



**Telecom Regulatory Authority of India
(TRAI)**

Recommendations

on

3rd Phase of Private FM Radio Broadcasting

22nd February 2008

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Table of Contents

	Subject	Page No.
	Preface	2
Chapter 1	Summary of Recommendations	4
Chapter 2	Background	20
Chapter 3	Regulatory and licensing issues	28
Chapter 4	Technical issues	68
Chapter 5	Other issues	88
Annexure-I	Letter from Ministry of I&B seeking recommendations from TRAI	99
Annexure-II	Summary of Stakeholders Comments	101
Annexure-III	International Experience	115
Annexure-IV	List of cities with number of channels that came up in Phase-I	122
Annexure-V	List of cities where LOI was issued for FM radio Broadcast under Phase-II	123
Annexure-VI	List of cities with number of channels put for re-bid under Phase-II	126
Annexure-VII	List of suggested cities along with number of channels for FM Radio Phase-III by BECIL	129
Annexure-VIII	Proposed selection criteria by Broadcast Engineering Consultants India Limited for cities in Phase-III	139
Annexure-IX	Analysis of cities vs. Districts where FM Radio broadcasting has been started	140
Annexure-X	Policy on Expansion of FM Radio broadcast Service through private agencies	144

PREFACE

Frequency Modulation (FM) Radio broadcasting due to its versatility is considered as main medium to provide entertainment, information and education. FM Radio broadcasting was first launched in the country in 1999 and subsequently 22 private channels became operational in Phase-I. Based on the popularity of FM Radio among the masses, Government offered 337 new FM radio channels in Phase –II in July 2005 for bidding to private agencies covering additional cities. Based on bidding results, Government issued Letters of Intent (LOI) for 245 channels out of which 185 channels have become operational. It is expected that FM Broadcasting coverage will soon be extended to cover a total of 92 cities in Phase-II.

Due to exponential growth of FM Radio Industry and demand for further expansion, Government is considering FM Radio Phase-III to cover other cities through private agencies. In view of this the Government has sought recommendations of TRAI under Section 11(1) (a) of TRAI Act, 1997 on the modifications to be incorporated in the policy for FM Radio broadcasting Phase-III.

The Authority has noted that the expansion of private FM Radio broadcasting in new cities will mainly depend on economic viability, sustainability and infrastructure readiness. In addition various related issues like ease of monitoring, importance to local content, tower location & frequency planning process etc have been considered for arriving at recommendations.

While framing these recommendations due consideration has been given to stakeholders' comments and best international practices.

It is hoped that these forward looking recommendations will enable fast growth of FM Radio broadcasting and will provide better listening experience with increased variety of content to Indian populace.

(Nripendra Misra)
Chairman, TRAI

CHAPTER 1

Summary of Recommendations

Principles underlying FM Radio Broadcast Recommendations for Phase-III -

1.1 FM Radio services have made rapid strides in the recent past particularly since adoption of TRAI Recommendations for the Phase-II. Experience in the Phase-II expansion suggests that untapped potential for further growth is quite phenomenal which can be realized if certain barriers to growth are removed. While the Government reference had indicated the broad areas where these barriers could be identified, subsequent consultation process undertaken by TRAI on the subject of FM Phase-III expansion has enabled the Authority in arriving at specific policy recommendations to facilitate further growth in the FM Radio sector. FM Radio is an important medium of communications that is capable of becoming a change agent in the Indian Society in general and more particularly in the semi-urban and rural areas. Employment opportunities are said to have been created specifically in the areas of local content provision to feed the fast growing FM Radio Services.

1.2 One of the barriers for further growth identified by the Authority during the consultation process relates to the restriction of existing guidelines that do not permit news and current affairs on FM Radio broadcast. We are in the information age and thus information is vital to decision making processes to all sections of society. Information requirements of the vast population and those who lack access to information through other means like internet, television services, etc. can be conveniently met without any cost to the receiving population only through FM Radio services. The

Authority does not find any justification to continue with the existing guidelines that restrict the contents of FM Radio broadcast to exclude news and current affairs. Necessary safeguards need to be built in to address the concerns that existed at the time of formulation of the present guidelines. Some of these have been spelt out in the recommendations, which may be further fine tuned by the Ministry of Information & Broadcasting.

1.3 Sustaining the growth witnessed in FM Radio sector is possible only if certain major policy decisions are taken and these include increasing the number of channels for FM Radio broadcast. Stakeholders in general have commented upon the need to enhance the viability of FM Radio operations in the country so that entry into semi-urban and rural areas is facilitated. One such area which is said to affect the viability of FM radio operations in the country is the restriction on multiple ownership of channels in a city and networking of FM radio programmes across entities. The Authority has weighed the pros and cons of these restrictions and has concluded that the benefits arising from the removal of these barriers are likely to be vary large in terms of its direct and indirect impact. The Recommendations in this regard when implemented would achieve cost reduction for FM Radio Broadcasters particularly by reducing the infrastructure requirements of smaller stations and the flexibility provided to the Broadcasters would actually enhance the viability of small stations.

1.4 Another major Recommendation that may remove barriers for consolidation and thus fuel further growth in the sector relates to a change of the unit for Private FM Radio broadcast licensing from city to district. This one step would effectively enhance the area of operations of FM Radio broadcasting to larger geographical area

and thus covering a larger population. This again would result in reduction in the cost of operations for the broadcasters. Necessary flexibility has however been provided for retaining the existing area of operations.

- 1.5** To ensure adequate flow of investment in the sector, the Authority has found it necessary based on consultation process, to enhance the present limit of Foreign Direct Investment (FDI) from 20% to 26% for FM Radio broadcasters whose content would include broadcasting of news and current affairs. For others who continue to opt for the general entertainment content excluding news and current affairs, the limit may be raised from 20% to 49%. In order to ensure that the licensing regime is not used to trade spectrum, the Authority has recommended strict guidelines regarding change in the ownership of the FM Radio license.
- 1.6** Disadvantaged regions like North-East and Jammu & Kashmir have been given special dispensation in the policy framework by way of reduction in the annual fee payable by broadcasters in these regions for a period of three years from the date of issue of LOI. This in the views of the Authority will ensure more FM Radio broadcasters, better programme content and viable business model for FM Radio broadcasters in these regions.
- 1.7** Considering the efficiency in the utilization of resources particularly the scarce ones, the Authority chose to mandate collocation of transmitters with existing facilities of All India Radio. Flexibility has however been given to the successful bidders of FM Radio broadcasting to form a consortium and set up required infrastructures, etc. if the AIR facility is not available within a period of three months.

1.8 In brief, the series of Recommendations made by the Authority are based on the following principles/rationale which would serve the avowed objectives set for the nation: -

- i) Removal of barriers for consolidation.
- ii) Enhancing viability of operations to facilitate growth of FM Radio in semi-urban and rural areas whereby bridging the rural-urban divide.
- iii) Facilitate higher levels of investments by relaxing restrictions.
- iv) Ensure efficiency in operations by encouraging/mandating infrastructure sharing.

□ **Summary of Recommendations**

1.9 REGULATORY ISSUES:

1.9.1 Need for Augmentation of Private FM Broadcasting

The Authority recommends:

- **The geographical basis for Private FM Radio bidding in future may be changed from City to District.**
- **The districts existing as on 01.01.2008 shall be identified and will form the basis of further permission. Any new district formed after 01.01.2008 shall continue to be served from the district(s) from where it has been carved out.**
- **In the districts, when no city is having any FM Radio permission, the new permission shall be given on district basis only.**

- **The bidding process will remain the same as envisaged in policy on expansion of FM Radio broadcasting service through private agencies (Phase-II) dated 13th July 2005.**
- **The channels available in a district shall be auctioned to the eligible bidders and shall be allocated to successful bidders in descending order of the bid price.**
- **In case the Private FM Radio broadcast is functional in any part of the district, such operator/ licensee may be given the option to enlarge the area of operation for the same channel to provide coverage to full district after paying difference in maximum bid price determined through the auction for the district or similar district (category of the district) in the state and One Time Entry Fee (OTEF) already paid for city. If highest bid is less than the original bid price for city basis, the migration shall be allowed without any additional payment. However, no refund shall be given.**
- **The reserve One Time Entry Fee (OTEF) shall be re-fixed based on the maximum bidding price through the auction for the district or similar district in the state. Annual fee for the district will now be determined considering revised reserve OTEF.**
- **A private FM Radio broadcaster functioning in a city of the district shall be given option to migrate to district level within three months from the date of finalization of bid for that district. In case where the auction for a district is technically not feasible, then the existing FM Radio permission holder, if any, in the city of that district will be given an option to migrate based on the bid amount for a similar district (based on categorization**

of district). If it does not opt for enlarging its area of operation to district level, such an operator shall continue to operate in the city only till the validity of existing permission with no prospects for renewal.

- The bidding for all vacant slots shall be done based on the district level.
- The bidding for remaining 97 channels of Phase-II scheduled on city as operational area be rescheduled considering district as operational area to avoid complication of subsequent migration from city to district level.

(refer para 3.4.22)

1.9.2 Additional channels in the same District

The Authority recommends:

- Number of channels for FM Radio broadcast in Category A+, A, B, C cities, now changed to districts basis, which may have been reduced due to non availability of frequencies during Phase-II bidding, may be restored as envisaged in Phase-II, subject to technical feasibility.
- The number of FM Radio broadcast channels for category 'D' cities, now changed to districts basis may initially be reduced to three from five as envisaged in FM Radio broadcast Phase-II, subject to technical feasibility. The progress of such FM Radio broadcasters in such districts may be observed for one year before taking appropriate decision to enhance the number of FM Radio broadcasters in such districts subject to technical feasibility.

(refer para 3.5.7)

1.9.3 Restriction on Ownership of Channels in a district

The Authority recommends:

- **At least three channels excluding AIR in any district will be given to three different entities. Once this condition is met, then the existing operator/ permission holder can bid for the remaining channels and may be declared successful for any channel where his bid is highest subject to the condition that maximum number of channels to a permission holder in the district will not be more than 50% of total channels in the district.**
- **The existing ceiling limit of 15% of total FM Radio channels in the country permitted to a permission holder is no longer valid as the fear of monopoly is no longer real. This limit is also not practical, as the total number of channels will vary depending on availability. Hence such limit may be withdrawn.**

(refer para 3.6.11)

1.9.4 Foreign Direct Investment (FDI) limit

The Authority recommends:

- **The FDI including Foreign Institutional Investment (FII) for FM Radio broadcasting permission holders, who are interested to broadcast news, may be enhanced to 26% from present 20% in view of FDI provision of 26% in news and current affairs in Television (TV) Broadcasting. All other terms and conditions will remain the same.**
- **Similarly, the FDI including FII for FM Radio broadcasting permission holders, who do not opt for news broadcasting, may be enhanced to 49% from present 20%. All other terms and conditions will remain the same.**

- **FM Radio broadcaster can opt later to broadcast news only if they bring down the FDI including FII to 26%. For this, such broadcasters have to seek specific permission from Ministry of I&B after submitting the proof of FDI including FII not more than 26%.**
- **The FDI including FII for FM radio will be revised as and when Government takes any further decision to revise FDI for TV broadcasting including news and current affairs.**

(refer para 3.7.12)

1.9.5 Change in ownership of the permission to broadcast FM radio

The Authority recommends:

- **No change in holding pattern of the shares shall be permitted till start of the FM Radio broadcasting in any circumstances.**
- **The majority share holders/ promoters of the company holding permission to provide FM Radio broadcasting may be permitted to dilute their share holding subject to condition that their share holding does not reduce below 51% after start of FM radio operation, with the prior permission of Ministry of Information and Broadcasting which shall be granted after operationalisation of FM Radio broadcasting.**
- **Any change in ownership or further dilution shall be permitted with the written permission of the Ministry of Information & Broadcasting after a period of three years from the date of operationalisation of the permission. Such requests shall be considered after three years of operationalisation subject to the condition that the new**

shareholders conform to all the prescribed eligibility criteria. Ministry of I&B shall examine before granting permission for dilution of majority shareholding that maximum number of channels to a permission holder in a district does not exceed 50% of total channels in that district.

(refer para 3.8.7)

1.9.6 Annual fee structure

The Authority recommends:

- **The method of calculation of reserve one time entry fee (OTEF) and annual fee may be same as prescribed for FM Radio broadcasting Phase-II.**

(refer para 3.9.3)

1.9.7 Relaxation of fee structure for North-East and J&K

The Authority recommends:

- **The rate of Annual fee may be reduced to 50% of what is being charged from all existing permission holders in other areas for private FM Radio broadcasters in North East (NE) and Jammu & Kashmir (J&K) region for an initial period of three years from the date of issue of Letter of Intent (LoI) to give such operators time to setup their network and start operations. This will ensure more FM Radio broadcasters, better program and viable business model for private FM Radio broadcasters in these regions.**

(refer para 3.10.6)

1.9.8 Networking of FM radio programs across entities

The Authority recommends:

- **All private FM Radio broadcasters may be permitted networking within their network. Networking across the permission holders should not be permitted.**

(refer para 3.11.7)

1.9.9 News and Current affairs on FM Radio

The Authority recommends:

- **FM Radio broadcasters may be permitted to broadcast news taking content from AIR, Doordarshan (DD), authorized TV news channels, United News of India (UNI), Press Trust of India (PTI) and any other authorized news agency without any substantive change in the content. No other source of news is permitted at present.**
- **The News broadcast should be based on the facts and sourced to any permitted agency only. Broadcasting of news contents having speculative, anticipatory or based on rumours/ hearsay is not permitted.**
- **Ministry of I&B may clarify areas which do not come under restrictions of news such as traffic bulletin, results of international games such as cricket scores, etc.**
- **The FM Radio broadcasters shall be responsible for misrepresentation of news and current affairs from identified sources and shall be acted upon in case of any violation.**
- **Ministry of I&B may prescribe broad guidelines to ensure that any news broadcast may not negatively impact general law and order of the area and basic features of social cohesiveness and constitutional framework are maintained.**

(refer para 3.12.10)

1.9.10 Applicability of FM Radio broadcast Phase-III guidelines on existing permission holders

The Authority recommends:

- **The guidelines for FM Radio broadcasting Phase-III shall be applicable to existing permission holders also subject to specific restrictions, if any stipulated in the recommendations.**
- **The condition/ provisions, which are not discussed in the recommendations, will remain unchanged as mentioned in the policy dated 13th July, 2005 on expansion of FM Radio broadcasting services through private agencies (Phase-II). Hence all such conditions/ provisions may be adopted for FM Radio broadcast Phase-III also.**

(refer para 3.14)

1.10 TECHNICAL ISSUES

1.10.1 Frequency Allocation

The Authority recommends:

- **The determination of number of channels in a district is directly related to available frequencies, which should be analyzed and notified for private FM Radio Broadcasting by Ministry of I&B in consultation with the Wireless Planning cell of Department of Telecom. The maximum number of FM Radio channels in any district will be within overall framework discussed in para 2.5.**

(refer para 4.2.7)

1.10.2 Co-channel spacing

The Authority recommends:

- **Co-channel Spacing within district presently used may not be changed and kept at 800 KHz. Similarly 400 KHz**

channel spacing between two channels in adjacent districts is maintained (as prescribed in FM Radio Phase-II).

(refer para 4.3.9)

1.10.3 Signal Strength Requirements

The Authority recommends

- **The minimum signal strength requirement as specified in International Telecommunication Union-Radio (ITU-R) recommendation BS.412-9 may be incorporated in Grant of Permission Agreement (GOPA) for Private FM Radio broadcasting.**

(refer para 4.4.4)

1.10.4 Protection Ratios

The Authority recommends:

- **ITU-R BS.412-9 specifications should be adopted in respect of RF protection ratio. This may be included in Grant of Permission Agreement (GOPA).**

(refer para 4.5.4)

1.10.5 Collocation of transmitters

The Authority recommends:

- **All successful bidders may be mandated to co-locate their transmitters with existing facilities of All India Radio if available and technically feasible within a pre-defined period say 3 month.**
- **If facilities of All India Radio are not available, the successful bidders for FM Radio broadcasting may form consortium and setup required infrastructure for collocation of all transmitters identified for that district. They will mutually decide infrastructure sharing**

methodology, commercial revenue sharing model, service level agreement and methodology for upkeep of such infrastructure, within 3 months.

- **If successful bidders are not able to reach any agreement on different issues regarding collocation and erection of tower, then all successful bidders should be mandated to have collocation with facilities to be developed by Broadcast Engineering Consultants India Ltd. (BECIL).**

(refer para 4.6.12)

1.10.6 Effective Radiated Power (ERP)

The Authority recommends:

- **Effective power radiation and Antenna height as adopted in Phase-II of Private FM Radio broadcasting may also be followed in Phase-III.**

(refer para 4.7.3)

1.10.7 Reference Collocation Offer

The Authority recommends:

- **Reference collocation offer should be mandated for better transparency and uniform treatment to all the FM radio operators. Such Reference Collocation Offer should also be posted on their websites for easy access.**

(refer para 4.8.4)

1.10.8 System Integrator

The Authority recommends:

- **Work of system integration may preferably be entrusted to an agency involved in setting up of collocation facilities in a district or as mutually agreed.**

(refer para 4.9.4)

1.11 OTHER ISSUES

1.11.1 Time for operationalisation of the channel

The Authority recommends:

- **Total time from the date of issue of LOI till operationalisation of the channel should not be more than one year. Ministry of I&B may look into various activities and prescribe maximum time limit for each activity. It may consider capping maximum time limit from date of issue of LOI to signing of GOPA as six months and another six months from signing of GOPA to operationalisation of FM Radio channel. This will ensure efficient utilization of allocated frequency channel.**
- **All permission holders must convey in advance, date of operationalisation of FM Radio channel to Ministry of I&B in writing to enable the Ministry monitor the programs and have effective control.**

(refer para 5.1.4)

1.11.2 Technical Parameters

The Authority recommends:

- **Technical specifications as specified in ITU-R recommendations SM.329-10 for frequency stability and harmonic/spurious should be included in GOPA.**

(refer para 5.2.5)

1.11.3 Floor price of the bid

The Authority recommends:

- **The Reserve OTEF should be fixed at 50% of the highest bid price in a District.**
- **No bid shall be considered below Reserve OTEF and all such bids shall be summarily rejected.**

- **Minimum annual fee for a district shall be calculated based on 5% of Reserve OTEF.**

(refer para 5.3.6)

1.11.4 Content Outsourcing

The Authority recommends:

- **In order to encourage diversified content development, there should be no restriction on the outsourcing of content production as well as leasing of content development equipment. The permission holder will have to adhere to stipulated regulations & guidelines regarding content and will be fully responsible for any violations/omissions in this regard.**
- **Permission holders may be permitted to hire or lease broadcasting equipments on long-term basis as long as it does not impact permission holder's right as FM Radio broadcaster.**

(refer para 5.4.6)

1.11.5 Auto Renewal of permission

The Authority recommends:

- **There should be provision for automatic renewal of permission to only district level permission holder of FM Radio broadcasting.**
- **Interested permission holders shall seek extension in writing from Ministry of I&B 4 months in advance of expiry of their permission period.**
- **If such permissions cannot be extended to seeker then Ministry of I&B shall inform to such permission holder within one month, stating reason in writing.**

- **Ministry of I&B shall inform to such permission holders within one month from the date of application seeking extension of permission for another 10 years.**
- **The amount for extension of the permission for another 10 years shall be equal to initial bidding amount or the highest bid price in the same area (District), whichever is higher, provided such permission is not denied.**
- **Permission holder shall pay the required amount within one month from the date of receipt of such demands from Ministry of I&B.**
- **Ministry shall issue permission for extension of operation period for another 10 years in one-month time from the date of receipt of such payment.**

(refer para 5.5.6)

1.11.6 Royalty related issue:

The Authority recommends:

- **The Annual fee shall be charged based on Gross Revenue (GR). No pass through shall be permitted. The percentage of Annual fee on GR shall remain unchanged.**

(refer para 5.6.4)

CHAPTER 2

Background

2.1 During Ninth Five Year Plan, the Government of India adopted a policy for improving variety of content and quality of Radio broadcasting. This heralded a technological shift from Medium Wave (MW) to Frequency Modulation (FM) Radio broadcasting. The thrust areas for Radio broadcasting were on improvement of program content; providing wider choice of programs; improving broadcast quality and enhancing technical features.

2.2 Keeping in line with the policy of liberalization and reforms adopted by the Government since 1991, the Government during Ninth Plan period allowed fully owned Indian companies to set up private FM radio stations on a pre-permission basis. Government took decision to open up FM broadcast channels to private participation with the following objectives:

- (a) To open up FM broadcasting for entertainment, education and information dissemination by commercial broadcasters;
- (b) To make available quality programmes with localized flavour in terms of content and relevance; to encourage new talent and generate employment opportunities directly and indirectly; and
- (c) To supplement the services of All India Radio (AIR) and promote rapid expansion of the broadcast network in the country for the benefit of the Indian populace.

2.3 First Phase of FM

2.3.1 In May 2000, 108 frequencies in the FM spectrum (VHF 87 – 108 Mhz) were auctioned across 40 cities in the country.

Multiple round auction format was followed to award permission on identified city basis. The permission was awarded for a period of 10 years and the annual fee was escalated at 15% per annum on the base of first year fees.

2.3.2 Government received bids for 101 frequencies in Phase-I, out of which bidder paid money for only 37 frequencies, i.e. bidders in respect of 64 frequencies defaulted. Out of these 37 permission holders only 22 channels had become operational of which one has closed down subsequently.

2.3.3 The deadline for operationalising of FM Radio in Phase-I was one year from date of signing the agreements, i.e. December 29, 2001. However, even after furnishing the bank guarantees and signing the agreement, 13 successful bidders did not operationalise their licenses within the required time frame and ultimately surrendered their licenses. Two permission holders were paying license fees though they had not operationalised the license till the migration to Phase-II. The Government accepted payments from these two permission holders by describing these licenses as deemed operationalised till start of Phase-II.

2.3.4 Thus, the outcome of the first phase of FM Radio broadcasting was not very successful as only about 20% of the successful bidders could become operational.

2.4 **Tenth Five-Year Plan**

2.4.1 The Government accepted FM broadcasting as the preferred mode of radio transmission due to its high quality stereophonic sound. Therefore, the emphasis in Tenth Five Year Plan was on substantially enhancing FM coverage from 30 per cent of the population to cover 60 per cent of the population along with

efforts to consolidate the MW transmission network. The following are the major thrust areas of Tenth Five Year Plan:

- a) No further expansion of MW transmission except in sparsely populated, hilly terrain and strategic border areas where it will still be cost effective.
- b) Expanding the reach of FM radio to cover 60 per cent of the population by the end of Tenth Plan. Private operators to be encouraged to provide FM radio services in metros and small cities.
- c) Encouraging private participation in providing quality services and replacing the existing system of bidding for licenses with a revenue sharing mechanism.
- d) Automating all FM transmitters and all MW transmitters of 20 kilowatt (KW) and below capacity.
- e) Creation of high quality content with long shelf life to enable AIR to fulfill its role of public service broadcaster.
- f) Strengthening and expanding the reach of radio in the northeastern states (including Sikkim) and island territories.
- g) Use FM radio to spread literacy, because of better transmission and reception

2.4.2 Tenth Five Year Plan stipulated that private operators be encouraged to provide FM Radio services in metros and small cities. It was envisaged to replace FM Radio Phase-I provision of annual fee for FM Radio broadcast permission with a revenue sharing mechanism.

2.5 **Radio Broadcast Policy Committee Report**

2.5.1 In July 2003, the Government appointed a Radio Broadcast Policy Committee (hereinafter called the Committee) under the Chairmanship of Dr. Amit Mitra, Secretary General, Federation of Indian Chambers of Commerce and Industry (FICCI) to

analyse the outcome of the Phase-I of FM Radio broadcasting and to provide recommendations on the second phase of Private FM Broadcast liberalization. The committee after delving through the lessons from the first phase, the relevant experience from the Telecom Sector as well as global experiences made a series of recommendations. These were primarily related to

- a) Entry & exit mechanism,
- b) License fees structure,
- c) Enhancing the scope of services,
- d) Improving roll out and
- e) Migration of existing licensees to Phase-II

2.6 In February 2004, TRAI was asked by Ministry of Information & Broadcasting to give guidelines for private FM Radio licensing permission Phase-II. Subsequently, TRAI submitted its recommendations on 11th August 2004 titled as “Licensing Issues Relating to 2nd Phase of Private FM Radio Broadcasting”.

2.7 **Phase-II of FM Radio Broadcasting:**

2.7.1 Based on the TRAI recommendations, Radio Broadcast Policy Committee report, experiences of Phase-I and wide range consultations, the Government introduced Phase-II for FM Radio broadcasting scheme vide its policy notification dated 13th July, 2005 (Refer Annexure X). Consequently 337 channels were put on bid encompassing 91 cities. Out of these 337 channels, 284 were successfully bid and after scrutiny, permission was granted for operationalisation of 245 channels spanning over 87 cities. Permission of one operator was cancelled subsequently. Total 136 channels have become operational as of now. Recently government vide its notification

dated 8th June 2007 invited bids for 93 remaining vacant slots of Phase-II and four new channels in Dehradun. The bidding has not yet taken place. It is expected that private FM Radio broadcasting will soon be extended covering 92 cities in total.

2.7.2 The highlights of the Phase-II were:

- All the cities having population equal to or more than 3 lakhs were considered.
- Two-stage selection process was adopted. First eligibility of bidders was determined and subsequently financial bids were called from eligible bidders.
- Reserve One Time Entry Fee (OTEF) was fixed at 25% of the highest bidding price in the city.
- Every applicant and its related entities were allowed to bid for only one Channel per city provided that the total number of Channels allocated to an applicant and its related entities would not exceed the overall limit of 15% of the total Channels allocated in India.
- The Permission holder was liable to pay an Annual Fee to the Government of India charged @ 4% of Gross Revenue for each year or 10% of the reserve one time entry fee (OTEF), whichever is higher.
- The validity period of license was 10 years.
- The Permission was for free to air broadcasts of audio on main carrier and data on sub-carriers, both excluding News and Current Affairs.
- The Permission is non-transferable. The Permission holder not permitted to grant a sub-permission.
- The Permission holder to comply with the audio and transmission standards for FM sound broadcasting at each

station conforming to the ITU-R (International Telecommunication Union) Recommendations.

