



Telecom Regulatory Authority of India

Recommendations on

Issues Relating to

Mobile Television Service

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Table of Contents

Chapters		Page No.
	Preface	i – ii
Chapter 1	Background	1-2
Chapter 2	Technology	3-8
Chapter 3	Allocation of Spectrum	9-17
Chapter 4	Licensing issues	18-37
Chapter 5	Summary of Recommendations	38-48
Annexure I	Letter of Government of India	49-50
Annexure II	Report of Expert Group	51-52
Annexure III	Extracts from the tender document for FM radio licensing (Phase II)	53-56
Annexure IV	Extracts from earlier recommendations of the Authority on review of FDI policy	57-58

Preface

The Working Group set up by Planning Commission on Information & Broadcasting sector, in its report for the 11th Five Year Plan (2007-12) had recommended that entry of private players into Doordarshan's transmission network for mobile solutions as well as terrestrial transmission should be allowed. It further stated that private sector investments should be sought in terrestrial transmission on a public private partnership mode. While Doordarshan has been carrying out trials of mobile television service based on DVB-H system transmitter in Delhi, the licensing framework for entry of private players is yet to be put in place.

2. A reference was received by Telecom Regulatory Authority of India (TRAI) from the Ministry of Information and Broadcasting seeking recommendations under Section 11(1)(a)(i) & (ii) of the Telecom Regulatory Authority of India Act, 1997 on various issues related to mobile television services. Accordingly, a consultation process was initiated by the Authority to obtain views of the stakeholders on the issues.

3. The terms and conditions of Unified Access Service License (UASL) agreement as well as Cellular Mobile Telephone Service (CMTS) license agreement already permit the delivery of Broadband services including triple play i.e. voice, video and data over the networks of UASL and CMTS licensees. Therefore, the primary focus of the consultation process was on provision of mobile television services using broadcasting technologies.

4. After going through a consultation process with the stakeholders in a transparent manner, the Authority has now finalized its recommendations which are being forwarded to the Ministry of Information and Broadcasting. Once the Ministry takes a final decision on these recommendations and a licensing framework for entry of private players in mobile television services is put in place, an exciting opportunity in broadcasting industry would unfold.

5. While finalizing the recommendations, the primary objective of the Authority has been to lay down an enabling framework for provision of mobile television services by a new class of service providers who would like to provide the mobile television services using broadcasting technologies. Thus, the competition between telecom and broadcasting networks will work for the ultimate benefit of the consumer. With the advent of mobile television services in the country, the consumers will get more choice in watching television in terms of what they watch, how they watch and when they watch.

(Nripendra Misra)
Chairman, TRAI

Chapter - 1: Background

- 1.1 The Ministry of Information & Broadcasting, Government of India, had sought recommendations of the Telecom Regulatory Authority of India (TRAI) under Section 11(1)(a)(i) & (ii) of the Telecom Regulatory Authority of India Act, 1997 with respect to various issues relating to mobile television services (annexed as Annexure I to these recommendations). The specific issues on which recommendations have been sought are briefly indicated below:-
- (a) International practice,
 - (b) Eligibility criteria, net-worth requirement,
 - (c) Foreign direct and indirect investment levels,
 - (d) Technology to be adopted,
 - (e) Revenue sharing, entry fees and bank guarantee, and
 - (f) Spectrum to be used.
- 1.2 In line with its consultative approach, the Authority issued a Consultation Paper on September 18, 2007 for comments from the stakeholders before giving its recommendations to the Government on the above issues relating to mobile television service. The stakeholders were also asked to offer suggestions regarding the terrestrial transmission as well as the satellite transmission, tenure of license and service area for provision of mobile television service. An Open House Discussion was held by the Authority on the issues on 26th October, 2007 in Delhi.
- 1.3 The Authority has carefully examined all the responses received from the various stakeholders. The Authority has kept in mind that there is increasing convergence of technologies in telecom and broadcasting on account of digitalization and in this specific case, it is technically feasible to provide

mobile television service by both telecom networks as well as by broadcasting networks. Therefore, the recommendations are being made for enabling and facilitating the existing telecom and broadcasting licensees to utilize their network for roll out of mobile television services as well as to introduce new service providers who may roll out these services by putting up a new network for mobile television service.

