well as support and guidance from Government bodies such as MIB and TRAI.

Q6. Please suggest measures that should be taken to encourage existing FM radio broadcasters to adopt digital radio broadcasting.

Government incentives for broadcasters include:

- Fee minimisation
 - Association with FM
 - Allowance of simulcasting
 - Reduced licence entry and annual fees during early years while the receiver population is expanding
- Incumbent and early adopter support
 - Assistance with planning activities including allotment of frequency blocks
 - No fees in addition to FM services for simulcast FM services
 - Limited time moratoriums on new broadcaster entrants

Government support

- EECC style legislation requiring all cars to include DR
- A similar approach could be used for mobile phones, possibly based on their use in Emergency situations when many Mobile networks fail, sometimes for extended periods of time
- Marketing support
- PSB support for new services

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

Some possible measures to minimise the cost of DR receivers includes:

- No import tariffs
- Local manufacturing support and incentives, e.g. tax offsets
- Support for marketing

Q8. Should private radio broadcasters be permitted to simulcast their live terrestrial channels on the Internet? If yes, what should be the terms and conditions for such simulcast? Please provide your comments with detailed justification.

Yes, internet streaming has been shown to be an essential part of the radio content delivery mix, usually around 10 – 20% of listening can be done via IP.

This actually supports broadcasters and will supplement broadcast delivery in coverage black spots.

Ideally regulation of India radio services over IP should be the same as applied to international tech giants to ensure a level playing field.

Hybrid radio, the combination of backbone DAB+ and IP, should be encouraged as it provides additional capabilities for both listeners and broadcasters and is increasingly being integrated into new cars. Further information is available from RadioDNS, Radioplayer and Xperi.

Q9. (i) Should the provisions relating to eligibility criteria prescribed in FM Phase-III Policy guidelines be adopted for Digital Radio Broadcast Policy?

(ii) If yes, is there any need to add or remove any criteria?

(iii) If not, please suggest the plausible eligibility criteria for granting authorisation for digital radio broadcasting.

WorldDAB encourages open and fair allocations of spectrum.

Q10. Should the financial eligibility criteria provided in existing policy guidelines be adopted for digital radio broadcasting policy? If not, what should be the financial eligibility criteria for different categories of cities for digital radio broadcasting? Provide your suggestions with detailed justification.

Financial eligibility criteria should be defined which encourages a vibrant ecosystem, it should be focused on the viability of the proposed DR service. For existing broadcasters this should be simply associated with their existing analogue services. For new entrants it should ensure financial stability for a period of time while they establish themselves in the market.

To encourage DR service offerings by broadcasters a sliding scale of entry and annual fees may be applied, for example the initial adopters and service providers could pay a small fraction of the normal / FM fees initially to help accelerate adoption by both broadcasters and listeners. Those fees can then be gradually increased to normal / FM levels when there is a prescribed level of DR radio listening and associated commercial revenues.

Q11. Should the provisions regarding the period of permission as per existing Policy Guidelines be adopted for the Digital Radio Broadcast Policy? If not, what should be the validity of the period of permission for Digital Radio Broadcasting? Provide your suggestions with detailed justification.

Given the use of simulcasting existing FM services on DR the provisions should be the same as for FM.

Q12. Should the provisions regarding the Earnest Money Deposit provided in existing policy guidelines be adopted for the Digital Radio Broadcast policy? If not, what should be the Earnest Money Deposit for digital radio broadcasting services?

WorldDAB has insufficient information to comment on this specific topic, however we believe that in general new broadcasters should be encouraged to have clear and viable business plans.

An example can be drawn from the UK as a case study. Ofcom's current UK small-scale licensing regime is set out in documents here: <https://www.ofcom.org.uk/tv-radio-and-on-demand/digital-radio/>

Specifically an example DAB licence advertisement is here, for Round 6 of small-scale DAB licensing, for licences in over 30 new areas:

<https://www.ofcom.org.uk/siteassets/resources/documents/manage-your-licence/digital-radio/small-scale-dab/round-6-advertisement/round-six-licence-advert.pdf?v=367314>. This includes (Para 3.4) the non-refundable £500 application fee.

For further guidance on small-scale DAB+ see the Ofcom guidance, here:

<https://www.ofcom.org.uk/siteassets/resources/documents/manage-your-licence/digital-radio/small-scale-dab/supporting-data/small-scale-radio-multiplex-licence-guidance-24.pdf?v=373842>

While this example is for "small-scale DAB+" where licenses typically cover small areas, e.g. a radius of up to 10 km, and populations up to a few hundred thousand, the principles can be used for larger areas and commercial operations.