- A Permission Holder was permitted to network its Channels in C & D category cities within a region only. No two Permission Holders were permitted to network any of their Channels in any category of cities.
- It has been made mandatory for all Phase-II permission holders to co-locate their transmission facilities on the existing identified towers in all the cities except where new towers shall be got constructed by Ministry of I&B. Pending creation of collocation facility, the successful bidders in these cities were permitted to operationalise their Channels on individual basis for a period of two years or till the collocation facility is commissioned, whichever is later, at the end of which they shall shift their operations to the new facilities.

As the cities covered in Phase-II were having population above three lakhs, the need is being felt to cover the cities with lesser population considering popularity of FM Radio broadcasting. Therefore, there is a considerable scope for expansion of FM broadcasting in smaller cities as well.

2.8 **Working Group Report of Eleventh Five-Year Plan (2007-12) on Information and Broadcasting Sector**

2.8.1 The highlight of the Working Group Report of Eleventh Five-Year Plan (2007-12) on Information and Broadcasting Sector are as follows:

- FM coverage remains at a level of 40% by population as against the 10th Plan target of 60%.

- FM coverage should be enhanced from 40% to 75% by using Digital Radio Mondiale (DRM+) compatible transmitters;
- Estimated 600 private FM stations to come up in the 11th Plan (including Phase-I & II).

2.9 Due to its versatility, FM Radio broadcasting is considered as main medium to provide entertainment, information and education. India is a vast country with mixed population. Benefit of such advancements should also be extended to other smaller areas not covered so far. Demand of the local content is also increasing. In addition to country wide spread of FM radio, the issues relating to FDI, permitting News and current affairs, networking in FM broadcasting, and reduction of license fee in certain identified areas are also needs to be addressed.

2.10 Ministry of I&B vide their letter DO no. 104/2/2007-FM/622 dated 13.11.2007 (Refer Annexure-I) have sought the recommendations of the Authority under section 11 (1) (a) of Telecom regulatory Authority of India Act 1997 on issue of modifications to be incorporated in policy for private FM Radio broadcast Phase-III.

2.11 In order to address various issues raised in the reference from Ministry of I&B, the Authority released a Consultation Paper titled 'Issues Relating to 3rd Phase of Private FM Radio Broadcasting' on 8th January 2008. An Open House Discussion (OHD) was held in Delhi on 30th January 2008 to seek the views of various stakeholders.

2.12 The Authority deliberated on various issues emanating from the written submissions of the stakeholders (Annexure-II), Open House Discussions (OHD) and International practices (Annexure-III). The recommendations have been structured in chapters one to five. Chapter 3 on "Regulatory & Licensing

issue” deals with licensing framework. Chapter 4 covers “Technical Issues”. Chapter 5 on “Other Issues” deals with issues like operationalisation time, floor bid price, content outsourcing, automatic renewal of permission etc.

CHAPTER 3

Regulatory and licensing issues

- 3.1 **Ministry of I&B vide their letter DO no. 104/2/2007-FM/622 dated 13.11.2007 have sought the recommendations of the Authority under section 11 (1) (a) of Telecom regulatory Authority of India Act 1997 on issue of modifications to be incorporated in policy for private FM Radio broadcast Phase-III. (Refer Annexure-I)**
- 3.2 The Authority has kept in view the Government policy direction of 10th Five-year plan and working group report of 11th Five-year plan to enhance the FM radio coverage from 40% by population at the end of 10th five year plan to 75% by the end of 11th five year plan. Though FM radio coverage has substantially increased and 185 channels are operational, yet the present coverage by population is approx. 40%. With the finalization of bidding of remaining 93 vacant channels of Phase-II and four new channels for Dehradun, the private FM Radio broadcasting is expected to cover 92 cities. There are 606 districts and 5161 towns in our country. The present private FM Radio broadcast coverage is not significant. Therefore it is clearly evident that fast growth of private FM Radio broadcasting is necessary if goals envisaged for the 11th five-year plan have to be achieved.
- 3.3 The demographic distribution of the population clearly indicates that 75% population is attributed to 33% of districts. FM Radio broadcast is now available in most of the big cities and metros. Therefore it needs to be extended to smaller cities in order to increase its coverage and penetration.

3.4 **Need for Augmentation of Private FM Broadcasting**

3.4.1 Radio broadcasting due to its versatility has been the main medium for entertainment, information and education. The popularity of private FM Radio broadcasting Phase-II amongst the masses itself speaks of success. The scheme to rope in private broadcasters for FM radio has significantly contributed to enhance the coverage and provide good quality of reception to radio listeners. This has also encouraged local talent and generated employment opportunities in various cities. Employment opportunities in this sector are thus no longer confined to Metros and handful of 'A' Class cities, but are also becoming available in other cities. Naturally, there is a demand to expand private FM Radio broadcast to smaller towns not covered so far in Phase-II through private agencies.

3.4.2 Market potential based on the population of any area had been the basis for selection of cities in Phase-I and Phase-II for private FM broadcasting. Taking into consideration various factors including the viability of number of channels, it was decided to include all the cities with a population of 3 lakhs and above in Phase-I and II. Besides the cities with population of 3 lakhs and above, some important cities like state capitals of thinly populated states were also taken into consideration. Following considerations influenced the selection of 92 cities in Phase-II: -

- a) 86 cities where Prasar Bharti towers were to be shared by private broadcasters.
- b) 6 cities where infrastructure of land and tower was to be created by the Government.
- c) Cities in close proximity to bigger proposed stations were not included in these phases

- 3.4.3 The list of cities and number of channels covered in Phase-I for private FM Radio broadcasting is at **Annexure-IV** and the list of cities and number of channels for Phase-II where LOI has been issued is at **Annexure-V**. List of remaining FM channels for Phase-II that have been put on re-bid is at **Annexure-VI**.
- 3.4.4 The stakeholders in Phase-III have favored to extend private FM Radio broadcasting to cities having population of 1 lakh and above. BECIL in its proposal to Ministry of I&B have also proposed that all cities having population of 1 lakh and above may be selected for FM Radio broadcast in Phase-III (**Refer Annexure-VII**). Here it is important to mention that none of the stakeholder has suggested any change in the present bidding process for the allocation of the FM radio channels. Therefore no change in auction format is envisaged and it shall continue to be guided by policy on expansion of FM Radio broadcasting service through private agencies (Phase-II) issued on 13th July 2005.
- 3.4.5 The expansion of private FM Radio broadcast in new cities depends on economic viability, sustainability and infrastructure readiness. It is directly related to the population of the city, composition, different target groups, and growth potential etc. While population of the city is prime criterion, selection of cities has to be based on technical considerations to ensure interference free transmission and reception.
- 3.4.6 Since common frequency band (87-108MHz) has been used to provide FM Radio broadcast in addition to other services, the frequency planning and location identification of the transmitter becomes important to ensure interference free transmission. The likely impact of existing transmitters, the present frequencies being used, and impact of proposed transmitters have to be studied in depth. BECIL has examined the cities,

which have so far not been brought under the ambit of FM Radio broadcasting from the point of view of proximity to other existing or proposed FM radio stations. From frequency usage point of view, it may be desirable to include only those cities in Phase-III whose distance from existing or proposed station permit allotment of frequencies that are atleast 400 KHz apart from existing/ proposed frequencies. A thumb rule could be to take into consideration Radio Protection as indicated in table 3.1 and minimum signal strength of 54 dB(μ V/m).

Table 3.1: RF Protection ratio as defined by ITU-R

Difference between the wanted and interfering carrier frequencies (KHz)	RF Protection Ratio (dB) Maximum frequency deviation of ± 75 KHz			
	Monophonic		Stereophonic	
	Steady interference	Tropospheric interference	Steady interference	Tropospheric interference
0	36	28	45	37
100	12	12	33	25
150	8	8	18	14
200	6	6	7	7
300	-7	-7	-7	-7
400	-20	-20	-20	-20

3.4.7 ITU-R has defined minimum signal strength both for monophonic and stereophonic radio transmission. Minimum signal strength as decided by ITU must be ensured to provide quality reception of signals (Refer table 2.2):

Table 3.2: Minimum usable field strength values recommended by ITU-R

Area	Monophonic Service dB (μ V/m)	Stereophonic Service dB(μ V/m)
Rural	48	54
Urban	60	66
Large Cities	70	74

3.4.8 The thumb rule thus prepared gives minimum distances between various combinations of categories of cities as indicated at **Annexure-VIII**. Cities that meet above-mentioned criteria have been proposed by BECIL for inclusion in Phase-III. Besides these cities, state capitals of thinly populated states have been re-examined. It is observed that the state capitals of two Union Territories (U.T.) viz. Lakshadweep and Dadra & Nagar Haveli have so far not found place in any of the lists. Kavaratti, the state capital of U.T. of Lakshadweep has, accordingly, been included in the list. As far as U.T Capital of Dadra & Nagar Haveli (Silvasa) is concerned, it is in close proximity of Daman and has not been included in Phase-III list.

3.4.9 The categorization of the cities is important to ensure maximum radial coverage of transmitters installed in such cities, the maximum power such transmitter can transmit and maximum height of the antenna to effectively control radio protection ratio. Considering these factors the categorization of the cities under Phase-III is proposed to be kept same as was adopted in Phase-II (Refer table 3.3): -

Table 3.3: Categorization of cities based on population, Antenna height and Effective power radiation details:

Category	Basic (one or more of the following)	Effective Radiated Power (ERP) (kW)		Antenna Height (Meters)	
		Min	Max	Min	Max
A+	Metro cities	25	50		
	Delhi Mumbai			75 75	200 175
A	Population above 20 lakhs	10	30	75	150
B	Population above 10 lakhs and upto 20 lakhs	5	15	50	100

C	Population above 3 lakhs and upto 10 lakhs	3	10	30	75
D	Population above 1 lakh and upto 3 lakhs	1	3	20	40

3.4.10 Here it will be important to mention that bigger cities have already been covered during Phase-I and Phase-II. Hence new cities in Phase-III would generally fall under categories D. We may note here that classification of the city is not only on the basis of population but also taking into consideration the area of the coverage. This is determined taking into consideration the height of the antenna, the effective radiated power etc. Since requirement of the coverage of an area by FM broadcast depends on many factors other than population, Government can upgrade or downgrade the category of a city keeping in view the relevant factors. For example a city can be upgraded if it is required to cover some nearby equally important cities or it can be downgraded, if its effective radiated power (ERP) is likely to cause interference to a nearby existing or proposed FM Radio station. Therefore even in Phase-III, though there will primarily be cities under category 'D', the possibility of cities in other categories cannot be ruled out and have to be considered on situational basis.

3.4.11 While all stakeholders have supported the provisioning of private FM Radio broadcast to cities with population of one lakh and above, many raised the issue of viability. Some stakeholders feel that operation of not many channels will be viable and they want that number of FM Radio broadcast channels in category 'D' cities be reduced from four as envisaged in policy guidelines to two. It was also felt that

effective measures have to be taken to ensure viability of FM Radio broadcasters in such areas.

- 3.4.12 Few Stakeholders are of the view that since coverage of FM Radio broadcasting is being extended to new areas; hence coordination of allocation of frequencies will be difficult. Therefore area of operation may now be extended from city to district. The channels may be allocated to the permission holders to operate across the district which will automatically reduce the number of FM Radio broadcasters when compared with city based operation and many coordination problems will be reduced. They argue that since channel frequency coordination has been done for many FM Radio broadcasters in various cities, such integration may not be difficult for district level. Since at present the coverage of FM Radio broadcast is limited to cover just 92 cities in Phase-II, the districts can be identified now and planning can be done accordingly. District level service area for FM broadcasting will have better revenue model and better long term planning for network infrastructure.
- 3.4.13 Some stakeholders also felt that since FM Radio broadcast channels have been allocated on the city basis based on the bidding, any migration at this stage from presently used city concept to district concept will complicate the issue. Their apprehension was mainly for calculating One Time Entry Fee (OTEF) for existing operators which may be difficult as auctions has been done on bid amount for every operator within certain defined parameters.
- 3.4.14 Some other stakeholders also feel that state level permission to operate private FM radio will be better as it will improve economic viability to great extent and also reduce the burden of frequent bidding for different cities. Though on face of it, it is a

good proposal but further analysis indicates operational problems. Some of these are: -

- a. The viability of number of channels in different cities across the state is different. Big cities have potential for more channels while smaller cities can economically support limited channels. The state level concept will reduce the number of channels for the whole state and it will not be possible to give more channels to bigger cities in the state.
- b. The planning of the tower locations and frequency planning will be very complicated with few FM Radio broadcasters already operational on city basis, and others expecting on state basis.
- c. Alternatively the planning of FM Radio channels considering green field operations in a state without any weightage to population and existing FM Radio transmitters may give 4 to 5 channels across the state, but both migration as well as meeting high channel requirement in bigger districts will be extremely difficult.
- d. The provision of district specific local content in case of state level auction may also be difficult. It may result in reduced local content generation and employment to local persons.
- e. Defining rollout obligations in state level bidding may be another complication.

3.4.15 From the above discussions it is clear that smaller cities having population around 1 lakh may not have viable business model and permission to operate FM Radio broadcast on state level will also have associated difficulties. In the present circumstances, the best option seems to consider district as the feasible unit to grant permission to FM Radio broadcasters. This will reduce the number of the bids in view of district level operation as well as facilitate identification and coordination of

the tower sites and roll out of FM Radio broadcast quickly. It will be important to mention that at present only 92 cities have been covered in Phase-II (where either auction of channels have been finalized or scheduled for the bidding in Phase-II). There are 606 districts across the country, so we still have 514 districts where FM radio has not started as yet. The pros and cons of district level auction for FM Radio broadcasting is given in table 3.4: -

Table 3.4 Summary of pros and cons for district level Auctioning

Items	City	District	State
Frequency planning	Easy	Moderate	Difficult
Tower coordination	Easy	Moderate	Difficult
No. of Bidding	High	Moderate	Less
Availability of total channels	High	Moderate	Less
Black Spots	High	Less	High
Local Content	High	Moderate	Low
Competition	High	Moderate	Low
Viability	Low	Moderate	High
Monitoring	Difficult	Moderate	Easy

3.4.16 On the basis of above deliberations the district is being considered as appropriate unit for provision of FM Radio broadcasting in Phase-III. The population of some of the districts may be small and as such the business model in such districts may not be viable. Ministry of I&B can take a view in such special cases to consider clubbing such a district with adjacent district/districts to make a viable business model.

- 3.4.17 Apprehensions have been raised that district boundaries may change due to further bifurcation of districts or for other reasons complicating district level planning for FM Radio broadcast. Subsequent change in district boundaries will disturb identified locations of transmitter towers. Therefore the number of districts and their geographical boundaries must be considered as on 1.1.2008 for planning of FM radio towers and the geographical boundaries of such districts for the purpose of FM Radio broadcasting should remain unchanged in Phase-III even if a new district is carved out from existing district(s).
- 3.4.18 The cities where FM Radio broadcasting is operational have been analyzed to determine if there are districts with more than one city having FM Radio broadcasting. It has been found that presently there is no district where more than one town/city is already covered with FM Radio Broadcasting services (Refer Annexure-IX). Hence FM Radio broadcast jurisdiction of such a permission holder can also be enlarged to a district level in cases where the existing operators opt for using the same channel for the district.
- 3.4.19 With district level permission the One Time Entry fee (OTEF) shall be determined on district basis for Phase-III based on the bidding process. In view of this OTEF shall have to be worked out afresh for Phase-II permission holders who opt for enlargement of their operational area to a district level as the unit at the time of the Phase-II bidding was city. OTEF for such expanded area of operation can be determined on the basis of highest bidding in the same district if auction of some FM Radio channels is proposed in Phase-III or similar districts (District Category wise) in the state. If highest bid is less than the original bid price for city basis, the migration shall be allowed without any additional payment. However, no refund shall be

given. The permission holder can operate in extended area on district basis if he pays the difference between the highest bid price determined on the basis of the auction after adjusting the bid price already paid. The reserve One Time Entry Fee will also get suitably revised (Reserve OTEF is 25% of the highest Entry fee) considering the highest bid price arrived based on the auction. Annual fee for the enlarged area of operation as district shall be determined considering revised reserve OTEF now applicable on district level. This will enable viable business model for operators, rationalize the bid process, ease monitoring requirement, give adequate importance to local content and will not complicate the tower location & frequency planning process.

3.4.20 It is important to mention that there are 97 channels of Phase-II where bidding was scheduled on city basis but has not been done. All such bidding must now be done on district level under Phase-III to avoid complication of migration for city basis to district basis.

3.4.21 All the existing FM Radio broadcasters who have been given permission to operate FM Radio broadcast in a city of a particular district shall be given option to migrate to district level within three months from the date of finalization of bids for that district. In case where the auction for a district is technically not feasible, then the existing FM Radio permission holder, if any, in the city of that district will be given an option to migrate based on the bid amount for a similar district (based on categorization of district). Those who do not opt to migrate to district level will be permitted to continue their operations till the validity of the existing permission period. No renewal shall be provided to such permission holders at the end of the existing permission and bidding for such slots will be done after

completion of the permission period considering district as a unit.

3.4.22 The Authority recommends:

- **The geographical basis for Private FM radio bidding in future may be changed from City to District.**
- **The districts existing as on 01.01.2008 shall be identified and will form the basis of further permission. Any new district formed after 01.01.2008 shall continue to be served from the district(s) from where it has been carved out.**
- **In the districts, when no city is having any FM Radio permission, the new permission shall be given on district basis only.**
- **The bidding process will remain the same as envisaged in policy on expansion of FM Radio broadcasting service through private agencies (Phase-II) dated 13th July 2005.**
- **The channels available in a district shall be auctioned to the eligible bidders and shall be allocated to successful bidders in descending order of the bid price.**
- **In case the Private FM Radio broadcast is functional in any part of the district, such operator/ licensee may be given the option to enlarge the area of operation for the same channel to provide coverage to full district after paying difference in maximum bid price determined through the auction for the district or similar district (category of the district) in the state and OTEF already paid for city. If highest bid is less than the original bid price for city basis, the migration shall be allowed**

without any additional payment. However, no refund shall be given.

- The reserve One Time Entry Fee (OTEF) shall be re-fixed based on the maximum bidding price through the auction for the district or similar district in the state. Annual fee for the district will now be determined considering revised reserve OTEF.**
- A private FM Radio broadcaster functioning in a city of the district shall be given option to migrate to district level within three months from the date of finalization of bid for that district. In case where the auction for a district is technically not feasible, then the existing FM Radio permission holder, if any, in the city of that district will be given an option to migrate based on the bid amount for a similar district (based on categorization of district). If it does not opt for enlarging its area of operation to district level, such an operator shall continue to operate in the city only till the validity of existing permission with no prospects for renewal.**
- The bidding for all vacant slots shall be done based on the district level.**
- The bidding for remaining 97 channels of Phase-II scheduled on city as operational area be rescheduled considering district as operational area to avoid complication of subsequent migration from city to district level.**

3.5 Additional channels in the same District:

- 3.5.1 TRAI in its recommendation on “Licensing Issues Relating to 2nd Phase of Private FM Radio Broadcasting” in Aug. 2004 recommended that in order to boost private FM Radio broadcast**

and considering availability of frequencies, maximum number of FM Radio broadcast channels must be identified and may be made available for bidding. The matter was examined by Ministry of I&B and as per BECIL number of channels in Phase-II proposed to be allotted for A+, A, B, C, and D category of cities were as follows (Refer table 3.5):

Table 3.5: Number of channels in Phase-II proposed to be allotted for A+, A, B, C, and D category of cities

Sl.No.	Category	Total number of channels to be offered	Number of channels to be earmarked for education	Number of channels to be offered to Private Broadcasters
1.	A+	10 to 12	1	9 to 11
2.	A	7	1	6
3.	B	5	1	4
4.	C	5	1	4
5.	D	5	1	4

3.5.2 The bidding of Phase-II channels was conducted subsequently and the number of channels identified for auction/ allotment in some cities were reduced because of constraints of frequency availability. It was provided that the decision would be taken later based on the availability of the frequencies in these cities.

3.5.3 Stakeholders have now pointed out that situation on availability of frequency in these cities have changed to great extent because of adoption of single frequency plan. It is being preferred by private broadcasters for using uniform brand name and continuity of service which has resulted in releasing of number of frequencies. The Government may therefore be in a position to release more channels in these cities where channels were reduced under Phase-II due to non availability of the

frequencies. They now want that such available frequencies may be auctioned and number of channels in a city may be restored as per initially planned (Refer table 3.5).

3.5.4 BECIL has examined the economic feasibility of the maximum number of FM Radio broadcast channels in a city and is of the view that sufficient scope exists to restore number of channels as initially envisaged in Phase-II in category A+, A, B and C cities subject to availability of frequencies. Their analysis for category “D” cities is not very encouraging and in their view economic model in category “D” cities can at the most support maximum three FM Radio broadcast channels at present. They therefore recommend that under category D number of channels may be reduced from 4 as envisaged in Phase-II plan to 3. BECIL recommends following scheme for allocation of additional channels subject to availability of the frequencies (Refer table 3.6):

Table 3.6: BECIL proposal for allocation of channels city category wise

Category	Private Broadcasters	Education/Public Services
A+	9 to 11	1
A	6	1
B	4	1
C	4	1
D	3	1

3.5.5 Other stakeholders are also of the similar view. Association of Radio Operators for India (AROI) is of the view that while frequencies may be restored as initially envisaged in Category A+, A, B, C cities, it may be reduced from 4 to 2 in category “D” cities. They are also of the view that economic viability in category “D” cities may not sustain more than 2 channels at present.

3.5.6 The Authority has considered the number of viable channels in a district. Since the district is being recommended as the unit of operation in Phase-III of FM Radio broadcasting, it is felt that minimum three channels should be offered for bidding for category 'D' districts also in FM Radio broadcasting in Phase-III, subject to technical feasibility.

3.5.7 **The Authority recommends:**

- **Number of channels for FM Radio broadcast in Category A+, A, B, C cities, now changed to districts basis, which may have been reduced due to non availability of frequencies during Phase-II bidding, may be restored as envisaged in Phase-II, subject to technical feasibility.**
- **The number of FM Radio broadcast channels for category 'D' cities, now changed to districts basis may initially be reduced to three from five as envisaged in FM Radio broadcast Phase-II, subject to technical feasibility. The progress of such FM Radio broadcasters in such districts may be observed for one year before taking appropriate decision to enhance the number of FM Radio broadcasters in such districts subject to technical feasibility.**

3.6 Restriction on Ownership of Channels in a district:

3.6.1 The policy guidelines on expansion of FM Radio broadcasting service through private operators dated 13th July 2005 vide clause 6 & 7 reproduced below clearly restrict one channel per city to every applicant provided total number of channels allocated to the permission holder is within overall ceiling limit of 15% of all the allocated channels in the country:

“6. No Multiple permissions in a city:

- 6.1 *Every applicant shall be allowed to run only one channel per city provided the total number of channels allocated to the entity is within the overall ceiling of 15% of all allocated channels in the country.*
- 6.2 *No permission holder shall outsource, through any long-term production or procurement arrangement, more than 50% of its total content, of which not more than 25% of its total content shall be outsourced to a single content-provider.*
- 6.3 *No permission holder shall hire or lease more than 50% of broadcast equipment on long-term basis.*
- 6.4 *No permission holder shall enter into any borrowing or lending arrangement with other permission holder or entities other than recognized financial institutions, which may restrict its management or creative discretion to procure or broadcast content.*

7. Total number of frequencies that an entity may hold:

- 7.1 *No entity shall hold permission for more than 15% of all channels allotted in the country. In the event of allotment of more channels than prescribed, the entity will have the discretion to decide which channels it would like to surrender and the government shall refund its OTEF for these channels in full.”*

3.6.2 Here word entity is used to define an organization/ Group which fulfill the requirements to contest bidding for allocation of FM radio channel. These provisions seem to have been made in

the guidelines to avoid the dominance of few entities to operate FM channel.

3.6.3 Many stakeholders are of the view that restriction of one channel per broadcaster per city must be relaxed. They argue that having more than one channel makes good business model for the private FM Radio broadcaster. At the same time, it provides more options and diversity to the customers to have different flavors of content. The different socio-economical background of masses, different languages and emerging importance of entertainment are some of the factors debated for seeking permission for more channels. FICCI is also of the view that the limited increase in the FM radio listenership (45% to 53% by increase in FM radio channels from 21 to 135) is largely due to lack of diversity in radio contents. They argue that problem is not the dominance but the abuse of the dominance. There are number of restrictions already imposed to check any abuse and therefore there is no relevance of present restriction of one channel per city. They also advocate that any permission holder in a city must be permitted to have up to 3 channels or 33% of total channels in the city whichever is less. The supporting arguments of FICCI are given below:

- Apprehension of abuse or monopoly of more channels is baseless. In current age, any particular company or media has limited scope of influencing a user/ listener as they have access to multiple sources for extracting information, education and entertainment.
- Blanket restriction on number of channels in a city will not generate diversity in content development and viewpoints. Therefore, FM Radio broadcasters should be allowed to own multiple channels in the city.

- The diversity of the content can be assured by casting obligations on multiple permission owners. India being a multi-linguistic country, there is enough room in each city to have different FM channels catering to different sector of population. They advocate that if an agency has to be given more than one channel in a city, the different formats such as Hindi Contemporary, English, Classical music, Retro (10 years old), Hindi popular, Dance Music etc can be mandated so that variety of the program are ensured.

3.6.4 The present guidelines to restrict one channel in a city to one permission holder is mainly to ensure that such an important sector is not monopolized. Since in Category “A+”, Category “A” and Category “B” cities, number of likely FM radio channels are more than 4, there is a scope to permit a permission holder more than one channel. The concern of the government will be met if it is ensured that first three FM Radio broadcast channels excluding AIR will be given to different permission holders. FICCI has also expressed similar views.

3.6.5 The channels are allocated in the city by following bid process. The additional channels can be given to an existing permission holder only when it is permitted to competes in the bidding. Bidding of the available channels is done in one lot and only eligible entities are permitted. Therefore if more than one channel is being permitted in a district, existing permission holders will be permitted for the bidding process provided the original condition of three different permission holders for first three channels is fulfilled.

3.6.6 This is to be ensured that first three channels excluding AIR are allocated to three different entities. This can be taken care

in making the framework of the bidding process. Any existing permission holder will not be declared successful even if the bid is highest unless initial three channels have gone to different entities. Any vacant channel among the first three channels will be given to independent entities only.