- 1.4 The Recommendations on various issues related to mobile television service have been grouped together under the broad headings Technology, Spectrum Allocation and Licensing Issues for sake of continuity and ease of reference.

Chapter - 2: Technology

- 2.1 The convergence of technologies in telecom and broadcasting sectors has made it possible to provide mobile television service using telecom networks as well as broadcasting networks. In the telecom networks, the terms and conditions of Unified Access Service License (UASL) agreement as well as of Cellular Mobile Telephone Service (CMTS) license agreement already permit the delivery of video content over their networks (of UASL and CMTS licensees) and hence, these service providers can provide mobile TV services through their networks. Therefore, the present TRAI's Recommendation though all inclusive mainly addresses TV by the broadcasting technologies.
- 2.2 The primary issue relating to broadcasting technology is whether the type of technology for mobile television service should be regulated or whether it should be left to the service provider. In case the technology is regulated, an associated issue would be the choice of broadcasting technology.
- 2.3 Another issue relating to broadcasting technology is about the route that would be preferable for mobile TV transmission - dedicated terrestrial transmission route or the satellite route. Technology wise the terrestrial and satellite based systems are entirely different. These two types of transmission routes use different spectrum bands and have different coverage areas. Terrestrial transmission for mobile television service provides coverage just like analogue terrestrial television transmission of Doordarshan or FM radio. As against this, satellite based mobile television service would cover large parts of the country. Here, it is pertinent to mention that reception of DTH service requires a dish antenna in clear line of sight of the satellite. For a mobile television receiver, dish antenna is not

required. For outdoor purpose the mobile handset can receive the signals directly from the satellite. However, in case of indoor use, terrestrial repeaters (working in the same spectrum band as satellite signals) are required to provide sufficient signal strength of mobile television service.

- 2.4 The various available technologies namely Digital Video Broadcasting–Handheld (DVB-H), Media Forward Link Only (Media FLO), Terrestrial-Digital Multimedia Broadcasting (T-DMB), Satellite-Digital Multimedia Broadcasting (S-DMB) and One Segment Broadcasting (OSB) have been summarized in the consultation paper. The said consultation paper has also deliberated on the merits and demerits of these technologies.

Comments of the stakeholders

- 2.5 The comments of stakeholders were sought on these technical issues among other issues. The overwhelming view of the stakeholders is that the choice of technology and preferred transmission route should be left to the service providers. However, some of the stakeholders have recommended adoption of DVB-H standards by pointing out that the standards for terrestrial transmission in India have been regulated and India follows the DVB-T standards in the digital terrestrial broadcasting being provided by Doordarshan. They argued that DVB-H, being an extension of the DVB-T standards, should be chosen as it permits transmission to small screen devices using the same infrastructure. It has been claimed that DVB-H has power consumption advantage, better receiver noise performance, lower network costs, ability to use existing DVB-T infrastructure, better spectrum availability and wider availability of terminal devices. It has therefore been pointed out that adopting DVB-H as a single standard for the country will be beneficial to the consumers and the industry. India being a leader in the

area of software and applications may also develop into a sourcing hub for DVB-H applications and equipments for the world market.

- 2.6 A few stakeholders have shown a preference for terrestrial system and one stakeholder has recommended use of satellite system based on DVB-SH specifications. It has been suggested that the system using network of medium and low-power repeaters, co-located with mobile operators' base stations, will provide good indoor coverage in urban areas, and cost effective nationwide coverage can be achieved by employing a high-power geo-stationary satellite.