Q13. What should be the amount of application processing fee for Digital Radio Broadcast services? Please provide your suggestions with justification.

Minimal, to cover the cost of processing only, also see answers to Q110 and Q12.

Q14. Should the provisions regarding the Performance Bank Guarantee provided in existing policy guidelines be adopted for the Digital Radio Broadcasting services? If not, what should be the amount of Performance Bank Guarantee for digital radio broadcasting services?

WorldDAB has insufficient information to comment on this specific topic, however we believe that in general new broadcasters should be encouraged to have clear and viable business plans and that some incentives be provided for early adopters in recognition of their commitment to DR..

Q15. Should the provisions regarding the time schedule for signing of authorisation and operationalisation of radio channel as prescribed in existing policy guidelines be adopted for Digital Radio Broadcasting services? If not, please suggest with justification the changes required in the time schedule for signing of authorisation and operationalisation for channels for Digital Radio Broadcasting services.

In general, broadcasters who have received authorisation for the use of spectrum should have a reasonable time to deliver their service. If the assigned spectrum has not been used within that reasonable period their access should be repealed.

Q16. What should be the provisions relating to the annual fee including payment methodology be adopted for digital radio broadcasting services? Provide your suggestions with detailed justification.

We suggest that for FM services that are simulcast on DR fees are covered in FM fees. For new DR only services initial fees should be minimal with an increasing sliding scale as the listener base and commercial revenues increase.

Q17. Should there be a minimum amount of annual fee for digital radio broadcasting services? What should be the criteria for deciding such a minimum annual fee? Provide your suggestions with detailed justification.

See Q16

Q18. Do you agree that the amended provisions of calculating annual fee as 4% of GR only and de-linking it from Non-Refundable One Time Entry Fee (NOTEF), be made applicable to existing operational FM radio channels, who migrate to digital radio broadcasting?

WorldDAB has no comment, every country is different.

Q19. What should be the definition of Gross Revenue (GR) to be adopted for digital radio broadcasting services? Provide your suggestions with detailed justification.

WorldDAB has no comment, every country is different.

Q20. Should the provisions regarding the restrictions on multiple permissions in a city be adopted for Digital Radio Broadcasting services? Please provide your suggestions with detailed justification.

No, encourage new content delivery to diversify content and drive listener uptake. The number of new DR only services per broadcaster will be governed by their ability to pay the required entry and annual fees for the spectrum capacity required to support those services.

Q21. Should the frequency be considered, or multiple channels operated on single frequency be considered for the purpose of putting restriction on multiple channels in a city? Please provide your suggestions with detailed justification.

No, see Q20

Content diversity provides increased choice for consumers and is a key driver for adoption and take up of DR. Usually existing analogue stations are best placed to provide that initial diversity at the launch of DR capabilities.

Q22. Do you agree that the maximum number of channels that has been identified by MIB in category A+ and A cities as given in Table 3 should be put up for auction for digital radio broadcasting? If not, please give your suggestions with detailed justification and criteria for deciding the maximum number of channels in each of the cities mentioned in Table 3 above.

It is clear from para 3.71 that there is high demand for new radio services. A DR allotment planning process should be undertaken to assess demand and determine the suitable number of services. That information can then be used to determine a suitable frequency allotment plan which will best serve the Indian public as a whole.

The high demand for new services and the high reserve prices being used demonstrates that there is demand for a significant number of new services, particularly in the larger cities. Only DAB+ in VHF Band III can provide a cost effective way of providing those services.

Q23. Should the provisions regarding the Programme Content provided in the existing policy guidelines be adopted for Digital Radio Broadcasting?

Yes

Q24. Should digital radio broadcasters be allowed to broadcast self curated news and current affairs programs as recommended by TRAI in its recommendations dated 5th September 2023? If yes, what should be the duration of such programs. Please give your suggestions with detailed justifications.

News and current affairs programs are essential for public information delivery subject to the rules of common decency and information accuracy. Broadcasters should be able to self-determine the duration of different content types subject the commercial viability.

Q25. Is there a need to prescribe the guidelines for genres of programmes that a broadcaster can provide on multiple channels available on a single frequency allocated to it for digital radio broadcasting? If yes, what should be the genres of channels permitted in digital broadcasting? Please give your suggestions with detailed justifications.

No, it should be market driven within the content requirements for common decency.

Q26. Should the provisions regarding penalties prescribed in extant guidelines be adopted for digital radio broadcasting? If not, what are your suggestions for modifications? Please give your suggestions with detailed justification for each.