3.6.7 The other concern is mandating different format of content as suggested by FICCI. Most of the stakeholders have endorsed these views. Though there is a concern that since allocation of the frequency is through bidding, one can say that it should be his choice to select the program and any mandating in reference to the content may be discriminatory. We may note here that FM Radio broadcasters are asking for content diversity themselves. There is all likelihood that they will themselves try their best to provide diversified content to improve their own business model. Hence such mandate may not be desirable. It is hoped that FM Radio broadcasters will make all out efforts to increase content diversity to increase the listener coverage.

3.6.8 Policy guidelines on expansion of FM Radio broadcasting service through private operators prescribes for 15% ceiling of total number of frequencies that an entity may hold in the country. The idea seems to restrict presence of single permission holder to have all India presence. This would have been prescribed considering importance and effectiveness of FM Radio broadcasting..

3.6.9 Stakeholders expressed the view to remove the upper ceiling limit of 15% of total FM Radio channels in the country presently imposed on existing entities. They are of the opinion that FM broadcast industry is already quite mature and therefore there is no need to put such artificial restrictions. It only complicates the bidding process without any gainful outcome. They are also

of the view that even national presence will not monopolise the FM Radio sector as channels to an entity per city is restricted.

3.6.10 The Authority evaluated pros and cons of the suggestions. It is important to note that provision has already been made to ensure that atleast three channels excluding AIR are allocated to different entities in a city. As such, even if the upper limit of 15% on total existing channels is removed, no single permission holder can monopolize the operation. Such an imposition of limit only throttles the competition especially when FM Radio broadcast channel is allocated based on open bid. Moreover the success of auction and availability of channels are not determinable as one time exercise. Therefore the ceiling of 15% may not work in a fair manner. Presence of one single operator across the country will not adversely impact if such an operator becomes successful through competitive bidding route. In order to ensure just and fair deal to all the players, the Authority is of the view that present ceiling limit of 15% of total FM Radio channels in the country may be removed.

3.6.11 **The Authority recommends:**

- **At least three channels excluding AIR in any district will be given to three different entities. Once this condition is met, then the existing operator/ permission holder can bid for the remaining channels and may be declared successful for any channel where his bid is highest subject to the condition that maximum number of channels to a permission holder in the district will not be more than 50% of total channels in the district.**
- **The existing ceiling limit of 15% of total FM Radio channels in the country permitted to a permission holder is no longer valid as the fear of monopoly is no longer real. This limit is also not practical, as the total**

**number of channels will vary depending on availability.
Hence such limit may be withdrawn.**

3.7 **FDI limit**

3.7.1 The policy guidelines on FM Radio broadcasting service vide clause 8 define restrictions on foreign investment. The related clause is reproduced here: -

“Total Foreign Investment, including Foreign Direct Investment (FDI) as defined by RBI, including FDI by OCBs/NRIs/PIOs etc., Portfolio Investments by FIIs (within limits prescribed by RBI) and borrowings, if these carry conversion options, is permitted to the extent of not more than 20% of the paid up equity in the entity holding a permission for a radio channel, subject to the following conditions:

- *One Indian individual or company owns more than 50% of the paid up equity excluding the equity held by banks and other lending institutions.*
- *The majority shareholder exercises management control over the applicant entity.*
- *Has only Resident Indians as Directors on the Board.*
- *All key executive officers of the applicant entity are resident Indians.”*

3.7.2 The present Foreign Direct Investment (FDI) limits prescribed in media sector is given below (Refer table 3.7):

Table 3.7: FDI limits in various media sectors

Media sector	Current FDI Cap/Equity limit	Entry Route
Uplinking a news and current affairs TV Channels	26% (FDI+FII)	FIPB
News and Current affairs TV	26% (FDI+FII)	FIPB

broadcaster		
Print Media publishing of newspaper and periodicals dailies with news and current affairs	26% (FDI)	FIPB
Cable TV	49% (FDI + FII)	FIPB
DTH	49% (FDI + FII)	FIPB
Terrestrial Radio	20% (FDI + FII)	FIPB

3.7.3 The stakeholders are of the view that foreign direct investment limit may be increased to 26% as applicable to TV news and Newspaper sector. They feel that FM Radio broadcasting requires significant investments, which will largely be facilitated if FDI cap is enhanced to 26%.

3.7.4 FICCI is also of the view that clause 8 needs modification as foreign inflow especially in the promoter company and /or majority of shareholders which are listed entities are subjected to change on daily basis. They argue that there can be instances when the permitted limit of 20% may be exceeded resulting in breach of conditions by FM Radio company. This is due to the fact that calculation of the 20% foreign investment in equity of the applicant company includes FDI/FII investments in the applicant company at the end of each quarter of the financial year. In addition to foreign direct holding component, if any, in the equity of the of the promoters and majority shareholding company of the applicant company, FII investments in them will also be reckoned on pro-rata basis so as to arrive at total foreign holding in the applicant's company. FICCI contest that Foreign Institutional Investor (FII)

shareholding in the Indian promoter company need not be taken into account for the purpose of calculating compliance of FDI cap.

3.7.5 BECIL is also of the view that FM Radio broadcasting requires heavy investment to bringing up a FM Channel and therefore they argue that present FDI limit may be enhanced in order to attract more investment.

3.7.6 Some stakeholders also contest that FDI inflow in a sector takes place only when it is viable. They argue that in absence of viability, neither FDI nor domestic investments will flow. While putting more emphasis to improve viability of FM Radio, stakeholder feel that in order to ensure level playing field with newspapers and news TV, the FDI may be brought at par with 26% limit. They are also more concern with method of calculation of FDI cap. They argue that present FDI cap is inclusive of pro-rata investment in promoter company and/or majority shareholders. This results in effective dilution of the permissible limit of 20%. They also expressed the view that management of total FDI limit will be difficult if Promoter Company is listed and variable FII investments are made spread over a quarter.

3.7.7 The Authority has noted that government in its press note 6 of 2005 of Department of Industrial Policy & Promotion, Ministry of Commerce & Industry has decided foreign equity/ FDI cap for FM Radio broadcasters. The exact para of press note is reproduced below:

“The Government has now decided to permit foreign investment, including FDI, NRI and PIO investments and portfolio investments up to 20% equity for FM Radio broadcasting services subject to such terms and conditions as specified from time to time by

Ministry of I&B for grant of permission for setting up of FM Radio stations”.

- 3.7.8 FM Radio broadcasting is very powerful communication medium to common masses. A constructive but effective control is necessary for integrity & security of the country. On the other hand the financial resource requirement/investment is important. A balanced view in terms of fund mobilization and public interest is important. The past experience show that private FM Radio broadcasters have been successful in raising resources and the existing cap of 20% FDI has not been experienced as too restrictive.
- 3.7.9 It is worth noting that the board of FM Radio broadcasters has a provision of prior clearance by home ministry. Therefore some form of effective control in cases where FDI has been sought is in-built into the system.
- 3.7.10 As far as level playing field with News paper and news TV channels is concerned, Government in press note 1 of 2006 of Department of Industrial Policy & Promotion, Ministry of Commerce & Industry has decided “ *FDI (including investment by foreign Institutional Investors (FIIs) up to 26% would be permitted with prior approval of the government for up-linking a news and current affairs TV channel subject to the condition that the portfolio investment in the form of FII/NRI deposits shall not be “Persons acting in concert” with FDI investors, as defined in the SEBI (Substantial Acquisition of shares and takeovers) Regulations, 1997. The company permitted to uplink the channel shall certify the continued compliance of this requirement through the company secretary at the end of each financial year”.*
- 3.7.11 The Authority has considered issue of FDI cap for FM Radio broadcasters. It is noted that FDI cap/ Equity in TV news channels, Cable TV Network and DTH also include FDI and FII

to determine the FDI/Equity cap. Therefore contention of stakeholders regarding violation due to variation in FII components in promoters' equity is not tenable and can be monitored. There are no serious reports of violation in case of Cable TV and DTH. The stakeholders' argument of dilution of FDI/Equity cap is also not tenable, as the government has cautiously prescribed combined limit of 20%. Stakeholders were unanimous to demand permission to broadcast news and current affairs. The matter is deliberated in Para 2.10 subsequently. Considering that FM Radio broadcasters shall be permitted to broadcast news as recommended in paras to follow, the parity with news paper and news TV channels will be desirable, however any FM radio not interested to broadcast news as recommended subsequently may be permitted higher FDI/equity.

3.7.12 **The Authority recommends:**

- **The FDI including FII for FM Radio broadcasting permission holders, who are interested to broadcast news, may be enhanced to 26% from present 20% in view of FDI provision of 26% in news and current affairs in TV Broadcasting. All other terms and conditions will remain the same.**
- **Similarly, the FDI including FII for FM Radio broadcasting permission holders, who do not opt for news broadcasting, may be enhanced to 49% from present 20%. All other terms and conditions will remain the same.**
- **FM Radio broadcaster can opt later to broadcast news only if they bring down the FDI including FII to 26%. For this, such broadcasters have to seek specific permission**

from Ministry of I&B after submitting the proof of FDI including FII not more than 26%.

- **The FDI including FII for FM radio will be revised as and when Government takes any further decision to revise FDI for TV broadcasting including news and current affairs.**

3.8 Change in ownership of the permission to broadcast FM radio

3.8.1 Policy guidelines on FM Radio broadcasting in clause 8 prescribe condition regarding change of ownership. The relevant clause is reproduced below: -

“No permission holder shall be permitted to change the ownership pattern of the company through transfer of shares of the major shareholders to any new shareholders without the written permission of the Ministry of Information & Broadcasting, which shall not be granted for a period of five years from the date of operationalisation of the permission, subject to the condition that the new shareholders conform to all the prescribed eligibility criteria”.

3.8.2 As per the clause, a lock-in period of five years is prescribed from the operationalisation of the FM Radio broadcasting channel. Thereafter, permission holder can seek explicit permission of the Ministry of I&B if new shareholders conform to the prescribed eligibility criteria. During this period the equity holdings pattern of majority share holders/ promoters cannot be changed. Normally operation of the channel takes 15 to 18 month from the date of issue of LOI. Total period of license is 10 years. So the equity of the majority share holders/ promoters including equity holdings pattern is locked for more than half of the license period.

- 3.8.3 FICCI is of strong view that Government may consider transferability and tradability of licenses even during present lock in period. In their view, it will provide an exit route for a company, if for certain reason it does not want to continue FM Radio broadcasting operations. In their view interest of the listener will also be protected due to continued channel operation and Government will also be saved from the burden of auctioning channels time and again to fill up gaps created by permission holders who are no more interested to continue the operations.
- 3.8.4 The effective utilization of frequencies is important. As grant of permission to the agency for FM Radio broadcasting comes with commitment of frequency allocation, effective utilization of the allocated spectrum and roll out obligations are important. Therefore lock-in period is necessary to ensure entry of only serious players in this business and to avoid trading of such licenses with commercial motives. However effective management of any business will require certain flexibility. In case of FM Radio broadcasters even share holding pattern by majority share holders/ promoters cannot be changed without written permission and such permissions shall not be given within 5 years from the date of starting the operations. This seems to be very harsh and needs revision.
- 3.8.5 Any business may require exit path if operations are not commercially successful or to meet genuine exigencies. The justice will be met if FM Radio broadcasters are permitted to dilute the share holding pattern of majority share holders/ promoters maximum up to 51% once FM Radio broadcasting has been started. The start of the FM Radio broadcasting will be certified by Ministry of I&B on the request of the permission

holder. Such written permission will be necessary before any change in share holding patterns by the permission holder.

3.8.6 Majority share holders/ promoters can dilute their shareholding below 51% after three years from the date of start of the FM Radio broadcasting after taking prior permission from Ministry of I&B. Such permissions shall be considered after three years from the date of operationalisation of FM radio subject to the condition that the new shareholders conform to all the prescribed eligibility criteria. Here it will be important to mention that maximum number of channels to a permission holder in a district cannot be more than 50% of total number of channels in that district. Therefore Ministry of I&B may consider this fact while granting permission for change of ownership.

3.8.7 **The Authority recommends:**

- **No change in holding pattern of the shares shall be permitted till start of the FM Radio broadcasting in any circumstances.**
- **The majority share holders/ promoters of the company holding permission to provide FM Radio broadcasting may be permitted to dilute their share holding subject to condition that their share holding does not reduce below 51% after start of FM radio operation, with the prior permission of Ministry of I&B which shall be granted after operationalisation of FM Radio broadcasting.**
- **Any change in ownership or further dilution shall be permitted with the written permission of the Ministry of Information & Broadcasting after a period of three years from the date of operationalisation of the permission. Such requests shall be considered after**

three years of operationalisation subject to the condition that the new shareholders conform to all the prescribed eligibility criteria. Ministry of I&B shall examine before granting permission for dilution of majority shareholding that maximum number of channels to a permission holder in a district does not exceed 50% of total channels in that district.

3.9 Annual fee structure

3.9.1 The policy on expansion of FM Radio broadcasting service through private agencies (Phase-II) vide clause no 4.4 define reserve OTEF and vide clause no 5.1 define entry fee. The respective clauses are reproduced below:

“4.4 RESERVE OTEF: Reserve OTEF limit for each city shall be 25% of the highest valid bid in that city. All bids below the reserve limit shall be summarily rejected.

5.1 Annual Fee shall be charged @ 4% of gross revenue, for the year or @ 10% of the Reserve OTEF limit for the concerned city, whichever is higher. Gross Revenue for this purpose would be the gross revenue without deduction of taxes.”

3.9.2 Stakeholders have not expressed any view on present method of calculation of the annual fee. The annual fee is determined based on the 4% of gross revenue or 10 % of the reserved OTEF whichever is more.

3.9.3 The Authority recommends:

- **The method of calculation of reserve one time entry fee (OTEF) and annual fee may be same as prescribed for FM Radio broadcasting Phase-II.**

3.10 Relaxation of fee structure for North-East and J&K

3.10.1 Policy guidelines on FM Radio broadcasting in clause 5 prescribe condition regarding annual fee:

“Annual Fee shall be charged @ 4% of gross revenue, for the year or @ 10% of the Reserve OTEF limit for the concerned city, whichever is higher. Gross Revenue for this purpose would be the gross revenue without deduction of taxes.”

3.10.2 The experience of Phase-II has shown that there has been lack of response from the areas like North East and J&K. As would be seen from the table 3.7, Guwahati is the only city where all the channels have been sold out in the first bidding process of Phase-II. Response in all other cities has been very poor:

Table 3.7: Channel bid status in NE and J&K

S.No.	State	City	No. of Channels offered	No. of Channels taken
1.	J & K	Jammu	3	1
2.	J & K	Srinagar	4	1
3.	Tripura	Agartala	4	1
4.	Mizoram	Aizawal	4	1
5.	Manipur	Imphal	4	0
6.	Arunachal Pradesh	Itanagar	4	1
7.	Nagaland	Kohima	4	0
8.	Guwahati	Assam	4	4

3.10.3 The problem seems to be related with the commercial viability of the operations due to geographical conditions, low population, difficult terrain and socio-economic background etc. The advertisement potential may not be sufficiently high in such places to pay minimum 10% of OTEF to government year on year basis till 4% of GR is more than that of 10% of OTEF in a year. BECIL advocates that difficulties in roll out of the services and poor socio-economic conditions prevailing in these states

need special consideration. It has proposed that committed yearly payment based on One Time Entry Fee (OTEF) for these states may be reduced preferably to make it a token payment.

3.10.4 It is also claimed that the provision of services like FM Radio broadcast is very important for the development of such states. Difficult terrain, revenue models based on only advertisements may not be easy for FM Radio broadcasting to take off in such difficult areas. Therefore it may perhaps be desirable to provide certain limited time relaxations in yearly commitments based on reserve OTEF to facilitate breathing time to roll out FM Radio broadcasting services.

3.10.5 In Tenth Five Year Plan one of the major thrust areas was the strengthening and expanding the reach of FM radio in the northeastern states (including Sikkim) and island territories. The Authority has taken note of different situations in North East and Jammu and Kashmir region and importance of FM Radio broadcast to reach to masses in far flung areas. The Authority is convinced that some financial relaxation to start FM Radio broadcast service in these regions will be desirable.

3.10.6 **The Authority recommends:**

- **The rate of Annual fee may be reduced to 50% of what is being charged from all existing permission holders in other areas for private FM Radio broadcasters in NE and J&K region for an initial period of three years from the date of issue of LoI to give such operators time to setup their network and start operations. This will ensure more FM Radio broadcasters, better program and viable business model for private FM Radio broadcasters in these regions.**

3.11 **Networking of FM radio programs across entities**

3.11.1 Policy guidelines on FM Radio broadcasting in clause 13 prescribe condition regarding networking of the programs:

“An entity will be permitted to network its channels in C & D category cities within a region only.

No two entities shall be permitted to network any of their channels in any category of cities.”

3.11.2 Networking of the programmes relate to sharing of the programs either within same permission holder or across the entities on real time basis. It is important to mention here that there is no restriction on re-transmission of the program i.e. same program can be re-transmitted from other cities also after gap of few minutes. Under Phase-II, a permission holder was permitted to network its channels in C&D category cities within a region only. Networking at present is neither permitted across the regions nor across the permission holders.

3.11.3 The basic idea not to permit such networking in Phase-II was to promote creation of more contents suitable for local broadcast areas and targeted to specific region. It was apprehended that networking may be used to broadcast same programme across the region and may badly impact generation of local contents. FM Radio broadcasting in Phase-III is targeted to cover all districts. The revenue potential from advertisements in such districts may be low and may not be economically viable to operate FM Radio broadcast with locally developed content. In order to facilitate setting up of FM Channels in small cities and make them commercially viable, BECIL has proposed that networking across the cities as well as across the entities may be allowed within the state. In their view, this will encourage

production of state specific program and reduce cost of FM Radio broadcasting.

3.11.4 FICCI is also of the view that networking both across the cities and across the entities may be permitted to ensure economic viability for FM Radio broadcasting. They have also raised the issue of level playing field as networking is permitted to All India Radio across the cities whereas same is not permitted to private FM Radio broadcasters. They strongly contest that such discriminatory treatment should be removed to give level playing field.

3.11.5 There are three issues for deliberation; viz economic viability of operation without permitting networking, creation of local value content, and level playing field with AIR. Local content development is important for increasing listenership but it is likely to increase cost of operation. FM Radio broadcasters have argued that increasing listenership is prime consideration for them as well to built sustainable business model. Therefore flexibility of networking must be left to FM Radio broadcasters.

3.11.6 The Authority has examined the issues. The broad goals will be achieved if networking is permitted with permission holder's network. This will reduce the cost of operation and give flexibility to the permission holder to appropriately plan the content. Such networking permission will also ensure level playing field with AIR broadcast. It is also in the interest of consumers, as they will receive quality program.

3.11.7 **The Authority recommends:**

- **All private FM Radio broadcasters may be permitted networking within their network. Networking across the permission holders should not be permitted.**

3.12 **News and Current affairs on FM Radio**

3.12.1 Policy guidelines on FM Radio broadcasting in clause 10 prescribe condition regarding transmission of news and current affairs:

“No news and current affair programs are permitted under the Policy (Phase-II).”

3.12.2 Private FM Radio broadcasters are not allowed to broadcast News & Current Affairs. They strongly contest such restrictions. They feel that large percentage of the rural and urban population is unable to read and write, hence it is impossible for them to read newspapers. Likewise, with most people unable to buy TV sets, they cannot be reached through TV. In addition, electrical connections are limited to either urban areas or to sections of the population that can afford to pay for electricity. Thus for the poor and under-privileged, the only available medium for news and entertainment is through FM Radio broadcast. Hence news and current affairs should be permitted on private FM Radio broadcast to disseminate news and current affairs to the under-privileged and under-served masses.

3.12.3 Stakeholders also expressed their concern that news and current affairs are not clearly defined viz traffic related information broadcast may be just information for local population and should not be treated as news. They have requested that clarity must be brought regarding news and current affairs.

3.12.4 FICCI is of the view that FM Radio broadcasters must be allowed at least 6 to 8 minutes time slot per hour to broadcast news and current affairs under 'general entertainment' license. They contend that news and current affairs are allowed on private TV channels which are more than 100 in number.

Moreover there are number of news papers, Internet and multiple source of information through which one can get information. None of these platforms is as restrictive as FM Radio broadcast. FICCI is of strong view that news and current affairs must be permitted to FM Radio broadcasters due to following reasons:

- News and current affairs programs across the world are classified as part of general entertainment
- TV & newspapers also bundle news and entertainment to provide a complete entertainment package to its customers
- Radio is the best medium to broadcast local news
- Radio is the best medium for general public to access news and information while on the move
- Radio is the best medium to reach masses – it has the potential to reach 99% of the population
- National and international news is allowed over Satellite radio

3.12.5 FICCI advocates allocation of FM radio channel exclusively for current and news affairs. They have also suggested allowing FM Radio broadcast News and current affairs to fulfill three main objectives of the Government,

- FM broadcasting for entertainment, education and information
- To make available quality programmes with a localized flavor and
- To supplement the services of All India Radio (AIR)

3.12.6 FICCI believes that permission to broadcast news and current affairs will increase the listener population. BECIL has also echoed similar views in support of allowing new and current affairs on FM radio.

- 3.12.7 This issue has been deliberated on different fora earlier also. Since FM Radio broadcast is very powerful medium and has wide reach across the country, monitoring of the news and current affairs contents is a challenge. It has potential to create major impact. The corrective action in case of news and current affairs becomes difficult and any damage control exercise may not be timely. Therefore news and current affairs was earlier not permitted in absence of effective monitoring mechanism.
- 3.12.8 While monitoring of news and current affairs is important, FM Radio broadcasters should not be denied broadcasting of news and current affair programs for completeness, level playing field, viability condition and consumer welfare. A clear definition of news and current affairs no doubt is desirable. The increasing spread of private FM Radio broadcasts will be a challenge to monitor the program transmission effectively. Though it is argued that all FM Radio broadcasters are required to keep the copy of the program transmitted for three months and therefore subsequent scrutiny of program transmission can be done and action against violators can be taken in present regulatory framework, but the potential damage in case of violation may be much higher. In such a situation, present restrictions on broadcasting of news and current affairs can not be totally lifted.
- 3.12.9 One probable option could be to permit FM Radio broadcasters to broadcast exactly same news and current affairs contents which have already been aired by AIR or Doordarshan; however this may be considered very limited and may not generate adequate interest. The Authority is of the view that justice will be met if FM Radio broadcasters are permitted to broadcast news and current affairs taking content from AIR, Doordarshan, authorized TV news channels, UNI, and PTI and any other

authorized agency. No other source of news should be permitted at present. The Authority is also of the view that Ministry of I&B may clarify areas which do not come under restrictions of news and current affairs such as traffic bulletin, results of international games such as cricket scores, etc. A broad guideline may be prescribed by Ministry of I&B so as to ensure that any news broadcast may not negatively impact on general law and order of the area and basic features of social cohesiveness and constitutional framework are maintained. The FM Radio broadcasters will be responsible for transmission of such news and shall be acted upon in case of any violation.

3.12.10 The Authority recommends:

- **FM Radio broadcasters may be permitted to broadcast news taking content from AIR, Doordarshan, authorized TV news channels, UNI, PTI and any other authorized news agency without any substantive change in the content. No other source of news is permitted at present.**
- **The News broadcast should be based on the facts and sourced to any permitted agency only. Broadcasting of news contents having speculative, anticipatory or based on rumours/ hearsay is not permitted.**
- **Ministry of I&B may clarify areas which do not come under restrictions of news such as traffic bulletin, results of international games such as cricket scores, etc.**
- **The FM Radio broadcasters shall be responsible for misrepresentation of news and current affairs from identified sources and shall be acted upon in case of any violation.**
- **Ministry of I&B may prescribe broad guidelines to ensure that any news broadcast may not negatively impact**

general law and order of the area and basic features of social cohesiveness and constitutional framework are maintained.

3.13 Level Playing field vis-à-vis Satellite Radio

3.13.1 The issue of level playing field vis-à-vis Satellite radio was raised in the consultation paper. The FM Radio broadcasters are of the view that regulatory framework is tilted in favour of Satellite radio provider. They also mentioned that there is no FDI cap on satellite radio operators, and they are also permitted to broadcast news and current affairs. The satellite operator argue that there is no comparison of satellite radio broadcast with FM Radio broadcast as they have different focus group, different clientele, different business model etc.

3.13.2 It is observed that Ministry of I&B have sought the recommendations of TRAI on terms and conditions for Private FM Radio broadcasting Phase-III. This issue has not been specifically referred. As such the Authority has not addressed this issue and no recommendations are offered.

3.14 Applicability of FM Radio broadcast Phase-III guidelines on existing permission holders:

3.14.1 The Authority has considered number of issues such as FDI, News and Current affairs, networking of the programs etc in its present recommendations. Here it is important to mention that certain modifications in existing guidelines are being recommended for Phase-III FM Radio broadcasting which are not available to existing operators.

3.14.2 The Authority recommends:

- **The guidelines for FM Radio broadcasting Phase-III shall be applicable to existing permission holders also subject**

to specific restrictions, if any stipulated in the recommendations.

3.14.3 The Authority while arriving at the recommendations for FM Radio broadcast for Phase-III, considered only those issues, which required to be modified. The issues, which are not discussed in this paper, will remain in force as mentioned in the policy dated 13th July, 2005 on expansion of FM Radio broadcasting services through private agencies (Phase-II).

3.14.4 **The Authority recommends:**

- **The condition/ provisions, which are not discussed in the recommendations, will remain unchanged as mentioned in the policy dated 13th July, 2005 on expansion of FM Radio broadcasting services through private agencies (Phase-II). Hence all such conditions/ provisions may be adopted for FM Radio broadcast Phase-III also.**

Chapter 4

Technical issues

4.1 Introduction

4.1.1 The proposed Phase-III expansion of FM Radio broadcasting services through private agencies is expected to cover all the districts as in existence on 01-01-2008. While considering population size, business & cultural environment in the districts to be covered now, it is essential to analyse various technical constraints also as it can jeopardize the business model of FM Radio broadcasters. Addressing the technical constraints will promote private FM Radio Broadcasters to supplement efforts of All India Radio, by operationalising radio stations. Various technical issues pertaining to FM Radio Broadcasting were discussed in the consultation paper. Comments received from stakeholders have been analysed and International practices have been considered for arriving at recommendations in sections to follow.

4.2 Frequency Allocation:

4.2.1 Presently 87 MHz to 108 MHz frequency band is used for FM Radio broadcasting in addition to other services defined in National Frequency Allocation Plan, 2002 (NFAP – 2002). The entire range of 21 MHz is divided into five distinct frequency bands out of which 3 bands are exclusively assigned for FM Radio Broadcasting Services. Rest two bands are shared between Fixed/Mobile and FM Broadcasting services (Refer table 4.1).

Table-4.1: Frequency allocation under NFAP-2000 for FM Radio

Spectrum Band (MHz)	Frequency available (MHz)	Allocation
87-91.5	4.5	Shared between Fixed/Mobile and FM Broadcasting Services. (Fixed/ Mobile Service have priority over FM Broadcasting)
91.5-95	3.5	Exclusively for FM Broadcasting Service
95-100	5.0	Shared between Fixed/Mobile and FM Broadcasting Services. (Fixed/ Mobile Service have priority over FM Broadcasting)
100-103.7	3.7	Exclusively for FM Broadcasting Service by All India Radio
103.7-108	4.3	Exclusively for FM Broadcasting Service

4.2.2 The present frequency allocation for individual channels is based on various technical parameters including co-channel spacing, transmitter power, area of coverage, channels protection ratio, quality of multiplexers/combiners etc. As shown in table 3.1 above exclusive FM Transmission bands consists of a total of 11.5 MHz frequency out of which 3.7 MHz is reserved for All India Radio. Rest of the bandwidth i.e. 7.8 MHz is assigned to Private FM Radio Broadcasters and Indira Gandhi National Open University (IGNOU). The exclusive FM bands are divided into a number of frequencies/channels and the spacing between any two channels is presently 700-800 KHz within same district.

4.2.3 Most of the stakeholders are not in favor of putting any cap on the number of channels/service providers in a district. The majority view is that maximizing the availability of channels will encourage more private FM Operators to bid and thus promote competition among operators. One of the stakeholders is in favor of putting a

cap on the maximum channels possible within the exclusive band reserved for FM Radio Broadcasting.

4.2.4 Effective utilization of available frequency is required to maximize the number of private FM Radio Broadcast channels (in frequency band of 87-108 MHz). Only exclusive FM Radio broadcast frequency bands with existing co-channel spacing may not suffice the high number of FM Radio channels required in A+ & A classified cities.

4.2.5 TRAI in its earlier recommendation on “Licensing Issues Relating to 2nd Phase of Private FM Radio Broadcasting” in August 2004 recommended:

- *Allow the maximum number of frequencies possible in metros, Hyderabad & Bangalore. WPC to release additional exclusive spectrum for FM Broadcasting out of the shared bands i.e. 87-91.5 MHz and 95-100 MHz in such selected locations where spectrum is a problem in Phase-II.*
- *Unlike Phase-I, a minimum of two frequencies are to be offered for licenses even at the smallest town in order to ensure competition and variety of programming.*
- *Consider all remaining towns having population of more than one lakh in the Phase-II of the Licensing process.*
- *IGNOU may be allowed to use FM spectrum in those cities only where neither the Medium Wave frequencies are available to establish IGNOU’s own radio stations nor does IGNOU find it feasible to share Medium Wave infrastructure of AIR.*
- *Due to rapid developments in the field of digital technology, in case digital radio broadcasting were to be introduced before the Licensing period is over, the Government should release additional spectrum either from the shared spectrum of VHF*

Band II (87-91.5/95-100 MHz) or VHF Band III (174-230 MHz) or fresh bands.

4.2.6 In line with TRAI's earlier recommendations and above discussions, possibility of allocating the maximum frequencies from shared bands should be examined. Wireless and Planning Coordination (WPC) wing of Department of Telecommunication (DoT) may analyze available frequencies in A+ and A classified cities and earmark sufficient number of channels/frequencies for FM Radio Broadcasting.

4.2.7 **The Authority recommends:**

The determination of number of channels in a district is directly related to available frequencies, which should be analyzed and notified for private FM Radio Broadcasting by Ministry of I&B in consultation with the Wireless Planning cell of Department of Telecom. The maximum number of FM Radio channels in any district will be within overall framework discussed in para 2.5.

4.3 Co-channel spacing:

4.3.1 The International trends on co-channel spacing indicate that it is much less than 800 KHz in most of the countries. For example, in USA the spacing between the two adjacent channels is 200 KHz. The total band of 88 – 108 MHz is divided into 100 channels with a spacing of just 200 KHz. The important issue for deliberation was to examine how co-channel spacing can be reduced in our country. Co-channel spacing depends on various technical factors like transmitter power, quality and level of port-to-port isolation at combiners, channel selectivity of FM receiver etc. Presently in our country this co-channel spacing is either 700 KHz or 800 KHz.

- 4.3.2 Port-to-Port isolation of minimum 50 db is required in combiner currently used at collocation facilities for combining radio signal of various FM Radio broadcasters. This value of Port-to-Port isolation may not be possible with lesser co-channel spacing. Combiner may not be able to radiate the combined signals of FM Radio broadcasters without interference if port-to-port isolation is low. Though certain advance combiner equipments are available, the cost of such equipment may be high and can only be used for collocation facilities to be developed in future.
- 4.3.3 Other area of concern is low selectivity of FM Receiver sets popularly being used in our country. The low cost FM Radio receivers widely available in country are very popular among masses. Affordability of FM radio receivers is one of the reasons for popularity of FM Radio broadcast and high listenership. Any reduction in channel spacing may badly impact program reception quality by such receivers and may have direct effect on popularity of FM Radio Broadcasting.
- 4.3.4 Further most of upcoming districts in Phase-III will be C & D classified districts, which may not have enough advertisement revenue for the broadcaster. Large number of FM radio channels in such location may not be viable. Therefore any exercise to reduce co-channels spacing may become futile. Moreover existing co-channel spacing of 800 KHz in exclusively reserved FM band will give 16 FM radio Broadcast channels (only considering co-channel spacing) in a district. (Ref table 4.2)

Table-4.2: Allocation of FM broadcast channels in exclusive FM Bands

Exclusive Frequency Band for FM	No of Channels which can be allotted	Tentative frequencies
91.5 - 95 MHz	5	91.5, 92.3, 93.1, 93.9, 94.7

100 - 108 MHz	11	100.0, 100.8, 101.6, 102.4, 103.2, 104.0, 104.8, 105.6, 106.4, 107.2, 108
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4.3.5 In present context, demand for channels is highest in A+ district (Metro districts) where 10-12 channels are already working. The existing co-channel spacing can meet such channel requirements. For example, in Delhi 11 FM Radio broadcast channels are already operational (table 4.3) and one more have been allocated.

Table 4.3: FM Radio Channel allocation in Delhi

Channel number	Frequency allocated
1	91.1
2	92.7
3	93.5
4	94.3
4	95.0
6	98.3
7	102.4
8	104.0
9	104.8
10	105.6
11	106.4

4.3.6 The requirement of frequencies C & D category districts, where FM coverage is just taking roots, may not be as high and number of channels with existing co-channel spacing may presently be a feasible proposition.

4.3.7 The other area of concern is allocation of FM Radio channel frequency in two adjacent districts, as it may cause interference in the FM receivers in the bordering area of such districts. Stakeholders are of the view that the present separation of 400 KHz may be allowed between neighboring towns in Phase-II also as it would not lead to any noticeable interference. Further broadcasters have to confine the broadcasting in the district for

which they have obtained the permission. Hence they will be required to ensure power radiation in specified limits.

4.3.8 Ensuring interference reception especially in bordering districts will be of prime concern in FM Radio broadcast in Phase-III. Considering above discussions the Authority is of the view that spacing between two channels in adjacent districts should be maintained at 400 KHz. (as specified in FM Radio broadcast Phase-II).

4.3.9 **The Authority recommends:**

Co-channel Spacing within district presently used may not be changed and kept at 800 KHz. Similarly 400 KHz channel spacing between two channels in adjacent districts is maintained (as prescribed in FM Radio Phase-II).

4.4 Signal Strength Requirements:

4.4.1 Minimum requirement of signal strength is being specified under the ITU-R BS.412-9 for different geographical conditions (Refer table 4.4) for good quality reception. For example in rural areas where the line of sight is clear, a relatively lower usable field strength values of 48 db(μ V/m) and 54 db(μ V/m) for Monophonic and Stereophonic services respectively are specified. But in the urban and larger cities these values are between 60-70 db(μ V/m) and 66-74 db(μ V/m) respectively for monophonic and stereophonic services.

Table-4.4: Minimum usable field strength values recommended by ITU-R

Area	Monophonic Service db(μV/m)	Stereophonic Service db(μV/m)
Rural	48	54
Urban	60	66
Large Cities	70	74

4.4.2 Issue of Minimum signal requirement has been raised in the consultation paper and stakeholders are of the view that standards as stipulated in the ITU-R BS.412-9 may be incorporated in Grant of Permission Agreement (GOPA).

4.4.3 Noise interference emanating from various sources may degrade the signal quality and therefore minimum signal strength as specified above will be essential for a satisfactory FM Radio Broadcasting.

4.4.4 **The Authority recommends**

The minimum signal strength requirement as specified in ITU-R recommendation BS.412-9 may be incorporated in Grant of Permission Agreement (GOPA) for Private FM Radio broadcasting.

4.5 Protection Ratios:

4.5.1 The ratio of radio frequency voltage wanted and interfering signal at input of receiver under specified conditions is termed as protection ratio. It is expressed in decibel (dB). The ITU-R BS.412-9 specifies the values of protection ratios to be adopted for different level of co-channel spacing (Refer table-4.5). It specifies the recommendatory values for both monophonic and stereophonic service. Value of RF Protection ratio decreases with the increase in difference between the wanted and interfering carrier frequencies and at 400 KHz this ratio is -20 dB for mono & stereophonic services.

Table-4.5: RF Protection ratio as defined by ITU-R

Difference between the wanted and interfering carrier frequencies (KHz)	Radio frequency protection ratio (db) using maximum frequency deviation of ± 75 Khz.			
	Monophonic		Stereophonic	
	Steady interference	Tropospheric interference	Steady interference	Tropospheric interference
0	36	28	45	37
100	12	12	33	25
150	8	8	18	14
200	6	6	7	7
300	-7	-7	-7	-7
400	-20	-20	-20	-20

4.5.2 The 10th and 11th Five-year plans lay significant emphasis on improving the quality of FM Radio Broadcasting and reception. Stakeholders are of the view that specifying such parameter will be useful to improve FM Radio Broadcast quality.

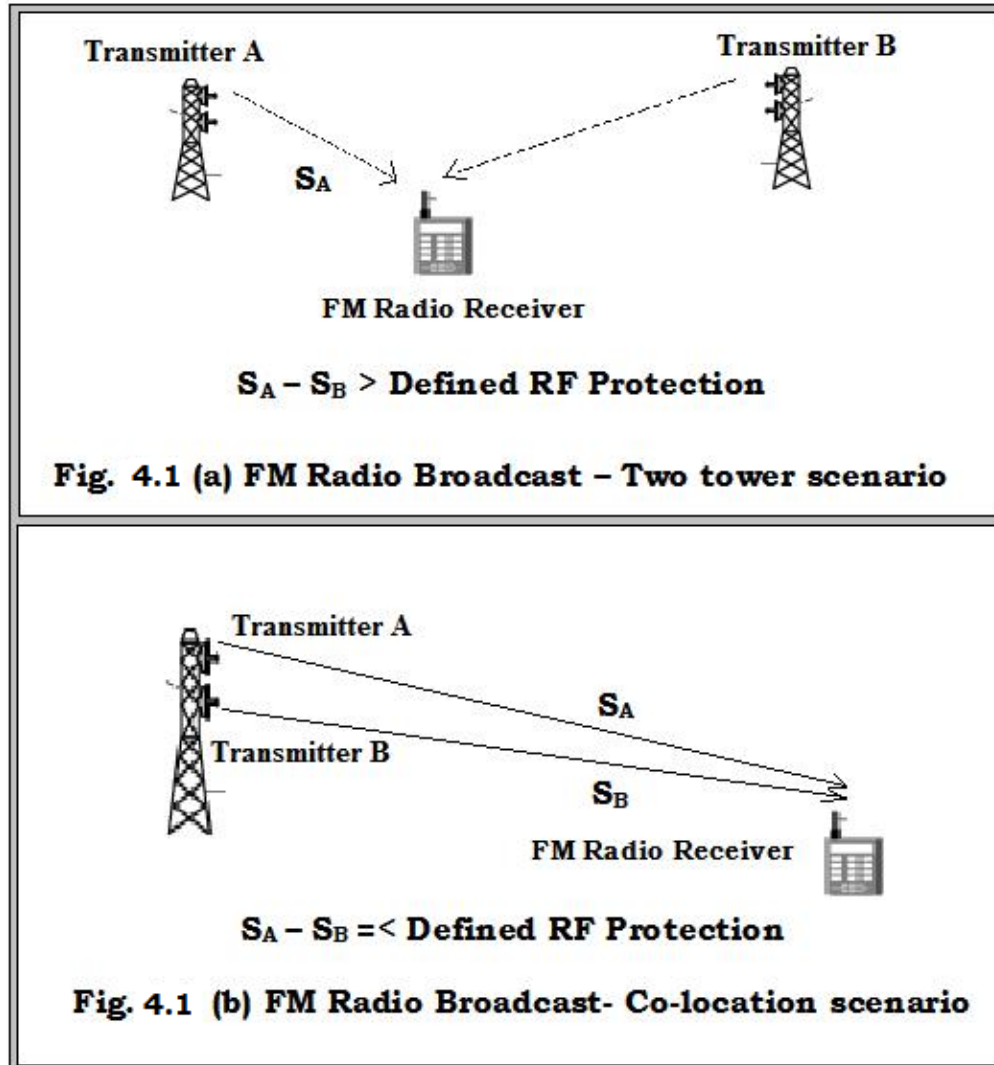
4.5.3 RF Protection ratio is an important parameter to determine likelihood of interference in any particular area. The protection ratio defines interference between two adjacent channels and a satisfactory signal to noise ratio (S/N) at the input of the receiver. The higher is the protection ratio in an area; the lower frequency spacing is required for FM Broadcast. With present 700-800 KHz co-channel spacing being adopted in our country FM Radio broadcast is possible with low value radio frequency protection ratio. In order to ensure good quality broadcasting and reception, the value of RF protection must be specified in GOPA.

- 4.5.4 **The Authority recommends:**
ITU-R BS.412-9 specifications should be adopted in respect of RF protection ratio. This may be included in Grant of Permission Agreement (GOPA).

4.6 Collocation of transmitters

4.6.1 Collocation is hosting of transmitter antennae of different FM radio channels on same transmitter tower. Collocation of the transmission facilities was mandated for FM Broadcaster in Phase-II to avoid any delay in rollout of services and to reduce the possibility of interference between adjacent frequencies. It was also anticipated that collocation will reduce co-channel spacing which is presently 800 KHz. Reduction of co-channel spacing was desired for release of more FM Radio broadcast channels in a district.

4.6.2 If all the transmitters in one city/ district (coverage area) are not co-located, the attenuation pattern of the signal will be very different. Therefore it may be possible that at several points in coverage area desired power protection is not achieved due to huge difference in signal levels of adjacent FM Radio channels. Fig 4.1(a) and 4.1 (b) below illustrate this situation: -



4.6.3 In view of this collocation of transmission facilities for FM Radio broadcast was mandated in Phase-II also. TRAI in its recommendation on “Licensing Issues Relating to 2nd Phase of Private FM Radio Broadcasting” in Aug. 2004 enumerated various advantages of collocation of transmitters for FM Radio broadcast as reproduced below:

- a) It results in the efficient utilization of spectrum.
- b) In metro and large cities (category ‘A’ cities of Phase-I) demand of large number of channels can be met by reducing the carrier separation (say from 800 KHz to 400 KHz).

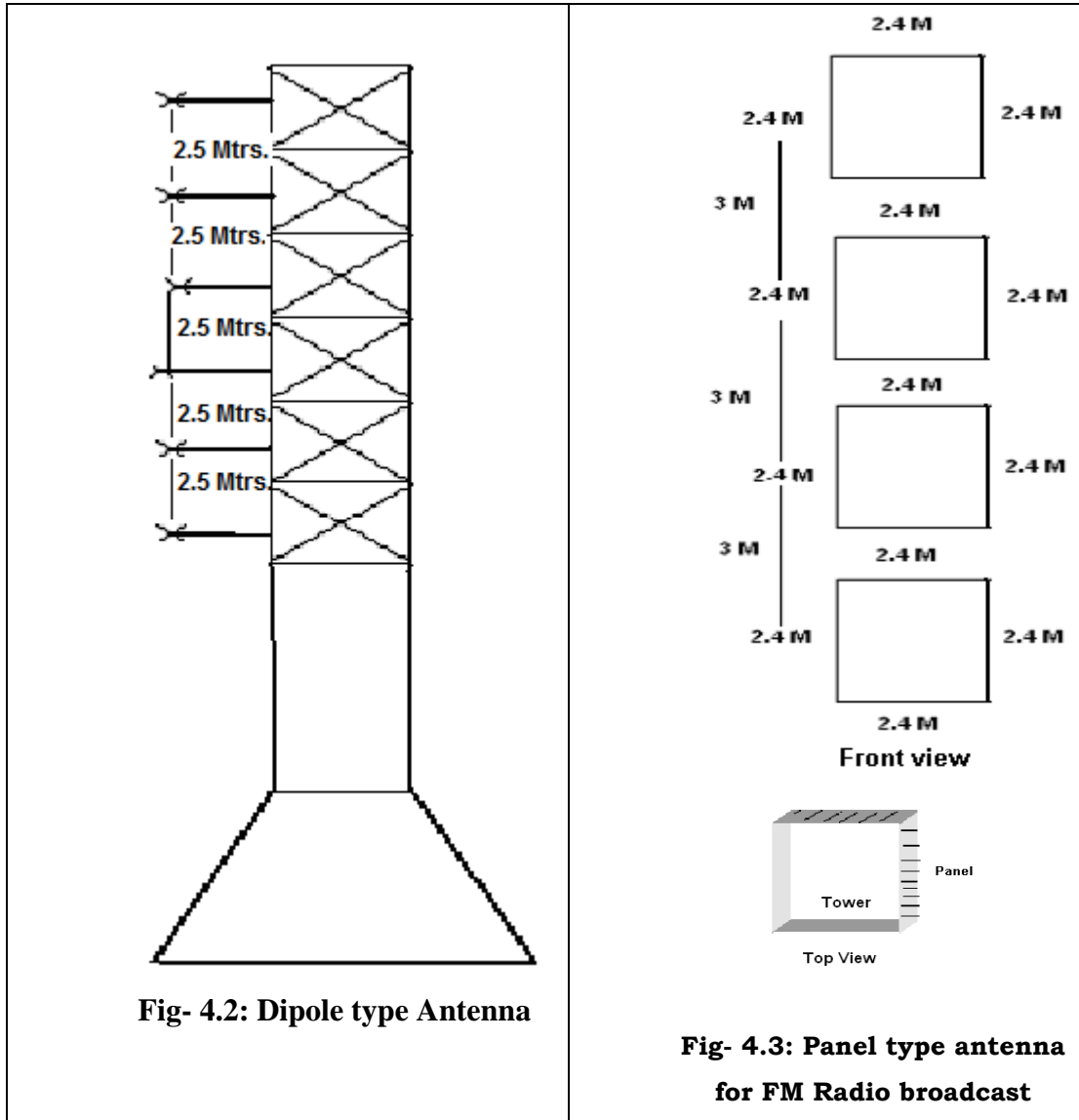
- c) *In metro and large cities (category 'A' cities of Phase-1) where number of FM channels would be large, collocation (due to sharing of infrastructure) would provide a much cheaper option.*
- d) *It avoids the problems which transmitting sites distributed all over the city create in their vicinity such as:*
- *Interference in radio receivers tuned to adjacent channels due to the presence of high field strengths (overloading)*
 - *Other radio frequency devices can be adversely affected due to signal overload.*
 - *High signal strengths may also cause equipment malfunction in non-radio frequency devices etc.*
- e) *Due to co-location, skyline of the city is not disturbed.*

4.6.4 Most of the stakeholders were of view that collocation should be made compulsory in 3rd Phase of FM Radio broadcasting as well.

4.6.5 Collocation of transmitters requires selection of appropriate tower. Primarily two types of antennas i.e. dipole and panel type are deployed in Phase-II of private FM Radio broadcasting (Fig-4.2 & 4.3). Dipole type of antenna is used where the transmitter power requirement is low (i.e. upto 40 KW). It is relatively cheaper (Appx. 70 Lacs) and faster to erect as the tower height required is typically low (less than 100 Mtrs). However, it has limitation on maximum number of transmitters (i.e., 2-3) it can host, low power transmission capabilities and lower frequency bandwidth (typically 6-8MHz). As such it is suitable only for smaller cities where less number of channels/ frequencies has to be operational.

4.6.6 Towers mounted with Panel type of antenna are typically used for transmitting more power (200 KW). It enables more sharing

as it can support at least 6-10 co-hosted transmitters. However, towers for panel type of antenna are more capital intensive and requires longer time to build (typically 18 months). This kind of tower is more suitable for A+ and A type of cities where radiated power is high and wide area coverage is required.



4.6.7 In this context it is worthwhile to note that Working Group Report of Eleventh Five-Year Plan (2007-12) on Information and Broadcasting sector has recommended that transmitting facilities by AIR under the 11th Plan should be compatible with

Digital Radio Mondiale+ (DRM+) Technology. A tower with DRM+ technology will need higher Capital Expenditure (CAPEX). Sharing of such cost can lead to less CAPEX burden on individual broadcaster and faster rollout is possible. In shared tower scenario, signals of various transmitters are first multiplexed at ground and then by using a shared feeder cable and antenna system combined signal is broadcasted.

4.6.8 Most of the Stakeholders are of the view that present sharing arrangement suffers with implementation delays, poor technical support and maintenance. FM Operators argued that the delay along with upfront One Time Entry Fee (OTEF) collected from broadcasters before operationalisation of FM radio station puts significant financial burden on them. It was also suggested that in Phase-III, until the collocation facilities are developed, operators may be allowed to have interim setup in all towns and Effective Height of Antenna above Average Terrain (EHAAT) specification be relaxed temporarily for that period. One of the stakeholder wanted that broadcasters should be allowed to setup their own towers and share among them for FM Radio broadcasting.

4.6.9 While there is general consensus that collocation of transmitters on towers for FM Radio broadcasting is necessary and should be mandated, stakeholders are concerned with administrative inefficiencies in the present system and wanted that successful bidders must be given option to setup their own towers, decide infrastructure sharing methodology, decide service level agreements and plan proper maintenance of such infrastructures. Stakeholders also argued that FM Radio broadcast in Phase-III will be targeted to smaller districts. The availability of the towers in such places is limited and many a district may require new towers to start FM Radio broadcasting.

Therefore flexibility to setup tower and collocation facilities to successful bidders is important for speedy rollout of FM radio and may be considered in Phase-III.

- 4.6.10 The Authority has considered the views of stakeholders and prevailing practices. In order to have interference free transmission and to explore the future possibility of reducing co-channel spacing, the collocation of transmitters for providing FM radio may be mandated. Further, the Authority is of the view that wherever towers of AIR are not available for collocation of transmitters of private FM Radio broadcasters and new towers have to be erected, the preference must be given to successful bidders. The Authority is aware that successful bidders may have to form a consortium, decide among them the methodology of taking land, tower erection, workout commercial revenue sharing model, ensure proper up-keeping of the transmission facilities etc which will require lot of coordination. More over any delay in coordination will badly impact the operationalisation of FM Radio broadcast. Therefore all such coordination must be done in a time bound manner say three month.
- 4.6.11 The Authority is also concerned with likely interference from existing and planned towers while planning new towers in any area (district). Such planning activities have to be coordinated. Presently Standing Advisory Committee for Frequency Allocation (SACFA) clearance is taken by the agency building the tower from WPC indicating the purpose and FM radio transmitters likely to be used on such towers. WPC may take extra care to consider likely interference before giving such clearance. Likelihood of existing telecom towers in smaller districts for purpose of FM Radio broadcasting can also be examined to reduce the cost and to speed up operationalisation.

4.6.12 **The Authority recommends:**

- **All successful bidders may be mandated to co-locate their transmitters with existing facilities of All India Radio if available and technically feasible within a pre-defined period say 3 month.**
- **If facilities of All India Radio are not available, the successful bidders for FM Radio broadcasting may form consortium and setup required infrastructure for collocation of all transmitters identified for that district. They will mutually decide infrastructure sharing methodology, commercial revenue sharing model, service level agreement and methodology for upkeep of such infrastructure, within 3 months.**
- **If successful bidders are not able to reach any agreement on different issues regarding collocation and erection of tower, then all successful bidders should be mandated to have collocation with facilities to be developed by BECIL.**

4.7 Effective Radiated Power (ERP)

4.7.1 Effective radiated power and antenna height are some of the other important issues. Effective Radiated Power is determined by subtracting system losses and adding system gains to the actual electrical power output of the transmitters (Refer table 3.6). For A+ city ERP can be up to 40 KW whereas for other cities it ranges between 3-30 KW. Similarly Effective Height of Antenna above Average Terrain (EHAAT) varies between 75-200 meters in A+ cities and 20-150 Meters for other cities. The policy on expansion of FM Radio broadcasting services through

private agencies (Phase-II) clearly define these specifications (Refer table 4.6):

Table-4.6: Specifications for Antenna height and Effective power radiation as applicable to Phase-II

Category	Basic (one or more of the following)	Effective Radiated Power (ERP) (kW)		Antenna Height (Meters)	
		Min	Max	Min	Max
A+	Metro cities	25	50		
	Delhi			75	200
	Mumbai			75	175
A	Population above 20 lakhs	10	30	75	150
B	Population above 10 lakhs and upto 20 lakhs	5	15	50	100
C	Population above 3 lakhs and upto 10 lakhs	3	10	30	75
D	Population above 1 lakh and upto 3 lakhs	1	3	20	40

4.7.2 Since type of antenna to be selected in an area depends on effective radiated power, clearly defining these parameters shall be necessary for Phase-III also. Discussions with WPC have confirmed that 40 Meters tower height and 3 KW maximum ERP will be sufficient to cover 20 km area which is generally the target for FM Radio broadcasting in Phase-III covering category “C” & “D” districts.

4.7.3 **The Authority recommends:**

Effective power radiation and Antenna height as adopted in Phase-II of Private FM Radio broadcasting may also be followed in Phase-III.