Existing penalties for FM on content decency requirements should be applied. There should not be any other content limitations on music genres, news, talk shows, religious content – that is for the listener to decide whether they want to listen or not. The broadcast service will discontinue if there are not sufficient listeners to generate revenue.

Q27. What should be the methodology for examination and creation of new Common Transmission Infrastructure (CTI) setups required for new channels including their upkeep, given the fact that existing CTI setups and towers may not have vacant space and apertures, respectively, for accommodating additional new channels in category A+ and A cities?

This should be driven by financial viability, typically CTI can be setup by network operators (existing or new) or by Broadcaster Joint Venture Companies (JVCs). In general CTI should be encouraged as it reduces operating costs.

Q28. What should be the methodology for examination and modifications to existing CTI setups or creation of new CTI setups required for transmission of digital components/ simulcast operation by existing broadcasters including its upkeep given the fact that existing CTI setups, including towers, may not support the addition of digital components without modifications?

See Q27

Q29. Are there any changes required in the format prescribed for reporting of Financial Accounting by radio broadcasters for the Digital Radio Broadcast Policy? If yes, please suggest changes with justification

WorldDAB has no comment, every country is different.

Q30. Whether any other provision of the existing policy guidelines that may require review for their adoption in Digital Radio Broadcast Policy? If yes, please provide your comments with reasons thereof for amendments (including any addition(s)) required in the existing policy guidelines for FM Radio, that the stakeholder considers necessary. The stakeholders may provide their comments in the format specified in Table 4 explicitly indicating the existing clause, suggested amendment and the reason/ full justification for the amendment in the existing policy guidelines for FM Radio for inclusion in Digital Radio Broadcast Policy.

Table 4: Format for stakeholders’ response on amendments required in Policy guidelines for expansion of FM Radio Broadcasting services through private agencies (Phase III) for inclusion in Digital Radio Broadcast Policy

S. No.	Clause No. of Existing Policy Guidelines for FM Radio	Provisions of the existing clause(2)	Amendment/ new provision(s) suggested by the stakeholder (3)	Reasons/ full justification for the proposed amendment (4)
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The changes required to support large scale DR broadcasting are to general broadcasting policy and spectrum use.

- Band III is “owned” by Doordashan but not used, indeed the only significant DTT services are in UHF, virtually all TV services are delivered by DTH technology.
- There is a clear requirement for efficient use of spectrum in India, as discussed by Mr Sanjay Jaju, the Secretary of Information and Broadcasting at the recent TRAI organised symposium on “*Emerging trends and technologies in the broadcasting sector*”, see footnote 1. To fulfil that efficient use of spectrum requirement VHF Band III should be reassigned for DAB+ exclusively to allow large scale radio services to be established to serve the general public.
- That reassignment will allow Prasar Bharati or commercial broadcasters to establish both simulcast and new services.

Q31. Do you agree that the methodology used in TRAI’s recommendations dated 10th April 2020 for determining reserve prices of FM Radio channels should be used for determining reserve prices of digital Radio channels?

a. If yes, please provide detailed justification for your views.

b. If not, please suggest an alternative approach/ methodology with details and justifications.

No, new services need to be encouraged and not limited by artificial financial barriers. This is especially the case when establishing a new broadcast technology which requires both the broadcasters and public to make financial investments, broadcasters in equipment, licences and content, listeners in new radio receiver devices.

As discussed above a sliding scale fee structure for both reserve and annual fees is recommended to ensure maximum take up and use of new DR services. As the listener base increases to a suitably large percentage of listening the fees can be adjusted accordingly.

Beauty contests are often used to determine the suitability and viability of new DAB+ ensembles and service providers.

Q32. Do you agree that due to non-availability of updated radio listenership estimates data and Market Intensity Index, whether the same data, as used in 2020 recommendation, can be used in the present exercise as well? In case the answer is no, which alternative data/methodology can be used for the same purpose?

Probably not, that data is over 4 years old. India needs to embrace modern listening measurement approaches. There are many examples of how listening can be measured and many companies who undertake such surveys in a scientific manner.

Q33. Do you agree that a multiplication factor of 0.7 be used for estimating the reserve price from average valuation of FM Radio channels or otherwise? Please provide your suggestions with detailed justification.

No, this seems to be an artificial number. Market forces should dictate the initial spectrum license fee through competitive bidding and/or beauty contents.

Q34. Stakeholders may also provide their comments/ suggestions along with detailed justification on any other issue that may be relevant to the present consultation.

WorldDAB has no further comments but remains available for discussion at your request.