4.8 Reference Collocation Offer:

4.8.1 Stakeholders also expressed the need to mandate reference collocation offer for transparency and uniform treatment to all stakeholders. Presently, private operators are mandated to use collocation facilities including towers either of All India Radio or BECIL. They feel that collocation facility charges are very high and have not been fixed transparently. Tower rent and lease charges for land and associated equipments are important as it is long term commitment and may directly impact the business model of private FM Radio broadcasters. They feel that on one hand they have been mandated to share the infrastructure, they have no option to negotiate the rentals also.

4.8.2 Ministry of I&B has stipulated the rates for the tower rental and space for co-location. Presently an amount of Rs. 13.20 lakhs per annum for tower rental charges (including maintenance charge) is specified for A+ category city. This amount is Rs. 8.25 lakhs for category “A” city and decreased to Rs. 1.75 lakhs per annum in case of category “D” cities. Rates for lease charges for land is in Rs. Per Sq. Meter per annum. The actual charges for space sharing are city specific and based on space being used.

Table-4.7: Rates for the tower rental and Space for co-location

Category	Tower rentals per broadcaster (including maintenance charge) per annum (Rs. In lakhs)	Lease Charges for land (Rs. Per Sq. meter) per annum	
		Open Space	Covered Space
A+	13.20	6400	7600

A	8.25	5200	6400
B	4.25	3000	3900
C	3.00	1680	2580
D	1.75	1260	2160

4.8.3 Mandating a reference collocation offer (RCO) will be desirable to bring in transparency and ensure good quality service. There is a need to define important parameters for the RCO like charges for tower sharing, time limit for completion of sharing arrangement, charges for sharing of building space and charges for miscellaneous facilities including electricity backup etc. The transparent availability of RCO should be ensured to all the FM Radio broadcasters to provide uniform treatment. Such RCO have to be periodically reviewed to take into account the prevailing market prices of inputs and maintenance costs and depreciations on the asset value.

4.8.4 **The Authority recommends:**
Reference collocation offer should be mandated for better transparency and uniform treatment to all the FM radio operators. Such Reference Collocation Offer should also be posted on their websites for easy access.

4.9 System Integrator:

4.9.1 System integrator (SI) plays very important role for integration and operationalisation of the FM Radio broadcast services. SI facilitates the FM Radio broadcaster in designing common transmission infrastructure for collocation facilities and helps LOI holder /Permission Holders to obtain SACFA clearance and frequency allocation from WPC for erection of the tower and other facilities. During Phase-I & II the system integration work

was awarded to Broadcast Engineering Consultants India Limited (BECIL) which was also involved in the setting up of collocation facilities as per the requirement of various broadcasters.

4.9.2 Majority of Stakeholders are of the view that the system integration work undertaken till now, in Phase-I and Phase-II, is not satisfactory and resulted in delay and poor quality of work. It was argued that effective integration mechanism is necessary for speedy operationalisation of FM Radio broadcasting.

4.9.3 System integrator forms an important part of project implementation and requires in-depth knowledge and expertise in setting up of collocation facilities. Co-ordination efforts among various agencies/ bodies and successful bidders will be of prime importance to start FM Radio broadcasting in tight time frame. Long term planning for maintenance and backup facilities are equally important. In view of this, system integration work is well suited to be done by agency that handles the planning and installation of collocation facilities as such agencies are familiar with facilities installed and sharing mechanism being followed.

4.9.4 **The Authority recommends:**
Work of system integration may preferably be entrusted to an agency involved in setting up of collocation facilities in a district or as mutually agreed.

Chapter 5

Other Issues

5.1 Time for operationalisation of the channel

5.1.1 Presently a time of twenty-one months has been permitted from the date of issue of Letter of Intent (LOI) till operationalisation of the channel. This period includes a time limit of nine months from the date of issue of LOI to sign “Grant of Permission Agreement”, which includes activities like obtaining frequency allocation, SACFA clearance, agreement with DD/ AIR/ BECIL etc for sharing of the infrastructure and a time limit of one year from signing “Grant of Permission Agreement” to operationalisation of the channel. This period seems to be too long when infrastructure sharing is already mandated. During this period the allocated frequency is kept unused. As successful bidders have to share annual license fee during this period, it creates an unnecessary burden on successful bidders. This delay needs to be curtailed by appropriate actions including fixing time limits on each activities. This will not only reduce the time taken to operationalise the channel, but will also enable speedy return on investments.

5.1.2 Stakeholders are also of the view that the current time limit of 9 months to sign the GOPA with the government is too long a period and should be brought down to about a month or so.

5.1.3 The signing of GOPA is merely an administrative activity, which may not justify such a long time. Even if all activities like SACFA clearance, frequency allocation, assignment of frequency etc are taken into account, one can easily complete them in a timeframe of about 3 months. TRAI has stated in its earlier recommendation on “Infrastructure Sharing” dated 11.04.2007

that procedure for grant of SACFA clearance be streamlined and it should be granted in a time bound manner (about 3 months). Considering this fact, the signing of GOPA can easily be completed in much less time (about six months). Similarly time taken from signing of GOPA to operationalisation of channels can easily be reduced to about six months. Ministry of I&B may look into various aspects and prescribe time frame for various activities so that total time taken from the date of issue of LOI to operationalisation of channel is limited to maximum one year. The effective utilization of allocated spectrum is of a prime concern, hence all efforts must be made to cut procedural delays and speedy operationalisation of channels. All permission holders must convey in advance date of operationalisation of channel to Ministry of I&B in writing to monitor the program and enable effective control. Various steps required from issue of letter of intent to operationalisation of channel should not be more than a year.

5.1.4 **The Authority recommends:**

- **Total time from the date of issue of LOI till operationalisation of the channel should not be more than one year. Ministry of I&B may look into various activities and prescribe maximum time limit for each activity. It may consider capping maximum time limit from date of issue of LOI to signing of GOPA as six months and another six months from signing of GOPA to operationalisation of FM Radio channel. This will ensure efficient utilization of allocated frequency channel.**
- **All permission holders must convey in advance, date of operationalisation of FM Radio channel to Ministry**

of I&B in writing to enable the Ministry to monitor the programs and have effective control.

5.2 Technical Parameters

- 5.2.1 The technical parameters stipulated in the GOPA include Effective Radiated Power (ERP), minimum & maximum antenna height, antenna polarization, pre-emphasis, maximum deviation in frequency etc. However, no technical parameters are presently mentioned to address the likely interference between co-channels. For reduction of such interference parameters like frequency stability and Harmonic/ spurious emissions play important role and need to be defined in technical specifications. This is important in view of the inferior selectivity of FM receivers available with common masses in the country.
- 5.2.2 Spurious emissions are emissions on a frequency or frequencies which are outside the necessary bandwidth and the level of which may be reduced without affecting the corresponding transmission of information. Spurious emissions include harmonic emissions, parasitic emissions, inter-modulation products and frequency conversion products, but exclude out-of-band emissions.
- 5.2.3 ITU-R recommendation SM.329-10 specifies norms for spurious emissions for FM Radio broadcasting. These should be included in GOPA for better functioning of FM Radio broadcasting.
- 5.2.4 Some stakeholders are of the view that technical specifications should be amended to include frequency stability and harmonic/spurious emissions. The matter was also discussed with wireless coordination wing of Department of Telecommunication (DOT). They are also of the view that inclusion of following parameters shall be desirable to ensure better quality of transmission and reception.

5.2.5 **The Authority recommends:**

- **Technical specifications as specified in ITU-R recommendations SM.329-10 for frequency stability and harmonic/spurious should be included in GOPA.**

5.3 Floor price of the bid

5.3.1 As per clause 4 of the policy guidelines on expansion of FM Radio broadcast by private operators, the floor price of the bid is fixed at 25% (called reserve OTEF limit) of the highest bid in the city and all the bids lower than the floor shall be summarily rejected. The relevant clause is reproduced below:

“RESERVE OTEF: Reserve OTEF limit for each city shall be 25% of the highest valid bid in that city. All bids below the reserve limit shall be summarily rejected.”

5.3.2 The successful agencies have to pay the price quoted by them during the bidding and are not asked to pay match up the highest bid. Channels available for private agencies in Phase 2 in each city are allocated in accordance with descending order of valid financial bids received. This may result in huge difference in bid prices of the highest bidder and other successful bidders. All the successful bidders get the channel and practically there is not much of difference in operation for highest bidder and other successful bidders. Such high difference in bid value of successful bidders may create a non level playing field, which need to be addressed to reduce disparity among successful bidders.

5.3.3 Some of the stakeholders suggested that raising of floor bidding price would make the costs of acquiring licenses more uniform. On the contrary, some stakeholders have mentioned that a wider band for bidding allows different bidders to assess the

market potential differently and take an appropriate approach to bidding. They also argued that fixing higher floor may give opportunity to some of the agencies to quote very high prices so that floor price becomes exorbitantly high and crossing the floor becomes unviable to other agencies resulting in monopoly of few agencies.

5.3.4 These issues have been considered in detail. Fixing floor price of bid at 50% give adequate cushion to other bidders to bid for FM Radio channel within perceived business model. Moreover bidding process does not require matching of the highest bid price. Therefore bidders who may bid unviable high prices will only suffer, as they have to give such bidding prices upfront. The reduced gap in highest and lowest bid will have level playing field and ensure more healthy competitions.

5.3.5 In view of above discussions, it will be desirable to fix the floor price for the bidding at 50% of the highest bid price (hereafter called as Reserve OTEF). This will reduce the gap among the bidders' initial bidding amount and still make lot of room for business potential based bidding. Here, it is important to mention that the Reserve OTEF of 50% of highest bid should be considered for bidding process only and any bid lower than this limit will be summarily rejected. This enhancement of Reserve OTEF will require change in the determination of the annual fee which shall now be determined based on 5% of Reserve OTEF.

5.3.6 **The Authority recommends:**

- **The Reserve OTEF should be fixed at 50% of the highest bid price in a District.**
- **No bid shall be considered below Reserve OTEF and all such bids shall be summarily rejected.**

- **Minimum annual fee for a district shall be calculated based on 5% of Reserve OTEF.**

5.4 Content Outsourcing

5.4.1 Policy guidelines on expansion of FM Radio broadcast do not permit the permission holder to outsource, through any long-term production or procurement arrangement, more than 50% of its total content, of which not more than 25% of its total content shall be outsourced to a single content-provider. According to clause 6.2 of Policy on FM Radio broadcasters by private operators: -

“No permission holder shall outsource, through any long-term production or procurement arrangement, more than 50% of its total content, of which not more than 25% of its total content shall be outsourced to a single content-provider”

5.4.2 Permission holders are also not permitted to hire or lease more than 50% of broadcast equipment on long-term basis.

5.4.3 Some of the stakeholders mentioned that removal of restrictions is essential, as it would lead to reduction of content development costs as well as growth of this sector in smaller towns and cities, which is the primary objective of Phase-III. This restriction may have been imposed to encourage creation of content production facilities and generation of more content. The FM Radio broadcasting is in operation since 2001. As such there are sufficient content development facilities available within country. Further, the FM Radio broadcast is posed to start operations in smaller districts (population more than 1 lakh but below 3 lakhs). As such more flexibility to permission holders may be desirable to build business model.

5.4.4 FM Radio broadcasting is a content oriented sector and content generation involves significant cost. With the advancement of

technology, new & sophisticated equipments relating to content development are coming in the market quiet often and it is not viable to purchase each and every such equipment. In order to reduce the operational cost of FM Radio broadcast, removal of such restrictions is need of the hour. This will be an enabler to spread FM Radio broadcasting to smaller cities and towns. Here it is important to mention that permission to hire content development equipment or outsourcing of content development will in no way dilute responsibilities of permission holders regarding such program broadcast. The permission holders should be fully responsible for compliance of regulations & guidelines relating to content development even if such developments are outsourced.

5.4.5 It was also highlighted whether permission holder can take on lease the FM Radio transmitting equipment exclusively used for his FM broadcasting (Not part of collocation facilities). The business models of operation are fast changing. In view of such rapid changes there may not be any objection if a permission holder take on hire or long term lease the broadcasting equipments if it can be ensured that such hiring/leasing is not going to impact the permission holder's right as FM Radio broadcaster.

5.4.6 **The Authority recommends:**

- **In order to encourage diversified content development, there should be no restriction on the outsourcing of content production as well as leasing of content development equipment. The permission holder will have to adhere to stipulated regulations & guidelines regarding content and will be fully responsible for any violations/omissions in this regard.**

- **Permission holders may be permitted to hire or lease broadcasting equipments on long-term basis as long as it does not impact permission holder's right as FM Radio broadcaster.**

5.5 **Auto Renewal of permission**

5.5.1 As per policy guidelines on expansion of FM Radio broadcast, every permission granted under Phase-II is valid for a period of ten years from the date of operationalisation of the channel or one year from the date of granting permission whichever is earlier. Similarly any permission in Phase-III will be valid for 10 years. As per the present provisions no extension is envisaged and it shall automatically lapse at the end of the permissible period and the permission holder shall have no rights whatsoever to continue operation of the channel after the date of expiry. The clause no. 5.8 of policy guidelines of FM Radio broadcast for private operators is reproduced below: -

“Every permission under Phase 2 shall be valid for a period of ten years from the date of operationalisation of the channel. There shall be no provision for its extension and it shall automatically lapse at the end of the period and the permission holder shall have no rights whatsoever to continue to operate the channel after the date of expiry. Government at the appropriate time shall determine procedure for issue of fresh permissions and no concessional treatment shall be afforded to the permission holders in the allotment of channels thereafter”.

5.5.2 The existing permission holders have made significant investments in creating transmission facilities for operating the channel. Stakeholders are of the view that blanket denial of renewal of permission for broadcasting of FM radio and giving

no preference to operate the services is too harsh and needs consideration. FICCI expressed the view that clause should have certain in-built procedure for extension of the permission so that the permission holder holding permission can continue the operations once they have setup their network and are already operating the FM Radio broadcast.

- 5.5.3 It can be argued that OTEF and bidding price will be much higher in case of re-bidding; therefore automatic extension of permission may not be desirable. On the other hand it is also argued that longer period of operation and provision for automatic renewal will enhance bidding price as it is directly related to business model and period of operation. Shorter period of operation is considered less remunerative as lot of time is lapsed to setup the network and initial cost to setup the network is high. Fresh bidding for renewal will further put the burden on the broadcaster and may make his business unviable.
- 5.5.4 Stakeholders suggested that the government may charge a lump sum amount at the end of the operation period of 10 years to extend it further by another 10 years. They are of the view that such sum should be small or at least the same as the bidder paid first time during bidding process.
- 5.5.5 One solution could be that FM Radio broadcasters interested to seek extension may inform to Ministry of I&B in writing 4 month in advance for renewal of their permission before completion of the agreement period. Government may intimate to the permission holder within one month if the permission cannot be extended to such a permission holder for reasons to be recorded in writing. If no information denying permission for extension of operation period is received by the permission holder from the government in specified time, the permission

holder will pay the price equal to initial bid amount paid by him earlier or the highest bid price in same area of operations whichever is higher again to Ministry of I&B and its permission is automatically extended for another ten years.

5.5.6 **The Authority recommends:**

- **There should be provision for automatic renewal of permission to only district level permission holder of FM Radio broadcasting.**
- **Interested permission holders shall seek extension in writing from Ministry of I&B 4 months in advance of expiry of their permission period.**
- **If such permissions cannot be extended to seeker then Ministry of I&B shall inform to such permission holder within one month, stating reason in writing.**
- **Ministry of I&B shall inform to such permission holders within one month from the date of application seeking extension of permission for another 10 years.**
- **The amount for extension of the permission for another 10 years shall be equal to initial bidding amount or the highest bid price in the same area (District), whichever is higher, provided such permission is not denied.**
- **Permission holder shall pay the required amount within one month from the date of receipt of such demands from Ministry of I&B.**
- **Ministry shall issue permission for extension of operation period for another 10 years in one-month time from the date of receipt of such payment.**

5.6 **Royalty related issue:**

5.6.1 Some of the stakeholder mentioned that they pay huge royalty for getting the content like music from the companies holding

rights of such content. They suggested that such revenue should be considered as a pass through revenue and should be excluded from license fee.

5.6.2 The royalty is paid under the commercial agreement between the FM broadcaster & the music company. The payment made by FM Radio broadcasters is basically input cost of operation. Such royalties varies from area to area and also on type of content. Monitoring of such agreements is difficult.

5.6.3 These royalty amounts may vary depending on the various agreements and therefore become a potential source to reduce payable license fee to the government.

5.6.4 **The Authority recommends:**
The Annual fee shall be charged based on Gross Revenue (GR). No pass through shall be permitted. The percentage of Annual fee on GR shall remain unchanged.

Annexure-I



भारत सरकार
GOVERNMENT OF INDIA
सूचना एवं प्रसारण मंत्रालय
MINISTRY OF
INFORMATION & BROADCASTING
NEW DELHI - 110001

D.O.No.104/2/2007-FM/622

08.11.2007
TS

Dear Sir,

As you are aware, a new policy of expansion of FM Radio broadcasting through private agencies was notified in July 2005. Consequently, a total of 337 channels in 91 cities were put on bid under closed bidding system. Out of this, 284 channels were successfully bid and after scrutiny permission was given for operationalization of 245 channels. Presently 136 channels have become operational including 21 channels operationalised in Phase I. Government has also published a notice inviting tenders for allotment of 97 vacant channels in 48 cities recently under the same terms and conditions of Phase-II.

2 FM Policy Phase-II has been well accepted by all stake holders which resulted in huge growth not only in FM Radio Industry but also in employment opportunity and has also created a demand for FM Radio in other cities. Keeping this in mind and to accelerate further growth of FM Industry, the Government is thinking to expand FM radio through private agencies under Phase-III to other cities.

3 There are certain issues the private broadcasters have been raising for consideration such as allowing news and current affairs, allowing multiple ownership, allow tradability of licenses, increase in FDI in FM Radio, networking and multiple channel ownership in a city etc. At present, no permission holder, whether with or without foreign investment, is permitted to change the ownership pattern of the company through transfer of shares of the majority shareholders/promoters to any new shareholders for a period of five years. Even though some broadcasters had requested for a change in the ownership pattern by way of creating 100% subsidiaries or de-merging the radio business, the Ministry did not agree to the same in view of the existing provision in the policy as mentioned above. In this connection, a copy of letter dated 15.6.07 received from FICCI is also enclosed.

4 BECIL has also submitted a proposal for FM Phase-III which incorporates suggestions for selection of cities and relaxation of fee in the case of North-East & Jammu & Kashmir amongst others. A copy of the proposal received from the Broadcasters Engineering Consultancy Ltd. is also forwarded herewith.

5. Since broadcasting has been notified to be a Telecommunication Service under Section 2 (1) (k) of TRAI Act recommendations of TRAI are sought as per provisions of Section 11(1)(a) on the modifications to be incorporated in plicy for FM Phase III. Suggestions & issues highlighted by FICCI & BECIL may also be considered while formulating recommendations. We would be happy to receive recommendations on various issues involved therein especially on the issues mentioned above.

:2:

5. As Government is keen to bring the policy by the year end so as to give a fillip to the FM radio sector, I would request you to kindly have the recommendations of the Authority expedited on priority.

With regards,

Yours sincerely



(Zohra Chatterji)

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Summary of Stakeholder' Comments

The comments of stakeholders on “Issue relating to 3rd Phase of Private FM Radio Broadcasting” are summarized into following three categories

REGULATORY ISSUES

a) Do you agree that number of channels for category A, B, and C be restored to Phase-II proposal where ever technically feasible and not implemented so far? Do you also agree with the BECIL proposal to reduce number of channels in Category D cities from 4 to 3? Give your comments with justification.

Majority of stakeholders are of the view that Private FM be pushed into even smaller towns to cover towns with population up to 1 lac. However, what is critical to ensure that the stations that come up in these small towns are viable economically. Some important suggestions given for improving the viability of FM Radio Broadcasting:

Number of channels: Since the local market is usually very small in revenue potential, we suggest that the number of frequencies be limited to just 2. Even 3 stations are too many for such markets for now. If the market develops, the government may consider putting out a 3rd frequency at a later date.

The stakeholders demands a big increase in the number of frequencies in the A+ and A towns and are of view that there must be up to 20 private FM channels in the A+ towns and up to 10 in A towns. It is technically possible to have up to 16 channels with an 800 KHz separation in just the “exclusive for FM” bands (as contained in your consultation paper). If the other bands – 87 to 91.5 MHz and 95-100 MHz – can be made exclusive for FM channels, another 10-12 channels can be added with an 800 KHz separation. This would make the total offering about 26-28 channels. Out of these private FM broadcasters could be allotted 20 channels. Likewise in the A category towns, while it would be possible to go up to 22-24 channels, it may be advisable to restrict the number of channels to about 10 for now – given the revenue potential in A towns. In B towns, there could be up to 6 channels; in C towns up to 3 channels and in D towns, up to 2 channels (as discussed earlier). It must also be kept in mind that frequency planning and spectrum allocation must first be done for the larger

cities and then for the smaller towns. So if Delhi needs 26-28 frequencies, it is possible that the smaller nearby town of Panipat may have to make do with only 2 (so that there is no overlap between Delhi and Panipat signals). And similarly, the frequency needs of Ahmedabad must be taken care of before frequencies are made available to Nadiad and Anand. If a further need for frequencies arises in the future, a 400 KHz separation can be planned.

One of the stakeholder commented that FICCI Recommendation on this point is very exhaustive and should be reinforced. The contrary view that multiple ownership would result in monopoly in few hands can be countered that the present policy has prevented growth of the industry in the manner espoused by the 10th five year plan.

License fee concessions: For these small towns, similar concessions should be provided as the consultancy paper suggests for the small towns of the North East. Most issues remain similar in small towns across the country and this step would be a welcome step. We would like to further suggest that the government give a moratorium of 3 years on license fees for all category D towns.

District/state level frequencies: Since it is very possible that an individual small town may still be un-viable, clubbing them together into a bouquet of state-wide frequencies is a good idea. Thus if there are 4 small towns in a state, they should be collectively bid for and collectively offered to a broadcaster. This will ensure overall viability of the bouquet. It is suggested that this clubbing be done on a state-wide basis and not a district-level. In some countries like the UK, the government actually allots national FM licenses as well.

Music royalties: The most important concession required by the radio industry is one that the MIB cannot sanction by itself. It can only influence the Ministry of HRD to help achieve this objective. This relates to the cost of music royalty. And while the issue is of a commercial nature (where the government may not usually like to get involved), the fact is that there exists a monopoly position for these music societies. The music industry has been misusing this position in the past. As is known, the radio industry pays royalties to the music publishers through two societies – PPL and IPRS. Given the intransigent stand that these two societies have taken (and continue to take), the amount of music royalty that broadcasters need to pay is exorbitantly high (by some estimates

between 100% and 300% of revenues in the small towns). This renders the small stations unviable. If private FM has to spread in these towns, the royalty rates have to become realistic. Most of these small towns have a very small revenue potential (between Rs 20 to Rs 50 lacs per annum) – less than 1% of big cities like Mumbai or Delhi. It has been recommended by the radio industry in the past that total music royalties be either calculated as a % of revenues (1-3%) or be a small fixed cost (less than Rs 1 lac per annum in these small towns – for PPL and IPRS combined – at this rate, it would still be about 3% or so). *It must be re-emphasized here that if this is not done, Phase 3 will be a non-starter and all the good efforts of the government will be in jeopardy.*

Networking: Most of the stakeholders are of views that for all the small towns (C and D categories), unlimited networking be permitted. A broadcaster should be allowed to network these small towns to big A and B category towns. This will reduce the cost of infrastructure (setting up of studios), manpower and other costs. However one of stakeholder commented that for all towns (A, B, C and D categories), it is recommended that unlimited networking be permitted

Government revenues: Very importantly, the government must believe in the power of radio. We keep hearing (as also captured in your consultation paper) that radio is the best medium for entertainment, information etc. If the government really believes this, it must make it mandatory for all government advertising to be directed in suitable proportions to private industry. Given the importance of radio and the support it needs from the government, we propose that as much as 25% of the governmental budget on advertising be directed towards private FM. This will lend support to small markets and small players.

Today unfortunately, we find that most government advertising is available only in the large markets – where advertising potential is anyways stronger. Support from the government to the smaller towns will go a long way in ensuring a successful roll-out across the country and making Phase-III successful.

b) Do you feel that present restriction of one channel per city and ceiling of 15% of all channel allocations in the country to an entity needs revision? Give your suggestion with justification.

Most of the stakeholder was of view that artificial shackles that bind the radio industry be removed immediately. TRAI had itself recommended that multiple frequencies be allowed to broadcasters with certain caps: 33% of all available frequencies or 3 whichever is lower. This is a good starting point – for the current number of frequencies available.

On the subject of a national cap of 15% as at present, it is the industry's view that there is no need for any such cap. Firstly, there is now a Competition Act passed by Parliament and this will ensure that there is no abuse of any monopolistic position. This will provide the overall cap on any one broadcaster. Secondly, as explained with the example of TV, there is anyway no question of a monopoly emerging. And lastly, the government must not single out only the radio industry for tough provisions – why is the same cap not prescribed for TV or indeed any other industry (outside of the media space). There are many scarce resources (minerals, telecom frequencies etc), but businesses are allowed to expand through more allocation of the scarce resource (mines, radio frequencies etc).

One of the stakeholder said that there should be a cap of ONE channel that can be owned by one permission holder within a city (existing norms should continue). Also, there is no justification of a 15% cap nationwide. If a cap is proposed it should be within a city (as per existing norms).

c) If the FM Radio broadcast is decided on district basis, what should be the % of all channels or % of number of districts to be permitted or any other suggestion?

Majority of stakeholders were of view that overall cap on district (or state) level frequencies should be governed by rules prescribed under the Competition Act.

d) Do you feel that present FDI cap of 20% and methodology of calculation in FM Radio broadcasting needs change? Give your comments with justification.

Most of the stakeholders disagreed with BECIL's observation that a lot of investment is required in the radio sector – and that is the logic for allowing higher FDI. According to them FDI only flows into a sector when there is viability. If there is no financial viability, neither FDI nor domestic investment will flow. This has been seen in Phase-I and Phase-II so far. Most investments in radio are funded out of promoters' equity. In only 2-3 cases has any FDI become available and the experience of these players has been

anything but satisfactory. Hence the question of FDI coming in only comes into play once the viability in the industry is ensured. Given the fact that in newspapers and news TV, the FDI is limited to 26%, it may be prudent for the government to also allow a 25% cap in Radio.

Stakeholders commented that it is probably more helpful for the radio industry that the government must help small broadcasters (in D category towns) to raise finance from PSU banks. Given the fact that radio is a free to air medium, and is the entertainment medium for common poor people, the government should make provisions where loans to radio stations are considered to be a part of “priority sector” lendings.

One of the stakeholder commented that government should also allow a 26% cap in Radio. Stakeholder also commented on the pass-through clause applicable to foreign investment in FM Radio. The permissible limit of 20% is inclusive of the pro-rata foreign investment of the promoter company and /or majority shareholders. This results in effective dilution of the permissible limit of 20%. Foreign institutional investor (FII) shareholding in the Indian promoter need not be taken into account for the purposes of calculating compliance with the FDI cap provided that the foreign promoter has not itself invested in the Indian promoter through the FII route.

One of the stakeholder commented that the contention of FICCI that tradability of license will result in continuous operations as it provides an exit route to the license holder and counters the argument that it would result in wastage of frequency already committed by MIB to the original license holder. The middle path suggested does not result in any change of ownership as the dilution is restricted till 51% and there is no change from the present position.

One of the stakeholder commented that in line with the attempt to create a national media policy in the future, there should be identical levels and laws on foreign equity in FM Radio Broadcasting.

One of the stakeholder commented that the pass through of foreign investment applicable to the Insurance sector is required to be highlighted. Also the contrary view that Radio is a sensitive sector and hence there should be greater restrictions on foreign investment is not a valid argument. Television is a more powerful medium than Radio as it combines visual with audio and foreign investment in that sector especially news segment is 26% while the same in FM Radio is 20%. There should be an uniform FDI limit and for the faster growth of the Radio Industry, the FDI limit should be increased.

- e) BECIL has raised the issue of giving relaxation in annual fee to North-East and J&K region. Do you feel the need for relaxation in yearly commitment based on one time entry fee (OTEF)? If so, please elaborate your comments with justification and time for which such concessions may be considered?**

Most of the stakeholders agree with this suggestion and in fact request that the ministry should help to solve the issue of music royalties too to make such stations viable.

One of the stakeholder commented that North East/ J&K etc hilly terrains should be allowed repeaters to boost the FM Radio signal. Relaxation in license fee with retrospective effect for stations under Phase-II should be given.

- f) Do you feel that relaxation in present networking guidelines will improve the quality of the programs produced and viewers' experience? Give your suggestions with justification.**

Most of the stakeholders were of view that Limitless networking is required to ensure viability of smaller stations. Networking helps reduce setting-up costs (by reducing the infrastructure requirement of smaller stations as infrastructure is shared with the bigger station) as well as operating costs (lower electricity costs, rents, payroll etc). Without full networking being allowed, most D category (and many C category towns) will be un-viable. What must be remembered is that the cost of setting up and operating radio stations is so much more than TV stations – and the revenue potential is only 1/14 of TV (share of radio 3% v/s 42% for TV). The only compromise that will necessarily be made is that the extent of local programming will drop. Most broadcasters would do 8-10 hours of local broadcast and would network the remaining 8-10 hours. But what's wrong with this? TV channels are allowed this all the time. CNBC runs its US programming in the night. History channel is all foreign content. What happens if networking is not permitted – station viability is affected and radio does not spread across the country – it stays in the main markets. One of the stakeholder commented that Networking of programming is a very big negative for the FM Radio Broadcasting business for the following reasons:

- It is a COST SUBSIDY to commercial broadcasters
- Non-availability of local programming to the public;
- Lower local employment;
- The cultural diversity of India will not be encouraged, and radio is a great low cost means for encouraging.

- g) Whether there is a need to modify present guidelines to permit News and current affairs on FM Radio broadcast? If**

so, the justification, duration of news and current affair programmes and method of effective monitoring may be suggested in your response.

Most of the stakeholders were of view that there is a need to modify present guidelines to permit News and current affairs on FM Radio broadcast. There are no arguments against allowing news and current affairs. The fact is that the government has adequate controls on private broadcasters to prevent any irresponsible behavior. For eg, the entire license fee is collected by the government in advance (OTEF). So if a broadcaster continues to misbehave, the government can simply cancel the license and keep the OTEF. This is a very significant financial deterrent to irresponsible programming.

Stakeholders were of view that there is the question of level playing field as AIR allowed to do news. Satellite radio is also allowed to do news.

Stakeholders commented that for general radio frequencies, news and current affairs must be allowed at least to the extent of 6-7 minutes an hour. This is the minimum requirement that even general entertainment channels have. A separate category of channels may be created called “news channels” which may need to be separately registered with the government. These channels would be permitted to do full broadcast of news and current affairs and sports.

Stakeholders commented that with respect to the suggestion of news broadcast by AIR and DD be used as the source for news by private broadcasters, is both unfair and too cautious.

One of the stakeholder said that Monitoring is an issue and responsibility of the ministry. It should not in any manner prevent the growth of the FM Radio Industry.

h) Do you feel the need to compare regulatory framework of FM Radio broadcast with satellite radio? If so, Please give your views on the issue of non-level playing field as raised by FICCI in reference to FM Radio broadcast with satellite radio with justification.

Most of the stakeholders were of the view that there should be a level playing field between FM and Satellite Radio. They strongly protest the highly favourable treatment being given to Satellite Operators vis a vis FM Operators.

Stakeholders suggested that the same conditions be apply to satellite radio as are applicable to them. FDI must be curtailed to the same limit. OTEF must be charged – the exact formula can be

worked out. Maybe the aggregate of what the radio broadcasters have paid should be the OTEF for a satellite radio broadcaster. Annual license fees should be charged at 4% of advertising (as for FM broadcasters) and 20% of distribution revenues (private FM is free to air).

One of the stakeholder commented that Satellite Radio service is different from terrestrial FM Radio in many aspects. FM Radio broadly covers limited geographical area, addresses local issues, promotes local culture and carries local advertisements. The FM frequency assignment is also mainly a national affair and does not require any significant regional or international coordination. The FM Radio listening has a mass base since it is in free- to-air broadcasting mode and inexpensive receivers are freely available. The cost of putting up of FM Radio infrastructure is also low. The source of revenue for the broadcasters in the case of FM Radio is advertisements. The quality of Service in FM Radio is inferior due to analogue mode. On the other hand, Satellite Radio provides national or sub-continental service. Instead of carrying one program channel per transmitter as is the case with FM Radio, a satellite radio transponder provides large number of program channels of different genres including niche language programming.

TRAI concluded in its recommendations that satellite radio has to be regarded “as a unique mode of communication with some limited overlap in the market for both DTH Television and FM Radio.”

In light of the significant differences between satellite radio and Private FM services, not least of which is the subscription revenue model that satellite radio has adopted, stakeholder believe that there is no need to compare the regulatory frameworks for these two distinct services.

TECHNICAL ISSUES

a) Should there be a cap on maximum number of FM Radio broadcast channels/ Service providers in a city? If so, what should the number be and basis thereof?

One of the stakeholders were of the view that there should be a cap and that cap should be on the maximum stations possible within the band exclusively reserved for FM Radio Broadcasters. However, within the Band and even outside, specific allocations need to be made for Community Radio Services (like Education), News & Current Affairs Channels, Niche/Specific Channels and General (Unrestricted) Channels. In order to optimize & maximize the available bandwidth,

- b) Do you feel that prevailing co-channel spacing of 700 to 800 KHz is most optimal and necessary for FM Radio broadcast without interference? Can co-channel spacing be reduced without affecting channel transmission? Give suggestions with justifications.**

Most of the stakeholders were of the view that at present the 800 KHz separation should be maintained. This is largely because of the quality of receivers that most people in our country have. Lesser separation will lead to disturbance and inability to tune in clearly to a particular channel. Even with 800 KHz separation, all frequency needs of the industry can be taken care of. As and when the medium develops and the quality of receivers improves, the separation may be reduced to 400 KHz and the number of channels doubled. In the meanwhile, the separation of 400 KHz may be allowed between neighboring towns as that would not lead to any major interference.

One of the stakeholder commented that the spacing between channels should be made dependent on the ERP at which the broadcast takes place, subject to a minimum spacing of 400-500KHz between ANY TWO channels, irrespective of ERP.

- c) Should we continue to mandate collocation of transmitter sites or the individual broadcaster should be left to plan as per his business model? In case individual broadcasters are permitted to setup their own towers, should the sharing of such towers be mandated to other operators also, subject to technical feasibility?**

Most of the stakeholders were of the view that collocation is a more efficient method of using a scarce resource like radio spectrum. Hence it should be made compulsory. However since the common infrastructure takes a long time to set up (more than 1 year) and since broadcasters are put to severe financial burden on account of this (the OTEF is collected in advance by the government), they should be allowed “interim” set up in all towns. During this period of time, some relief should also be provided in the technical specs. Especially the EHAAT specification. The interim set-up usually takes up to 6 months to set up and this may provide some financial relief to broadcasters. Also Secondly, the common infrastructure should not all be limited to only one transmission site. If there are 12 frequencies in a market, maybe two separate transmission sites may be created, each hosting 6 channels.

One of the stakeholder commented that different collocation sites should have a level playing field and no Radio operator should have a site that has any advantage over a site from where another Radio operator is broadcasting. Also the CTI/ Tower Height should be same for all players, whether Phase-I, II, III etc. ERP, height of transmission tower should be increased to allow for quality transmission and better coverage.

One of the stakeholder commented that it should be left with the individual broadcasters and sharing of tower option to be decided by operators based on feasibility. The present position of sharing of Transmitter Infrastructure has faced several issues from delay in setting up of CTI to the smooth running of the same i.e. sharing of common charges etc.

d) Is there a need to mandate reference collocation offer for better transparency and uniform treatment to all the stakeholders? Give suggestions with justifications.

Most of the stakeholders commented that there is need to allow broadcasters to choose the common transmitter vendor. At present, the only option given to them is AIR. But this cannot be mandated. As in any business, this is a choice that the broadcasters have to exercise. However, the experience of the past suggests that broadcasters may not be able to come to a conclusion on who the common infrastructure provider should be. This would lead to a delay in the launch of the service, thus sacrificing the interests of the listeners and blocking the frequency un-necessarily. It also penalizes serious broadcasters who may want to launch their service early. Thus, two things need to be done: Firstly, interim set-up should be allowed before the common facility comes up (as discussed earlier) and secondly, an outer time limit needs to be specified for private broadcasters to choose their infrastructure provider. If they cannot make their choice in time, then the government may mandate usage of AIR facilities. Government could also shortlist 2 vendors so that operators can choose any one, basis their proposals.

One of the stakeholder commented that it should be followed but priority should be given to the individual broadcasters to set up their own infrastructure since Phase-II launches have been delayed primarily due to delays from BECIL.

e) Are tower & space sharing guidelines existing at present transparent and functioning effectively? Do you suggest any modifications to existing guidelines to improve effectiveness of sharing?

Most of the stakeholders are of view rentals that are fixed for tower and space are done unilaterally by Prasar Bharati. In many cases, there is no co-relation to the real market rates in the area. This process needs to be consultative. In many ways, the behavior of Prasar Bharati is monopolistic in nature and a type of abuse is inherent in the fact that it is the chosen exclusive host for the transmission site. Apart from this is the entire issue about co-operation from AIR. There have been innumerable delays on account of the lack of co-operation from AIR. There are delays because AIR refuses to allow work on the tower to start, refuse to take down their antenna on time and put other last-minute constraints on private FM broadcasters. Such highhanded behavior can either be put down by fiat or by market forces. As has been said earlier, we would like the option to go with private tower companies

One of the stakeholder suggested that guidelines are available, but local AIR stations are not clear about the same. Proper execution of the guidelines is required at ground level.

f) Do you feel that present arrangement of system integration work being done by BECIL is satisfactory and can be adopted for Phase-III FM Radio broadcast as well? Give suggestions with justifications.

Most of the stakeholder commented that they are broadly unhappy with both the time taken by BECIL to deliver the projects as well as the quality of the work executed. Now when the projects have been delivered to us, we are not confident about how good the quality is and how long the infrastructure will run without trouble. Private FM broadcasters are also unhappy with the rates that BECIL has managed to get from vendors. It is a known fact that private broadcasters would have managed to get better rates and a better delivery time from vendors of infrastructure equipment. It is the view of the radio industry that there should be no constraints on the private FM broadcasters to compulsorily go with BECIL as the project integrator. This decision should be left to the broadcasters to decide. An outside time limit should be put on this decision and if no decision can be reached, then the order may be placed with BECIL for integration work.

OTHER ISSUES

- 1. Government policy guidelines on FM Radio broadcast details policy issues. Similarly grant of permission agreement is draft format of agreement between Ministry of I&B and the***

successful bidder. Do you expect any change (other than discussed earlier) in these documents to facilitate FM broadcasters to speedy roll out of services and improve service efficiency?

- (I) Reduction of time period of 21 months from date of LOI till operationalisation of channel.

One of the stakeholder commented that the time period should be reduced but the aforesaid point should be considered in relation to the Technical Issues related to Common Transmission Infrastructure (CTI). The experience from Phase-II has been that even the time period of 21 months have not proved enough for operationalisation of channel since BECIL has not been able to fully commission the CTI. In the event, there is agreement on technical issues relating to commissioning of CTI etc., then the time period as given above can be reduced considerably.

Most of the stakeholders commented that the current policy allows 9 months for broadcasters to sign the GOPA with the government. This is too long a period of time and should be brought down to about a month or so. This will reduce the time taken to operationalize the stations and will make the investments productive sooner.

- (II) Tradability of licenses:

Stakeholders commented at present, there is a lock-in of 5 years for the main promoter of a radio company. The main promoter is not allowed to transfer even one share to any other party for the first 5 years. The rules for transfer after 5 years are also unclear – it is subject to governmental permission but the rules for such a transfer to be allowed or disallowed are not specified. Smaller shareholders are however allowed to transfer their shares to other parties. This lock-in creates several problems. 5-year lock-in is a very harsh license condition and the same should be diluted.

- (III) On floor of bidding being 25% of the highest bid of the city, with all bids lower than 25% being rejected.

Stakeholders commented that there are pros and cons in raising this threshold of 25%. Raising it would make the costs of acquiring licenses more uniform and may help reduce any speculative selling of frequencies post bidding (if permitted). On the other hand, a wider band allows different bidders to assess the market potential differently and take an appropriate approach to bidding. Some

operators prefer a high risk bidding strategy where they are willing to lose some bids, but would like to win other bids cheap.

One of the stakeholders suggested that lowering the Floor Price to 10 – 15% of the highest bid. The counter argument would be that lowering of the floor price might result in participation by frivolous entities.

(IV) Automatic renewal of license post the initial period of 10 years:

Stakeholders were of view that it is a very harsh term in the existing GOPA that the radio licenses of existing broadcasters will not be renewed automatically at the end of the first spell of 10 years. This would probably make India the only country in the world to have such a condition. Likewise, we would agree with your recommendation that the government charge a financial sum of money at the end of the first period of 10 years to extend it by another 10 years. This sum should normally be a smaller sum of money than the OTEF paid the first time; however we would be OK with TRAI's suggestion that broadcasters pay the same sum to get 10 more years.

One of the stakeholders commented that suggestions in 5.6.3 of the paper can be considered instead of the present position but the OTEF should be reduced at the time of renewal.

(V) Compulsory License Fees of 4% should be only on Income from Radio Operations and not on other income.

Stakeholders commented that the compulsory License Fees of 4% should be payable on net revenue generated from Radio business only and not the Gross Income of the entity having the FM license. This would help the players to undertake new activities and broaden their business resulting in faster growth of the Radio Industry.

One of the stakeholders commented that Definition of Annual Gross Revenue ("AGR") for the purposes of computation of License Fees as given in the Tender Documents and the Grant of Permission Agreement (FM Radio) should be amended keeping in consideration the interpretation of components/ calculation of AGR in view of Judgment dated 30th August 2007 of the TDSAT in Petition # 7 of 2003 and other such petitions.

(VI) Net Worth and Financial Bids

Stakeholders were of view that One Time Entry Fees Should be included in the Net Worth as the payment of this fee is for acquiring a 10-year license and therefore has a definite value. Furnishing of Bank Guarantee at the time of signing of the LOI is onerous since the financial worthiness of the players has already been proved by them upon payment of the OTEF. This condition should be done away with in Phase-III.

(VII) Automatic Migration of Phase-II Stations to Phase-III

Stakeholders commented that though this is generally understood, however for complete clarity, the Policy must state that the migration will be automatically allowed and GOPA will be revised accordingly.

(VIII) Restrictions on outsourcing of content

One of the stakeholders commented that Removal of restrictions is essential as it would lead to reduction of costs as well as growth of this sector in smaller towns and cities which is the primary objective of Phase-III.

International Experiences

1. United State of America:

The total band of 88-108 Mhz is divided into 100 Channels with a spacing of 200 KHz. To specify various transmitter powers and antenna heights, eight different classes viz. A, B1, B, C3, C2, C1, C0 and C have been made. The minimum ERP varies from 6 KW to 100 KW. The permissible height varies between 100 to 600 Meters. Rule 73.211 of FCC Code of Federal Regulation mentions about minimum and maximum ERP for each class of FM station. For example class C1 can have ERP in range of 50-100 KW.

Table 1- FM Station Classes as defined by FCC

FM Station Class	Reference (Maximum) Facilities for Station Class ERP (in kW) / HAAT (in meters)
Class A	6.0 kW / 100 meters
Class B1	25.0 kW / 100 meters
Class B	50.0 kW / 150 meters
Class C3	25.0 kW / 100 meters
Class C2	50.0 kW / 150 meters
Class C1	100.0 kW / 299 meters
Class C0 (C-zero)	100.0 kW / 450 meters
Class C	100.0 kW / 600 meters

FCC rule 73.239 also deliberates on the collocation. It says that, “ No FM broadcast station license or renewal of FM broadcast station license will be granted to any person who owns, lease, or controls a particular site which is peculiarly suitable for FM broadcasting in a particular area and (a) which is not available for use by other FM broadcast station licensees; and (b) no other comparable site is available in the area; and (c) where

the exclusive use of such site by the applicant or licensee would unduly limit the number of FM broadcast stations that can be authorized in a particular area or would unduly restrict competition among FM broadcast stations.” From this rule, we can guess that collocation is very well there in USA.

2. Canada:

In Canada too, as per Spectrum Management and telecommunications Broadcasting Procedures and Rules, August 2005, the FM channel classes are defined by the maximum permissible ERP and the associated EHAAT.

FM classes

Class A1: a maximum ERP of 250 W with an EHAAT of 100 metres.

Class A: a maximum ERP of 6 kW with an EHAAT of 100 metres.

Class B1: a maximum ERP of 25 kW with an EHAAT of 100 metres.

Class B: a maximum ERP of 50 kW with an EHAAT of 150 metres.

Class C1: a maximum ERP of 100 kW with an EHAAT of 300 metres.

Class C: a maximum ERP of 100 kW with an EHAAT of 600 metres.

Table -2 below specifies the minimum Domestic separation distances in kilometres for all classes of channel assignments, using the protected contour levels. The appropriate contours for Class C channels are based on an ERP of 100 kW and an EHAAT of 450 metres.

Class A1	Co-channel	78					
	200 kHz	45					
	400 kHz	22					
	10.6/10.8 MHz	4					
Class A	Co-channel	131	151				
	200 kHz	78	97				
	400 kHz	42	47				
	10.6/10.8 MHz	7	10				
Class B1	Co-channel	164	184	197			
	200 kHz	98	118	131			
	400 kHz	55	60	63			
	10.6/10.8 MHz	9	12	24			
Class B	Co-channel	189	209	222	236		
	200 kHz	117	137	150	164		
	400 kHz	68	73	77	84		
	10.6/10.8 MHz	12	15	24	24		
Class C1	Co-channel	223	243	256	270	291	
	200 kHz	148	168	181	195	216	
	400 kHz	90	95	99	106	119	
	10.6/10.8 MHz	19	22	40	40	48	
Class C	Co-channel	238	258	271	285	306	317
	200 kHz	166	186	199	213	234	245
	400 kHz	101	106	110	117	131	139
	10.6/10.8 MHz	26	32	40	40	48	48
	Relationship	Class A1	Class A	Class B1	Class B	Class C1	Class C

Transmitter Locations

FM station transmitters shall be located to serve the principal centre to which the channel is assigned. Transmitter sites shall be located so that the separations are not less than those set forth.

3. New Zealand

VHF-FM broadcasting usage in New Zealand is based on a minimum frequency separation of 800 kHz between licenses at the same

transmitting site. This is known as an "800 kHz raster" and is consistent with ITU-R technical standards. It recognizes the typical quality of receivers in use, and the efficient practice of multiplexing transmitters to a common antenna. In some circumstances, particularly where several sites might be used to cover the same general area, or when infill coverage licenses might reduce licence availability at a main site, frequency separations as narrow as 600 kHz have been trialled and generally found to be satisfactory for long-term use in that situation. However during the trials it was observed that in some of the areas the use of licenses separated by 400 kHz might be limited by "co-channel" use of the same frequency in nearby areas. Further, presently available sub-carrier technologies, such as SCA and RDS, may be difficult to apply with narrower separation of frequencies, and future technologies such as digital IBOC may be impractical. Considering these wider implications, the full extent of new licenses that might be available with rasters of less than 800 kHz has not yet been quantified.

1) Under revised FM Licensing criteria for VHF-FM broadcasting stations in New Zealand government will:

- a) Resolve licensing issues arising from the two identified trials with the parties concerned;
- b) Not create further licenses at an established site if the resultant frequency separations do not comply with the established 800 kHz raster at that site;
- c) Not create further licenses at an established site which has overlapping coverage with another site if the new licence would have a narrower frequency separation from a licence at the other site, than exists at present between the two sites;
- d) Only consider further trials of co-sited licenses at separations of less than 800 kHz where the trial will, in the Ministry's

opinion, provide new technical information that will assist further policy development;

- e) Consider applications for temporary new licenses at new sites (i.e. locations without existing FM licenses) intended to cover portions of the coverage area from an existing site, provided that,
- * the new licence covers a minor part (less than 25% of the population) of the main coverage site;
 - * the new licence does not directly preclude a "on raster" licence at the main site;
ITU-R protection ratios in Rec 412-9 are met;
 - * the licence is agreed as temporary until issues related to narrower (less than 800 kHz) separation are resolved;
 - * there is no expectation of the licence being made available on long term basis.

4. South Africa:

In the VHF FM sound-broadcasting band between 87,5 MHz and 108 MHz there are 204 channels, each of 100 KHz bandwidth. These are grouped into 31 groups of 6 channels, plus additional 18 channels. The groups distributed in a uniform lattice where each node point relates to a transmitting area. This means that at any one transmitting site in an area the ITU plan provides for 6 channels or frequencies to be available for assignment. In areas of greatest demand, 12 channels were assigned to one area by combining 2 lattice node points. In order to provide national FM coverage it was necessary to locate high power transmitting stations approximately 110 Km apart. Although such a transmitting station may only have a coverage radius of 30 -50 Km, interference from such a station can occur over hundreds of kilometres. In order to avoid mutual

interference between stations operating on the same frequency, it is necessary for the signal from the wanted station to be between 37 dB and 45 dB higher (i.e. 5 000 and 30 000 times stronger) than the interfering signal. Hence a high power FM frequency can only be reused at a distance of close to 500 Km. On the other hand, low power (for e.g. 1 watt) FM transmitters using the same frequency can be situated some 10 km apart (depending on the terrain and broadcasting antenna characteristics and site height) due to its limited area of coverage and interference impact.

USO: As per frequency plan envisaged in Notice of Publication of Terrestrial Broadcast Frequency Plan, 2002 by Independent Communication Authority of South Africa (ICASA), a balance between universal access to PBS services and diversity within the categories of services are to be maintained

5. Australia

Frequency Modulation (FM) broadcasting services in Australia have a nominal bandwidth of 200 kHz and operate in the very high frequency Band II (VHF Band II). There are approximately 1600 licensed FM broadcasting services with transmissions ranging from very low power to 250 kW effective radiated power (ERP).

Collocation

Many higher power national and commercial FM services are currently co-located with television services and, if these services have complementary VHF or UHF wideband digital radio services, would be best suited using the same site. Conversely, most community and low-power FM services have their own transmission sites, which are often not co-located with television transmission facilities. If the digital radio system is to operate in a TV frequency band, co-siting with TV services will give the best spectrum productivity.

Program multiplexing and distribution

In some cases, particularly for high power commercial and national FM services, a common multiplex and transmission facility may be practicable. In the case of low power community services, a common multiplex and transmission infrastructure does not appear to be practicable without a major rearrangement of licence areas (eg. aggregation of smaller licence areas into larger licence areas).

Maximum antenna height :

As stipulated in Broadcasting Services (Technical Planning) Guidelines 2007

- If a transmitter is sited at the nominal location, the licensee shall ensure that the height of the electrical centre of the transmitting antenna above ground does not exceed the maximum height specified in the LAP.
- If there is no technical specification specified in a LAP for a transmitter, the height of the electrical centre of the transmitting antenna above ground shall not exceed that specified in the technical conditions of the transmitter licence.

6. Malaysia

Existing terrestrial audio broadcast services in Malaysia comprise of MF/AM, HF/AM and VHF/FM services, of which only the VHF/FM services provide basic two-channel stereophonic broadcasts of good sound quality. The existing analogue VHF/FM services operate in the frequency band 87.5 - 108 MHz.

Annexure-IV**List of cities with number of channels which came up in Phase- I**

Sr No	Name of City	No of Channels occupied
1	Delhi	3
2	Mumbai	5
3	Kolkata*	4
4	Chennai	2
5	Bangalore	1
6	Ahmedabad	1
7	Pune	1
8	Indore	1
9	Lucknow	1
10	Coimbtore	1
11	Tirunvelveli	1
12	Vishakhapatnam	1
Total		22

* One channel hasn't become operational

Annexure-V**List of cities where LOI was issued for FM
radio Broadcast in Phase- II**

Sr No	Name of City	No of Channels for which LOI were issued
1	Agartala	1
2	Agra	3
3	Ahmedabad	4
4	Ahmednagar	3
5	Aizwal	1
6	Ajmer	3
7	Akola	2
8	Aligarh	1
9	Allahabad	3
10	Amritsar	4
11	Asansol	2
12	Aurangabad	2
13	Banglore	6
14	Barelilly	2
15	Bhopal	4
16	Bhubneshwar	3
17	Bikaner	1
18	Bilaspur	2
19	Chandigarh	2
20	Chennai	6
21	Cochin	3
22	Coimbatore	3
23	Daman	1
24	Delhi	5
25	Dule	1
26	Gangtok *	3
27	Gorakhpur	1
28	Gulbarga	2
29	Guwahati	4
30	Gwalior	4
31	Hissar	4
32	Hyderabad	4
33	Indore	3
34	Itanagar	1

35	Jabalpur	4
36	Jaipur	5
37	Jalandhar	4
38	Jalgaon	3
39	Jammu	1
40	Jamshedpur	3
41	Jhansi	1
42	Jodhpur	4
43	Kannur	4
44	Kanpur	3
45	Karnal	2
46	Kolhapur	2
47	Kolkatta	5
48	Kota	3
49	Kozhikode	2
50	Lucknow	2
51	Madurai	3
52	Mangalore	4
53	Mumbai	3
54	Muzzafarpur	1
55	Mysore	2
56	Nagpur	4
57	Nanded	2
58	Nasik	2
59	Panaji	3
60	Patiala	4
61	Patna	1
62	Pondicherry	3
63	Pune	3
64	Raipur	4
65	Rajamundry	2
66	Rajkot	3
67	Ranchi	4
68	Rourkela	2
69	Sangli	2
70	Shilling	2
71	Shimla	3
72	Sholapur	2
73	Siliguri *	4
74	Srinagar	1
75	Surat	4

76	Thirunelveli	2
77	Thiruvananthapuram	4
78	Tirupathy	2
79	Trichy	2
80	Trissur	4
81	Tuticorin	3
82	Udapur	3
83	Varanasi	4
84	Vijayawada	2
85	Visakkapatnam	3
86	Vododara	4
87	Warangal	2
Total		245

*** One LOI was cancelled later on.**

**List of cities with number of channels put for re-bid
under Phase – II**

Sr No	Name of City	State	Class of City	No of Channels
1	Delhi	Delhi	A+	1
2	Mumbai	Maharashtra	A+	2
3	Hyderabad	A.P.	A	3
4	Dehradun	Uttarakhand	A	4
5	Ahmedabad	Gujarat	A	1
6	Bangalore	Karnataka	A	1
7	Nagpur	Maharashtra	A	2
8	Allahabad	U.P.	B	1
9	Jamshedpur	Jharkhand	B	1
10	Patna*	Bihar	B	3
11	Ajmer	Rajasthan	C	1
12	Akola	Maharashtra	C	2
13	Aligarh	U.P.	C	1
14	Aurangabad	Maharashtra	C	1
15	Bareilly	U.P.	C	2
16	Bhubaneshwar/ Cuttack	Orissa	C	1
17	Bikaner	Rajasthan	C	3

18	Bilaspur	Chattisgarh	C	2
19	Dhule	Maharashtra	C	1
20	Gorakhpur	U.P.	C	3
21	Gulbarga	Karnataka	C	2
22	Jalgaon	Maharashtra	C	1
23	Jammu	J&K	C	2
24	Jhansi	U.P.	C	3
25	Kota	Rajasthan	C	1
26	Muzzafarpur	Bihar	C	3
27	Mysore	Karnataka	C	2
28	Nanded	Maharashtra	C	2
29	Rajamundri	A.P.	C	2
30	Rourkela	Orissa	C	2
31	Sagar	M.P.	C	4
32	Sholapur	Maharashtra	C	1
33	Srinagar	J&K	C	3
34	Tiruchy	Tamil Nadu	C	2
35	Tirunelveli	Tamil Nadu	C	1
36	Tuticorin	Tamil Nadu	C	1
37	Udaipur	Rajasthan	C	1
38	Warangal	A P	C	2

39	Agartala	Tripura	D	3
40	Aizawl	Mizoram	D	3
41	Daman	Daman & Diu	D	1
42	Gangtok	Sikkim	D	1
43	Imphal	Manipur	D	4
44	Itanagar	Arunachal Pradesh	D	3
45	Kohima	Nagaland	D	4
46	Port Blair	A&Nicobar	D	4
47	Shillong	Meghalaya	D	2
48	Shimla	H.P.	D	1
Total				97

Annexure-VII**List of suggested cities along with number of channels for FM
radio Phase-III by BECIL**

Category “A”			
1	Hyderabad	Andhra Pradesh	1
2	Jaipur	Rajasthan	1
3	Kanpur	Uttar Pradesh	3
4	Lucknow	Uttar Pradesh	3
5	Pune	Maharashtra	2
6	Surat	Gujarat	2
Category “B”			
7	Agra	Uttar Pradesh	1
8	Asansol	West Bengal	2
9	Cochin	Kerala	1
10	Dhanbad	Jharkhand	4
11	Ludhiana	Punjab	4
12	Madurai	Tamil Nadu	1
13	Moradabad	Uttar Pradesh	4
14	Rajkot	Gujarat	1
15	Vijayawada	Andhra Pradesh	2
Category “C”			
16	Alappuzha (Alleppey)	Kerala	4
17	Amravati	Maharashtra	4
18	Ahmednagar	Maharashtra	1
19	Aligarh	Uttar Pradesh	2
20	Aurangabad	Maharashtra	1
21	Bhagalpur	Biha	4
22	Bhavnagar	Gujarat	4
23	Belgaum	Karnataka	4
24	Bellary	Karnataka	4

25	Chandigarh	Chandigarh/UT	2
26	Devengeri	Karnataka	4
27	Dhule	Maharashtra	2
28.	Erode	Tamil Nadu	4
29.	Gaya	Biha	4
30	Hubli-Dharwad	Karnataka	4
31	Jamnagar	Gujarat	4
32	Jammu	J&K	1
33	Kakinada	Andhra Pradesh	4
34	Kurnool	Andhra Pradesh	4
35	Kolhapur	Maharashtra	2
36	Kozhikod	Kerala	2
37	Malegaon	Maharashtra	4
38	Muzaffarnagar	Uttar Pradesh	4
39	Nellore	Andhra Pradesh	4
40	Nasik	Maharashtra	2
41	Pondicherry	Pondicherry	1
42	Salem	Tamil Nadu	4
43	Saharanpur	Uttar Pradesh	4
44	Shahjahanpur	Uttar Pradesh	4
45	Sholapur	Maharashtra	1
46	Sangli	Maharashtra	2
47	Tirupati	Andhra Pradesh	2
48	Ujjain	Madhya Pradesh	4
49	Vellore	Tamil nadu	4
Category "D"			
50	Anantpur	Andhra Pradesh	
51	Adoni	Andhra Pradesh	3
52	Adilabad	Andhra Pradesh	3

53	Alwal	Andhra Pradesh	3
54	Arrah	Biha	3
55	Ambala	Haryana	3
56	Achalpur	Maharashtra	3
57	Abohar	Punjab	3
58	Alwar	Rajasthan	3
59	Azamgarh	Uttar Pradesh	3
60	Alipurduar	West Bengal	3
61	Bheemavaram	Andhra Pradesh	3
62	Bettiah	Biha	3
63	Bihar Shareef	Biha	3
64	Begusarai	Biha	3
65	Bharuch	Gujarat	3
66	Botad	Gujarat	3
67	Bhiwani	Haryana	3
68	Bhadurgarh	Haryana	3
69	Bokaro Steel City	Jharkhand	3
70	Bijapur	Karnataka	3
71	Bidar	Karnataka	3
72	Burhanapur	Maehya Pradesh	3
73	Barshi	Maharashtra	3
74	Brahmapur	Orissa	3
75	Baleshwar	Orissa	3
76	Baripada	Orissa	33
77	Bhatinda	Punjab	3
78	Bhilwara	Rajasthan	3
79	Bharatpur	Rajasthan	3
80	Beawar	Rajasthan	3

81	Bahraich	Uttar Pradesh	3
82	Budaun	Uttar Pradesh	3
83	Bands	Uttar Pradesh	3
84	Basti	Uttar Pradesh	3
85	Ballia	Uttar Pradesh	3
86	Barddhaman	West Bengal	3
87	Baharampur	West Bengal	3
88	Balurghat	West Bengal	3
89	Bankura	West Bengal	3
90	Bangaon	West Bengal	3
91	Cuddapah	Andhra Pradesh	3
92	Chittoor	Andhra Pradesh	3
93	Chirala	Andhra Pradesh	3
94	Chapra	Biha	3
95	Chitradurga	Karnataka	3
96	Chikmagalur	Karnataka	3
97	Chhindwara	Madhya Pradesh	3
98	Chhattarpur	Madhya Pradesh	3
99	Churu	Rajasthan	3
100	Coonoor	Tamil Nadu	3
101	Dharamavaram	Andhra Pradesh	3
102	Dibrugarh	Assam	3
103	Darbhanga	Biha	3
104	Durg-Bhillainagar	Chattisgarh	3
105	Dohad	Gujarat	3
106	Deoghar	Jharkhand	3
107	Damoh	Madhya Pradesh	3

108	Dimapur	Nagaland	3
109	Dingdigul	Tamil Nadu	3
110	Deoria	Uttar Pradesh	3
111	Darjiling	West Bengal	3
112	Daman	Daman & Diu	3
113	Eluru	Andhra Pradesh	3
114	English Bazar (Maldah)	West Bengal	3
115	Etawah	Uttar Pradesh	3
116	Etah	Uttar Pradesh	3
117	Farrukhabad cum Fatehgarh	Uttar Pradesh	3
118	Faizabad/Ayodhya	Uttar Pradesh	3
119	Fatehpur	Uttar Pradesh	3
120	Guntakal	Andhra Pradesh	3
121	Godhra	Gujarat	3
122	Giridih	Jharkhand	3
123	Gadag Betigeri	Karnataka	3
124	Guna	Madhya Pradesh	3
125	Gondiya	Maharashtra	3
126	Ganganagar	Rajasthan	3
127	Gonda	Uttar Pradesh	3
128	Ghazipur	Uttar Pradesh	3
129	Hindupur	Andhra Pradesh	3
130	Hazaribag	Jharkhand	3
131	Hospet	Karnataka	3

132	Hassan	Karnataka	3
133	Hoshiarpur	Punjab	3
134	Hanumangarh	Rajasthan	3
135	Hardwar	Uttaranchal	3
136	Haldwani-cum Kathgodam	Uttaranchal	
137	Hardoi	Uttar Pradesh	
138	Itarsi	Madhya Pradesh	3
139	Jorhat	Assam	3
140	Jagdalpur	Chattisgarh	3
141	Junagadh	Gujarat	3
142	Jetpur Navagadh	Gujarat	3
143	Jind	Haryana	3
144	Jhunjhunun	Rajasthan	3
145	Jaunpur	Uttar Pradesh	3
146	Karimnagar	Andhra Pradesh	3
147	Khammam	Andhra Pradesh	3
148	Kothagudem	Andhra Pradesh	3
149	Korba	Chattisgarh	3
150	Kaithai	Haryana	3
151	Kolar	Karnataka	3
152	Kanhangad (Kasargod)	Kerala	3
153	Kavaralli	Lakshadweep	3
154	Khandwa	Madhya Pradesh	3
155	Khargone	Madhya Pradesh	3
156	Karur	Tamil Nadu	3

157	Karaikkudi	Tamil Nadu	3
158	Kharagpur	West Bengal	3
159	Krishnanagar	West Bengal	3
160	Karnal	Haryana	1
161	Latur	Maharashtra	3
162	Lakhimpur	Uttar Pradesh	3
163	Lalitpur	Uttar Pradesh	3
164	Machillpatnam	Andhra Pradesh	3
165	Mahbubnagar	Andhra Pradesh	3
166	Mancherial	Andhra Pradesh	3
167	Madanapalle	Andhra Pradesh	3
168	Munger	Biha	3
169	Motihari	Biha	3
170	Mahesana	Gujarat	3
171	Murwara (Katni)	Madhya Pradesh	3
172	Mandsaur	Madhya Pradesh	3
173	Moga	Punjab	3
174	Mathura	Uttar Pradesh	3
175	Maunath Bhajan (Distt. Mau)	Uttar Pradesh	3
176	Mirzapur cum Vindhyachal	Uttar Pradesh	3
177	Mainpuri	Uttar Pradesh	3
178	Nizamabad	Andhra Pradesh	3
179	Nandyal	Andhra Pradesh	3
180	Nalgonda	Andhra Pradesh	3

181	Nagaon (Nowgang)	Assam	3
182	Neemuch	Madhya Pradesh	3
183	Nagarcoil/Kanyakumari	Tamil Nadu	3
184	Neyveli	Tamil Nadu	3
185	Ongole	Andhra Pradesh	3
186	Orai	Uttar Pradesh	3
187	Proddatur	Andhra Pradesh	3
188	Porbandar	Gujarat	3
189	Purnia	Biha	3
190	Palanpur	Gujarat	3
191	Patan	Gujarat	3
192	Panipat	Haryana	3
193	Palakkad	Kerala	3
194	Puri	Orissa	3
195	Pathankot	Punjab	3
196	Pali	Rajasthan	3
197	Pudukkottai	Tamil Nadu	3
198	Puruliya	West Bengal	3
199	Ramagundan	Andhra Pradesh	3
200	Rajgarh	Chattisgarh	3
201	Rohtak	Haryana	3
202	Rewari	Haryana	3
203	Raichur	Karnataka	3
204	Ratlam	Madhya Pradesh	3
205	Rewa	Madhya Pradesh	3
206	Rajapalayam	Tamil Nadu	3

207	Rae Barelli	Uttar Pradesh	3
208	Raoganj	West Bengal	3
209	Silchar	Assam	3
210	Sasaram	Biha	3
211	Saharsa	Biha	3
212	Siwan	Biha	3
213	Surendranagar Dudhrej	Gujarat	3
214	Sirsa	Haryana	3
215	Shimoga	Karnataka	3
216	Satna	Madhya Pradesh	3
217	Singrauli	Madhya Pradesh	3
218	Shivpuri	Madhya Pradesh	3
219	Sambalpur	Orissa	3
220	Sikar	Rajasthan	3
221	Sawai Madhopur	Rajasthan	3
222	Sitapur	Uttar Pradesh	3
223	Sultanpur	Uttar Pradesh	3
224	Tinsukia	Assam	3
225	Thanesar	Haryana	3
226	Tumkur	Karnataka	3
227	Tonk	Rajasthan	3
228	Thanjavur	Tamil Nadu	3
229	Tiruvannamalai	Tamil Nadu	3
230	Udupi	Krnataka	3
231	Vizianagaram	Andhra Pradesh	3

232	Veraval	Gujarat	3
233	Vidisha	Madhya Pradesh	3
234	Vaniyambadi	Tamil Nadu	3
235	Wadhwan (Surendernagar)	Gujarat	3
236	Wardha	Maharashtra	3
237	Yavatmal	Maharashtra	3

Annexure-VIII

**Proposed selection criteria by Broadcast Engineering Consultants
India Limited for cities in Phase-III**

S.No.	Category to Category	Minimum Distance in Km within two category cities to qualify for selection (400 KHz apart)
1.	C to C	43
2.	D to D	31
3.	D to C	36
4.	B to C	51
5.	B to D	41
6.	A to D	51
7.	A to C	61
8.	A to B	66
9.	A+ to B	77
10.	A+ to C	72
11.	A+ to D	59

Annexure-IX**Analysis of cities vs. District where FM Radio broadcasting has been started**

List of cities with number of channels which came up in Phase- I				
Sr No	Name of City	No of Channels occupied	District	State
1	Delhi	3	Delhi	Delhi
2	Mumbai	5	Mumbai	Maharashtra
3	Kolkata*	4	Kolkatta	West Bengal
4	Chennai	2	Chennai	Tamil Nadu
5	Bangalore	1	Bangalore	Karnataka
6	Ahmedabad	1	Ahmedabad	Gujarat
7	Pune	1	Pune	Maharashtra
8	Indore	1	Indore	M.P
9	Lucknow	1	Lucknow	U.P
10	Coimbatore	1	Coimbatore	Tamil Nadu
11	Tirunvelveli	1	Tirunvelveli	Tamil Nadu
Total 22 * One channel hasn't become operational				
List of cities where LOI was issued for FM radio Broadcast in Phase- II				
Sr No	Name of City	No of Channels for which LOI were issued	District	State
1	Agartala	1	West Tripura	Tripura
2	Agra	3	Agra	U.P
3	Ahmedabad	4	Ahmedabad	Gujarat
4	Ahmednagar	3	Ahmednagar	Maharashtra
5	Aizwal	1	Aizwal	Mizoram
6	Ajmer	3	Ajmer	Rajasthan
7	Akola	2	Akola	Maharashtra
8	Aligarh	1	Aligarh	U.P
9	Allahabad	3	Allahabad	U.P
10	Amritsar	4	Amritsar	Punjab
11	Asansol	2	Barddhaman	West Bengal
12	Aurangabad	2	Aurangabad	Maharashtra
13	Bangalore	6	Bangalore	Karnataka
14	Bareilly	2	Bareilly	U.P
15	Bhopal	4	Bhopal	M.P
16	Bhubneshwar	3	Bhubneshwar	Orissa
17	Bikaner	1	Bikaner	Rajasthan

18	Bilaspur	2	Bilaspur	Chhattisgarh
19	Chandigarh	2	Chandigarh	Chandigarh (UT)
20	Chennai	6	Chennai	Tamilnadu
21	Cochin	3	Ernakulam	Kerala
22	Coimbatore	3	Coimbatore	Tamilnadu
23	Daman	1	Daman	Daman & Diu (UT)
24	Delhi	5	Delhi	Delhi
25	Dhule	1	Dhule	Maharashtra
26	Gangtok *	3	East Distt.	Sikkim
27	Gorakhpur	1	Gorakhpur	U.P.
28	Gulbarga	2	Gulbarga	Karnataka
29	Guwahati	4	Guwahati	Assam
30	Gwalior	4	Gwalior	M.P.
31	Hissar	4	Hissar	Haryana
32	Hyderabad	4	Hyderabad	A.P.
33	Indore	3	Indore	M.P.
34	Itanagar	1	Itanagar	Arunachal Pradesh
35	Jabalpur	4	Jabalpur	M.P.
36	Jaipur	5	Jaipur	Rajasthan
37	Jalandhar	4	Jalandhar	Punjab
38	Jalgaon	3	Jalgaon	Maharashtra
39	Jammu	1	Jammu	Jammu & Kashmir
40	Jamshedpur	3	East Singhbhum	Jharkhand
41	Jhansi	1	Jhansi	U.P.
42	Jodhpur	4	Jodhpur	Rajasthan
43	Kannur	4	Kannur	Kerala
44	Kanpur	3	Kanpur	U.P.
45	Karnal	2	Karnal	Haryana
46	Kolhapur	2	Kolhapur	Maharashtra
47	Kolkatta	5	Kolkatta	West Bengal
48	Kota	3	Kota	Rajasthan
49	Kozhikode	2	Kozhikode	Kerala
50	Lucknow	2	Lucknow	U.P.
51	Madurai	3	Madurai	Tamil Nadu
52	Mangalore	4	Mangalore	Karnataka
53	Mumbai	3	Mumbai	Maharashtra
54	Muzzafarpur	1	Muzzafarpur	Bihar
55	Mysore	2	Mysore	Karnataka
56	Nagpur	4	Nagpur	Maharashtra
57	Nanded	2	Nanded	Maharashtra
58	Nasik	2	Nasik	Maharashtra
59	Panaji	3	Panaji	Goa
60	Patiala	4	Patiala	Punjab
61	Patna	1	Patna	Bihar
62	Pondicherry	3	Tamilnadu	Pondicherry

63	Pune	3	Pune	Maharashtra
64	Raipur	4	Raipur	Chattisgarh
65	Rajamundry	2	West Godavary	Andra Pradesh
66	Rajkot	3	Rajkot	Gujarat
67	Ranchi	4	Ranchi	Jharakand
68	Rourkela	2	Rourkela	Orissa
69	Sangli	2	Sangli	Maharashtra
70	Shillong	2	East Khasi Hills	Meghalaya
71	Shimla	3	Shimla	H.P.
72	Sholapur	2	Sholapur	Maharashtra
73	Siliguri *	4	New Jalpaiguri	West Bengal
74	Srinagar	1	Srinagar	Jammu & Kashmir
75	Surat	4	Surat	Gujarat
76	Thirunelveli	2	Thirunelveli	Tami Nadu
77	Thiruvananthapuram	4	Thiruvananthapuram	Kerala
78	Tirupathi	2	Chittoor	Andra Pradesh
79	Trichy (Tiruchinappalli)	2	Trichy	Tamil Nadu
80	Trissur	4	Trissur	Kerala
81	Tuticorin	3	Tuticorin	Tamil Nadu
82	Udaipur	3	Udaipur	Rajasthan
83	Varanasi	4	Varanasi	U.P
84	Vijayawada	2	Vijayawada	Andhra Pradesh
85	Visakkapatnam	3	Visakkapatnam	Andhra Pradesh
86	Vododara	4	Vododara	Gujarat
87	Warangal	2	Warangal	Andhra Pradesh
	Total			

* One LOI was cancelled later on.

List of cities with number of channels put for re-bid under phase - II

Sr No	Name of City	Class of City	No of Channels	District	State
1	Delhi	A+	1	Delhi	Delhi
2	Mumbai	A+	2	Mumbai	Maharashtra
3	Hyderabad	A	3	Hyderabad	A.P.
4	Dehradun	A	4	Dehradun	Uttarakhand
5	Ahmedabad	A	1	Ahmedabad	Gujarat
6	Bangalore	A	1	Bangalore	Karnataka
7	Nagpur	A	2	Nagpur	Maharashtra
8	Allahabad	B	1	Allahabad	U.P.
9	Jamshedpur	B	1	East Singhbhum	Jharkhand
10	Patna*	B	3	Patna*	Bihar
11	Ajmer	C	1	Ajmer	Rajasthan
12	Akola	C	2	Akola	Maharashtra

13	Aligarh	C	1	Aligarh	U.P.
14	Aurangabad	C	1	Aurangabad	Maharashtra
15	Bareilly	C	2	Bareilly	U.P.
16	Bhubaneshwar/ Cuttack	C	1	Khordha/ Cuttack	Orissa
17	Bikaner	C	3	Bikaner	Rajasthan
18	Bilaspur	C	2	Bilaspur	Chattisgarh
19	Dhule	C	1	Dhule	Maharashtra
20	Gorakhpur	C	3	Gorakhpur	U.P.
21	Gulbarga	C	2	Gulbarga	Karnataka
22	Jalgaon	C	1	Jalgaon	Maharashtra
23	Jammu	C	2	Jammu	J&K
24	Jhansi	C	3	Jhansi	U.P.
25	Kota	C	1	Kota	Rajasthan
26	Muzzafarpur	C	3	Muzzafarpur	Bihar
27	Mysore	C	2	Mysore	Karnataka
28	Nanded	C	2	Nanded	Maharashtra
29	Rajamundry	C	2	East Godavari	A.P.
30	Rourkela	C	2	Sundargarh	Orissa
31	Sagar	C	4	Sagar	M.P.
32	Sholapur	C	1	Sholapur	Maharashtra
33	Srinagar	C	3	Srinagar	J&K
34	Trichy (Tiruchinappalli)	C	2	Trichy	Tamil Nadu
35	Tirunelveli	C	1	Tirunelveli	Tamil Nadu
36	Tuticorin	C	1	Tuticorin	Tamil Nadu
37	Udaipur	C	1	Udaipur	Rajasthan
38	Warangal	C	2	Warangal	A P
39	Agartala	D	3	West Tripura	Tripura
40	Aizawl	D	3	Aizawl	Mizoram
41	Daman	D	1	Daman	Daman & Diu
42	Gangtok	D	1	East Distt.	Sikkim
43	Imphal	D	4	Imphal	Manipur
44	Itanagar	D	3	Papumpare	Arunachal Pradesh
45	Kohima	D	4	Kohima	Nagaland
46	Port Blair	D	4	Port Blair	A&Nicobar
47	Shillong	D	2	Shillong	Meghalaya
48	Shimla	D	1	Shimla	H.P.
	Total		97		

**POLICY ON EXPANSION OF FM RADIO BROADCASTING SERVICES
THROUGH PRIVATE AGENCIES (PHASE-II)**

New Delhi.

Dated : 13th July, 2005.

The Government of India, Ministry of Information & Broadcasting has formulated a policy on expansion of FM Radio broadcasting services through private agencies (Phase-II). As in the Phase-I policy, the objectives of Phase-II shall be to attract private agencies to supplement and complement the efforts of All India Radio by operationalizing radio stations that provide programmes with local content and relevance, improve the quality of fidelity in reception and generation, encouraging participation by local talent and generating employment.

The salient features of the Policy are given below:

1. Process of granting permission:

1.1 Permission shall be granted on the basis of One-Time Entry Fees (OTEF) quoted by the bidders (Closed Tender System). The Ministry of I&B would separately issue detailed tender notice in due course enabling the interested parties to participate.

2. Eligibility Process:

2.1 The process of granting permission for new participants under Phase 2 shall consist of two rounds. The first round shall be for pre-qualification and only applicants qualifying in accordance with prescribed eligibility criteria given at item no. 3 below will proceed to the next round for making financial bids for specific channels in different cities.

2.2 Participants of Phase 1, who exercise their option to be considered for Phase 2, including those licensees who are eligible for automatic migration for channels already operationalised by them, shall be eligible to be considered for the pre-qualification round for fresh tendering under Phase 2, subject to their fulfilling the prescribed eligibility criteria.

3. Eligibility Criteria:

3.1 Only Companies registered under the Indian Companies Act, 1956 shall be eligible for bidding and obtaining permission for FM Radio channels. The following disqualifications shall apply to these companies:

- o Not registered in India.
- o Controlled by persons convicted of certain offences.
- o Subsidiary of the applicant company.
- o Companies with same management.
- o Companies of the same group or inter-connected companies.
- o Religious bodies or their controlled/associated companies.
- o Political bodies or their controlled/associated companies.
- o Advertising agencies or their controlled/associated companies.
- o Trusts, Societies, Non-Profit Organizations controlled/associated companies.

3.2 Financial Competence:

3.2.1 Bidding will be conducted at Delhi, Mumbai, Kolkata and Chennai for the respective four regions of the country with dates fixed at weekly intervals. Since companies will be eligible to participate in bidding for channels in all the four regions, their financial competence shall be assessed on the basis of the following indicative criteria:

- o Minimum Net Worth required for one channel per center in all regions:
 - D category Centers: Rs. 50 Lakhs.
 - C category Centers: Rs. 1 Crore.
 - B category Centers: Rs. 2 Crore.
 - A or A+ category Centers: Rs. 3 Crore.
 - All Centers: Rs. 10 Crore.
- o However, each company may intimate in writing the maximum number of channels in different categories of cities it desires to bid for and its eligibility will be determined accordingly. In case the applicant does not wish to intimate these details, the applicant company should have the minimum net worth of Rs. 10 Crore.

3.2.2 The applicant company would be required to furnish Annual Reports and Audited Accounts for the last three years, or in the case of a newly incorporated company, Balance Sheets from the date of incorporation till 31st March, 2005, certified by a Chartered Accountant, to support its claim of financial competence.

3.3 Managerial Competence:

The applicant company shall be required to furnish the following information:

- * Names of Directors with evidence of their commercial or managerial competence.
- * Directorship or other executive positions held by the Directors in other companies/organizations with details of such

companies/organizations with documentary evidence to support their claim

- * Names of the key executives, i.e. Chief Executive Officer, and Heads of Finance, Marketing and Creative Departments, if any in position, with evidence of their professional qualifications and managerial competence.

3.4 The applicant company will have to conform to foreign investment and other related stipulations as prescribed in Para 8.1 below.

4. Process of granting permission:

4.1 SEPARATE FINANCIAL BID FOR EACH CHANNEL: Every pre-qualified applicant may apply for allotment of only one channel in each city through a separate financial bid for payment of OTEF for each channel.

4.2 TENDER DEPOSIT: Each such financial bid shall be accompanied with a demand draft for an amount equal to 50% of the financial bid and unconditional and irrevocable Performance Bank Guarantee (PBG) for an amount equal to 50% of the financial bid valid for one year from the date of closure of the bidding process.

4.3 STAGGERED TENDERING: The venue, date and time for submission and opening of the sealed tenders will be staggered region-wise.

4.4 RESERVE OTEF: Reserve OTEF limit for each city shall be 25% of the highest valid bid in that city. All bids below the reserve limit shall be summarily rejected.

4.5 WAITING LIST: Channels available for Private Agencies in Phase 2 in each city shall be allocated in accordance with descending order of valid financial bids received. In the event of the number of valid bids

being more than the available number of frequencies, those unsuccessful valid bidders, who are above the Reserve OTEF limit, and who are willing to continue the deposit of their PBG for the amount equal to 50% of their respective financial bids, will be placed in a waiting list in accordance with the descending order of their financial bids for a period of two years.

4.6 BALANCE BID PAYMENT: Every successful bidder shall be asked to deposit the balance 50% of his financial bid through a demand draft within a period of seven days of being declared a successful bidder.

4.7 BLACKLISTING AND FORFEITURE: Any successful bidder, who fails to deposit the balance 50% of the bid amount within the prescribed period, shall be immediately disqualified to take part in any fresh bidding anywhere in the country for a period of five years. Further, the original payment made through demand draft for 50% of the bid amount shall be forfeited immediately.

4.8 LETTER OF INTENT: On deposit of the balance 50% of the bid amount within the stipulated time, and fulfillment of other eligibility conditions, the successful bidder will be issued a Letter of Intent (LOI) to enable the company to obtain frequency allocation, SACFA clearance, achieve financial closure and appoint all key executives, enter into agreements with DD/AIR/BECIL and deposit the requisite amounts towards land/tower lease rent, common transmission infrastructure etc. and comply with requisite conditions of eligibility for signing the “Grant of Permission Agreement” within a period of nine months from the date of issue of LOI.

4.9 In the event of the failure of any LOI holder to comply with the eligibility conditions for the Grant of Permission Agreement or failing to sign the Grant of Permission Agreement within the prescribed period of nine months from the date of issue of LOI, the full deposit of the bid amount shall be forfeited without further notice, and Letter of Intent and

the allocation of frequency, if any, shall stand cancelled. The frequency so released may be allotted to the next highest bidder from the waiting list.

4.10 GRANT OF PERMISSION AGREEMENT: On complying with all the requisite conditions of eligibility, and furnishing a PBG for an amount equal to the **annual fee (10% of Reserve OTEF)**, the LOI holder and the Ministry of Information & Broadcasting will sign the Grant of Permission Agreement in the prescribed format. Besides the Ministry of Information & Broadcasting would issue a permission after signing the agreement to enable the permission holder to install the radio station, obtain Wireless Operating License (WOL) and operationalise the channel within a period of one year from the date of signing the Grant of Permission Agreement. The period of permission shall be reckoned from the date of operationalisation or one year from the date of signing of the Grant of Permission Agreement, whichever is earlier.

4.11 In the event of the failure of the permission holder to operationalise the channel within the stipulated period, the permission holder shall become liable to pay the annual fee, which shall be recovered in one lump sum from the PBG furnished by the permission holder and the permission holder asked to furnish a fresh PBG to cover next year's fee. In the event of the permission holder failing to operationalise the channel within a period of eighteen months from the date of signing the Grant of Permission Agreement, or failing to furnish PBG for the next year's annual fee within a period of three months from the date of invoking the PBG, whichever is earlier, the Grant of Permission Agreement shall be revoked and the permission holder debarred from bidding for the same city for a period of five years from the date of revocation of permission.

5. Fee and duration:

5.1 Annual Fee shall be charged @ 4% of gross revenue, for the year or @ 10% of the Reserve OTEF limit for the concerned city, whichever is higher. Gross Revenue for this purpose would be the gross revenue without deduction of taxes.

5.2 The first year from the date of signing the Grant of Permission Agreement shall be reckoned as the commissioning period. The first year's fee shall become payable with effect from the date of operationalisation of the channel or expiry of one year from the date of signing the Grant of Permission Agreement, whichever is earlier. The permission holder shall initially pay advance quarterly installments on the basis of the Reserve OTEF formula till the end of the financial year. Once the final fee for the financial year is determined on the basis of gross revenue share formula, the permission holder shall pay the balance in one lump sum within a period of one month from the date of such determination, in any case not later than 30th September of the following year.

5.3 From the second year onwards, the permission holder shall pay advance license fee on the basis of 4% gross revenue share of the first year or 10% of reserve OTEF, whichever is higher, within the first fortnight of each quarter, and balance due of final annual fee by 30th September each year.

5.4 Gross revenue shall be calculated on the basis of billing rates, which shall include discounts, if any, given to the advertisers and any commissions paid to the advertising agencies. Barter advertising contracts shall also be included in gross revenues of either licensee on the basis of their respective relevant billing rates.

5.5 Every permission holder shall furnish a bank guarantee for the amount of annual fee calculated on the basis of Reserve OTEF formula,

and maintain its validity throughout the currency of the permission. Any default in payment of determined annual fee shall be recovered from the bank guarantee and if the amounts due are more, the permission holder shall be asked to furnish additional bank guarantees to cover the balance.

5.6 Every permission holder shall maintain separate financial accounts for each channel, which shall be audited by chartered accountants. In the case of a permission holder providing or receiving goods and services from other companies that owned or controlled by the owners of the permission holder, all such transactions shall be valued at normal commercial rates and included in the profit and loss account of the permission holder to calculate its gross revenue.

5.7 Government shall have the right to get the accounts of any permission holder audited by CAG or any other professional auditors at their discretion. In case of difference between the financial results determined by the chartered accountant and the government appointed auditors, the views of the government appointed auditor shall prevail to the extent of determining gross revenues of the permission holder.

5.8 Every permission under Phase 2 shall be valid for a period of ten years from the date of operationalisation of the channel. There shall be no provision for its extension and it shall automatically lapse at the end of the period and the permission holder shall have no rights whatsoever to continue to operate the channel after the date of expiry. Government at the appropriate time shall determine procedure for issue of fresh permissions and no concessional treatment shall be afforded to the permission holders in the allotment of channels thereafter.

6. No Multiple permissions in a city:

6.1 Every applicant shall be allowed to run only one channel per city provided the total number of channels allocated to the entity is within the overall ceiling of 15% of all allocated channels in the country.

6.2 No permission holder shall outsource, through any long-term production or procurement arrangement, more than 50% of its total content, of which not more than 25% of its total content shall be outsourced to a single content-provider.

6.3 No permission holder shall hire or lease more than 50% of broadcast equipment on long-term basis.

6.4 No permission holder shall enter into any borrowing or lending arrangement with other permission holder or entities other than recognized financial institutions, which may restrict its management or creative discretion to procure or broadcast content.

7. Total number of frequencies that an entity may hold:

7.1 No entity shall hold permission for more than 15% of all channels allotted in the country. In the event of allotment of more channels than prescribed, the entity will have the discretion to decide which channels it would like to surrender and the government shall refund its OTEF for these channels in full.

8. Foreign Investment:

8.1 Total Foreign Investment, including Foreign Direct Investment (FDI) as defined by RBI, including FDI by OCBs/NRIs/PIOs etc., Portfolio Investments by FIIs (within limits prescribed by RBI) and borrowings, if these carry conversion options, is permitted to the extent of not more than 20% of the paid up equity in the entity holding a permission for a radio channel, subject to the following conditions:

- o One Indian individual or company owns more than 50% of the paid up equity excluding the equity held by banks and other lending institutions.
- o The majority shareholder exercises management control over the applicant entity.
- o Has only Resident Indians as Directors on the Board.
- o All key executive officers of the applicant entity are resident Indians.

8.2 If during the currency of the permission period, government policy on FDI/FII is modified, the permission holders shall be obliged to conform to the revised guidelines within a period of six months from the date of such notification, failing which it shall be treated as non-compliant of Grant of Permission Agreement, and liable for punitive action.

8.3 No permission holder shall be permitted to change the ownership pattern of the company through transfer of shares of the major shareholders to any new shareholders without the written permission of the Ministry of Information & Broadcasting, which shall not be granted for a period of five years from the date of operationalisation of the permission, subject to the condition that the new shareholders conform to all the prescribed eligibility criteria.

9. Cross Media Ownership:

9.1 If during the currency of the permission period, government policy on cross-media ownership is announced, the permission holder shall be obliged to conform to the revised guidelines within a period of six months from the date of such notification, failing which it shall be treated as non-compliant of Grant of Permission Agreement, and liable for punitive action. Provided however, in case the permission holder is not in a position to comply with cross media restrictions for bonafide reasons to

the satisfaction of the Ministry of Information & Broadcasting, the Permission Holder would be given an option of furnishing one month's exit notice and the entry fee for the remaining period, to be calculated on pro rata basis, shall be refunded to the permission holder.

10. News and Current Affairs Programs:

10.1 No news and current affairs programs are permitted under the Policy (Phase-II).

11. Code of Conduct:

11.1 Every permission holder shall follow the AIR Program and Advertising Code as amended from time to time.

11.2 In the event of the government announcing the setting up of a Broadcast Regulatory Authority, by whatever name called, and the content regulations are modified, the permission holder shall be obliged to conform to the revised guidelines.

11.3 No permission holder shall use brand names or owners' names or corporate-group names to identify its channel to gain commercial advantage over other permission holders.

11.4 The Ministry of Information & Broadcasting shall have the right to suspend the permission of one or more permission holders in public interest or national security to prevent the misuse of their respective channels and the permission holders shall be obliged to immediately comply with the directives of the Government.

12. Penalty for Non operationalisation of Awarded Licenses:

12.1 Each permission holder shall operationalise the channel within 18 months of the date of signing of the Grant of Permission Agreement, failing which the permission will be revoked, and permission holder shall be debarred from allotment of another channel in the same city for a

period of five years from the date of such revocation. The frequency so released will be allotted to a fresh successful bidder.

12.2 The Ministry of Information & Broadcasting may also revoke the permission if the channel is closed down for more than six months for whatever reason.

13. Networking:

13.1 An entity will be permitted to network its channels in C & D category cities within a region only.

13.2 No two entities shall be permitted to network any of their channels in any category of cities.

14. Technical Parameters:

The details of technical parameters for each category of city is at **Annexure-A.**

15. Number of Frequencies:

15.1 A total of 336 channels in 90 cities across the country would be made available for bidding by Indian private companies, details of which are at **Annexure-B.**

16. Co-location:

16.1 It has been made mandatory for all Phase-II operators to co-locate transmission facilities in all the 90 cities, on terms and conditions to be prescribed separately. In 81 cities, the facilities would be co-located on existing AIR/DD towers, while in remaining 9 cities, new towers shall be got constructed by the Ministry, through Broadcast Engineering Consultants India Limited (BECIL), for the purpose. The details of cities where AIR/DD towers would be utilized for collocation as well as where new towers will be constructed are available at **Annexure-II.**

16.2 Pending creation of collocation facilities by BECIL in due course, the successful bidders in these 9 cities will be permitted to operationalise their channels on individual basis for a period of two years, at the end of which they shall shift their operations to the new facilities. Permission to run its individual channel will be granted to each successful bidder only after it has entered into an agreement with BECIL and made full payments towards its share in the common infrastructure. In the case of Mumbai, even the existing operators shall be permitted to migrate to Phase 2 only after they have entered into agreements with BECIL and made the required payments towards their share in the common infrastructure for co-location.

16.3 BECIL shall act as the system integrator for providing the common transmission infrastructure and will help the LOI holder/ permission holders to obtain SACFA clearance and frequency allocation on prescribed terms and conditions. After grant of permission, each permission holder shall obtain wireless operational license, for which WPC, DOT, MoC&IT will be requested to grant priority clearance.

17. Penalties:

17.1 In the event of a permission holder letting its facilities being used for transmitting any objectionable, unauthorized content, messages or communication inconsistent with public interest or national security or failing to comply with the directions as per para 11.4 above, the permission granted shall be revoked and the permission holder shall be disqualified to hold any such permission in future, apart from liability for punishment under other applicable laws.

17.2 Subject to the provisions contained in Para 17.1 above, in the event of a permission holder violating any of the terms and

conditions of permission, or any other provisions of the FM Radio policy, the Ministry of I&B shall have the right to impose the following penalties:

17.2.1 In the event of first violation, suspension of the permission and prohibition of broadcast up to a period of 30 days.

17.2.2 In the event of second violation, suspension of the permission and prohibition of broadcast up to a period of 90 days.

17.2.3 In the event of third violation, revocation of the permission and prohibition of broadcast up to the remaining period of the permission.

17.2.4 In the event of the failure of the permission holder to comply with the penalties imposed within the prescribed time, revocation of permission and prohibition to broadcast for the remaining period of the permission and and disqualification to hold any fresh permission in future for a period of five years.

17.3 In the event of suspension of permission as mentioned in Para 11.4 or 17.2, the permission holder will continue to discharge its obligations under the Grant of Permission Agreement including the payment of fee.

17.4 In the event of revocation of permission, the permission holder will lose the One Time Non-Refundable Entry Fee. The Government shall not be responsible for any investment towards the operationalisation of the channel, not limited to capital and operating expenditure, in case of imposition of any penalty referred above.

17.5 All the penalties mentioned above shall be imposed only after giving a written notice to the permission holder to rectify the violation within a period of 15 days, failing which he shall be liable for the proposed penalty.

18. Dispute Resolution Mechanism.

18.1 In the event of any question, dispute or difference arising under the Grant of Permission Agreement or in connection thereof, except as to the matter, the decision of which is specifically provided under this Grant of Permission Agreement, the same shall be referred to the sole arbitration of the Secretary, Department of Legal Affairs or his nominee.

18.2 There will be no objection to any such appointment that the Arbitrator is a Government servant. The award of the arbitrator shall be final and binding on the parties. In the event of such Arbitrator, to whom the matter is originally referred to, being transferred or vacating his office, or being unable to act for any reason whatsoever, Secretary, Department of Legal Affairs shall appoint another person to act as Arbitrator.

18.3 The Arbitration and Conciliation Act, 1996, the rules made thereunder and any modification thereof, for the time being in force, shall be deemed to apply to the arbitration proceedings as above. The venue of arbitration shall be New Delhi or such other place as the Arbitrator may decide. The arbitration proceedings shall be conducted in English language.

18.4 Upon any and every reference as aforesaid, the assessment of costs, interest and incidental expenses in the proceedings for the award shall be at the discretion of the Arbitrator.

MIGRATION TO PHASE 2.

1. Licensees of Phase-I, who have actually operationalized their channels would be given the option to Migrate to Phase 2 Policy Regime. They will have to exercise their initial option by the prescribed date to automatically migrate to Phase 2 Policy regime in accordance with the

terms and conditions of migration or continue under Phase 1 or surrender their licenses with one month's notice.

2. In the event of surrender of channels, Government may include the surrendered channels for allotment under the Phase-II policy regime.

3. Automatic migration shall be considered for only those license holders of Phase 1 who have actually operationalised their channels, provided they have paid all their dues from the due date (after allowing for certain condonation of delay in the case of Delhi, Kolkata and Chennai due to problems of co-location) up to the cut-off date, and are not in default of any other license conditions till the date of migration to Phase 2.

4. The cut-off date for automatic migration to Phase 2 shall be taken as April 1, 2005. All payments made by operationalised license holders of Phase 1 in excess of amounts due till the cut-off date, shall be given credit and adjusted against their One-Time Entry Fee (OTEF) for Phase 2.

5. Each operationalised license holder of Phase 1, who is eligible for automatic migration, shall pay OTEF amount equal to the average of all successful bids received under Phase 2 in that city. In the event of no successful bid in the city, such OTEF amount shall be equal to the average of all successful bids received in that category of cities in that region. In the event of no successful bid in any metro city, such OTEF amount shall be equal to the average of all successful bids received in all the four metro cities.

6. On exercising its option to automatically migrate to Phase 2, and payment of the OTEF within the prescribed period, each eligible operationalised license holder of Phase 1 shall be issued a fresh permission with the same terms and conditions as for successful bidders of Phase 2.

7. If any of the operationalised license holders of Phase 1, who is eligible and opting for automatic migration to Phase 2, fails to deposit the OTEF or sign the Grant of Permission Agreement within prescribed period, its automatic migration to Phase 2 shall stand cancelled and it shall be governed by the terms and conditions of its original license under Phase 1 Policy regime, as modified from time to time.

8. In the event of any operationalised license holder of Phase 1 declining to opt for automatic migration, it shall continue to be governed by the terms and conditions of its original license under Phase 1 Policy regime, as modified from time to time.

9. In the event of opting to close down its radio station, an operationalised license holder of Phase 1 shall give a notice of termination with a minimum period of one month at the end of which the Ministry of Information & Broadcasting may cancel its license and permit it to close down the station, and may allocate the frequency so released to the next highest eligible bidder under Phase 2.

CHANGES IN PHASE 1 POLICY REGIME:

1. Keeping in view the litigation generated in Phase 1, and the need to encourage maximum number of bidders to take part in Phase 2, Government have decided to revoke the LOIs/LAs of the defaulting participants of Phase 1 who failed to operationalize their channels while granting them certain concessions in the Phase 1 policy regime.

2. Revoke LOIs: In the case of those LOI holders, who defaulted in furnishing requisite bank guarantees and fulfilling other conditions of eligibility for signing of license agreements, Government will initiate action to revoke their LOIs after giving appropriate notices with the permission of the concerned courts of law where their respective cases are pending.

3. Revoke LAs of non-operationalised Channels: In the case of those License Agreement holders who failed to operationalize their channels within the prescribed time, Government will initiate action to revoke their License Agreements after giving due notice with the permission of the concerned courts of law where their respective cases are pending.

4. Without prejudice to the legal stands of either party: The revocation of LOIs/LAs shall be without prejudice to the respective stands of either party in respect of pending litigation in various courts and arbitration proceedings. Similarly, it is hereby assured that acceptance of concessions enumerated in paragraphs 5 to 8 below and exercise of options by the LOI/LA holders will also be without prejudice to their respective stands before the courts of law, whose decisions shall be binding on either party.

5. Limited Removal of 'Blacklisting': Government have decided to waive the condition of 'Blacklisting' for defaulting LOI/License holders of Phase 1 for the limited purpose of taking part in the tendering process for Phase 2, provided they exercise their options to do so and are eligible as per the prescribed eligibility criteria of Phase 2. In the event of any participant declining to exercise this option and losing its case before the competent court, the blacklisting condition would continue to be enforced.

6. Condone Delays in Operationalisation in Three Metros: In Delhi, Chennai and Kolkata, where Government insisted on co-location, the Government extended the time limit for operationalizing the channels from December 2001 to August 2002. However, in these three metros collocation could not be achieved even by the end of the extended period in August 2002. Finally Government intervened in July 2002 and appointed BECIL as a system integrator to provide collocation facilities and common transmission infrastructure in Delhi, Chennai and Kolkata.

With BECIL setting up the common infrastructure, 9 channels got operationalised within nine months i.e. by the end of May 2003. Since the delay in operationalization occurred on account of bona fide reasons, Government has decided to condone delays in operationalization in the case of the nine channels in the three metros of Delhi, Chennai and Kolkata and reckon the dates of actual operationalization as due dates for liability to pay annual license fees.

7. BECIL to provide collocation facilities in Mumbai: In Mumbai, Government reviewed its policy on collocation in December 2001 and decided to grant a period of two years to achieve co-location. In the interim period, collocation was not insisted upon as a pre-condition and Government permitted the licensees to set up stations individually within a grace period of four months. Since the stations have already been operationalised without collocation within the original grace period, Government have decided not to insist on collocation after the expiry of the prescribed two year time limit. However, Government has appointed BECIL as the system integrator to provide the land and tower as well as the common transmitting infrastructure to enable collocation for Phase 1 operators along with Phase 2 applicants.

8. Reduce Surrender Notice Period to One Month: In order to facilitate unwilling participants of Phase 1 to surrender their licenses quickly and reduce their liability to pay license fees during the notice period, Government have decided to reduce the notice period of one year to only one month to enable easier exit for those who wish to opt out of running their channels.

Annexure-A.

TECHNICAL PARAMETERS.

Category	Basis (one or more of the following)	Effective Radiated Power (ERP) (kW)		Antenna Height (Mtr.)	
		Min.	Max.	Min.	Max.
A ⁺	Metro cities	25	50		
	Delhi			75	200
	Mumbai, Kolkata, Chennai			75	175
A	- Population above 20 lakhs	10	30	75	150
B	- Population above 10 lakhs and upto 20 Lakhs	5	15	50	100
C	- Population above 3 lakhs and upto 10 lakhs	3	10	30	75
D	- Population above 1 lakh and upto 3 lakhs	1	3	20	40

Annexure-B.

**FM Channels to be put on bid for Phase-II of private FM Radio
Broadcasting.**

A. FM Channels in cities where common infrastructure will be created by the Government.

S.No.	City	State/UT	no. of Channels available for bidding
	Category - A+		
1	Chennai	T.N.	6
2	Delhi	Delhi	6
3	Kolkata	W.B.	5
4	Mumbai	Maharashtra	5
	Category - A		
5	Bangalore	Karnataka	7
6	Hyderabad	A.P.	7
7	Jaipur	Rajasthan	5
8	Pune	Maharashtra	3
9	Surat	Gujarat	4
	Total		48

B. FM Channels in cities where Broadcasters will share common infrastructures on Prasar Bharati towers.

S.No.	City	State/UT	No. of Channels available for bidding
	Category - A		
10	Ahmedabad	Gujarat	5
11	Lucknow	U.P	2

12	Nagpur	Maharashtra	6
13	Kanpur	U.P.	3
	Category - B		
14	Agra	U.P.	3
15	Allahabad	U.P.	4
16	Amritsar	Punjab	4
17	Asansol	W.B	2
18	Bhopal	M.P.	4
S.No.	City	State/UT	No. of Channels available for bidding
19	Cochin	Kerala	3
20	Coimbatore	Tamil Nadu	3
21	Indore	M.P.	3
22	Jabalpur	M.P.	4
23	Jamshedpur	Jharkhand	4
24	Patna	Bihar	4
25	Rajkot	Gujarat	3
26	Vadodra	Gujarat	4
27	Varanasi	U.P.	4
28	Vijayawada	A.P.	2
29	Vishakapatnam	A.P.	3
30	Madurai	Tamil Nadu	3
	Category - C		
31	Ahmednagar	Maharashtra	3
32	Ajmer	Rajasthan	4
33	Akola	Maharashtra	4
34	Aligarh	U.P.	2
35	Aurangabad	Maharashtra	3
36	Bareilly	U.P.	4

37	Bhubneshwar/ Cuttack	Orissa	4
38	Bilaspur	Chatisgarh	4
39	Dhule	Maharashtra	2
40	Gorakhpur	U.P.	4
41	Gulbarga	Karnataka	4
42	Guwhati	Assam	4
43	Gwalior	M.P.	4
44	Jalandhar	Punjab	4
45	Jalgaon	Maharashtra	4
46	Jammu	J&K	3
47	Jhansi	U.P.	4
48	Jodhpur	Rajasthan	4
49	Kannur	Kerela	4
50	Kolhapur	Maharashtra	2
51	Mangalore	Karnataka	4
52	Muzzafarpur	Bihar	4
53	Mysore	Karnataka	4
54	Nanded	Maharashtra	4
55	Nasik	Maharashtra	2
56	Patiala	Punjab	4
S.No.	City	State/UT	No. of Channels available for bidding
57	Pondicherry	Pondicherry	3
58	Raipur	Chattisgarh	4
59	Rajamundri	A.P.	4
60	Ranchi	Jharkhand	4
61	Sagar	M.P.	4
62	Sholapur	Maharashtra	3

63	Siliguri	W.B.	4
64	Srinagar	J&K	4
65	Tiruchy	Tamil Nadu	4
66	Tirunelveli	Tamil nadu	3
67	Tirupati	A.P.	2
68	Thiruvananthapuram	Kerala	4
69	Warangal	A.P.	4
70	Bikaner	Rajasthan	4
71	Kota	Rajasthan	4
72	Kozhikod	Kerala	2
73	Rourkela	Orissa	4
74	Sangali	Maharashtra	2
75	Trissur	Kerala	4
76	Tuticorin	Tamil Nadu	4
77	Udaipur	Rajasthan	4
	Category - D		
78	Agartala	Tripura	4
79	Aizwal	Mizoram	4
80	Gangtok	Sikkim	4
81	Hissar	Haryana	4
82	Imphal	Manipur	4
83	Itanagar	Arunachal	4
84	Kohima	Nagaland	4
85	Panaji	Goa	3
86	Shillong	Meghalaya	4
87	Shimla	H.P.	4
88	Daman	Daman & Diu	2
89	Karnal	Haryana	2
90	Port Blair	A&Nicobar	4

	TOTAL		288
	Grand Total		336