Analysis of Comments and Recommendations of the Authority

- 2.7 Presently, globally, no single broadcasting technology has emerged as a clear winner in the field of mobile television services. The comments made by the stakeholders on the issues of technology are a reflection of this fact. Accordingly, the stakeholders by and large have not favoured any specific technology and instead have suggested that the choice of technology and transmission route should be left to the service provider.
- 2.8 The advocacy for regulation of technology runs on the following lines. Adoption of a uniform technology throughout the country has the advantage of leveraging the economies of scale in so far as the cost of handsets and transmission infrastructure is concerned. It has been observed in the case of mobile telephony that mass production of mobile handsets has brought down the cost of entry level handsets to less than Rs. 1000/-, which was several times more till a few years ago. Moreover, high levels of churn witnessed by the mobile telephone industry show that consumers exercise

their choice of migrating to a new service provider if they are not satisfied with the level of service being provided by their existing service provider. Such an option is not easily available to consumers if different service providers are providing their services using different technologies.

- 2.9 At the same time, there is a broad convergence of opinion that the best way to ensure that regulation does not become a hindrance to technological development is to make regulation “technology neutral”. Such an approach enables the service providers to keep pace with technological developments across the world. Mandating any particular technology has the disadvantage of shutting out any other newly developed technologies even if such technologies are superior to the mandated technology.
- 2.10 Thus, considering both the advantages as well as disadvantages of a decision regarding regulation of technology, **the Authority recommends that**
- (a) **The chosen technology should be digital;**
 - (b) **the choice of technology should be left to the service provider with the condition that the technology to be deployed for providing mobile television should be based on standards issued by International Telecommunication Union (ITU), Telecom Engineering Centre of India (TEC) or any other International Standards Organization/ body such as the European Telecommunications Standards Institute (ETSI) or any other standardization organization/ body specified by the Government of India; and**
 - (c) **the chosen technology should be a proven one. For this purpose, any digital technology having been used for a global customer base of fifty thousand or more for a continuous period of one year to be reckoned from the date of commercial launch anywhere in the world, should be permissible for use regardless of its changed versions. A certificate from the manufacturers of mobile television equipment about**

satisfactory working for a global customer base of fifty thousand or more over the period of one year from the date of commercial launch should be treated as established technology. This certificate from the manufacturer should be accompanied by certificate(s) from the service providers deploying the technology.

- 2.11 The Authority, while leaving the choice of technology for providing mobile television service to the service providers, is equally concerned with the protection of interests of subscribers who wish to switch from one service provider to another. Such an objective may be achieved by mandating technical interoperability of handsets, but it has serious cost implications for subscribers in terms of handset cost. This is because if a handset has to be interoperable across various mobile television broadcast technologies and standards, then the mobile handset will have to be built to conform to all such technologies. Such stacking of technologies may increase the size and cost of the handheld terminal devices. Moreover, such a stipulation will benefit only a small percentage of subscribers who wish to switch from one mobile television operator to another, but the disadvantages of higher cost and size would have to be borne by each and every subscriber. Accordingly, the interoperability requirement should be restricted to service providers using the same technology and standards. Therefore, the **Authority recommends that in case the handset is provided by the licensee, it should be ensured that if the subscribers desire to migrate to any other licensee using the same technology and standards, they should be able to migrate without changing the handsets.**

- 2.12 As regards the mode of transmission, it has to be kept in mind that spectrum availability and area of coverage are entirely different for terrestrial and satellite based systems. While it may be reasonable to leave the choice of preferred transmission route to the service provider, spectrum management requirements and earmarking of service area of license will be dependent on

the choice made by the service provider. However, the licensing policy should not restrict the transmission route to be used by a licensee. The licensing policy should enable a service provider to make available the mobile television service using any of the possible transmission routes. As per the available information as a result of consultation with ISRO, satellites capable of providing mobile television services covering India are not available at present. Therefore, for the present it may not be possible to provide mobile television service through satellite transmission route. Hence, **the Authority recommends that licenses for the terrestrial transmission route only should be offered for the time being.** Accordingly, licensing issues pertaining to terrestrial route are discussed in detail in the following chapters.

Chapter - 3: Allocation of Spectrum

- 3.1 Spectrum is the first and foremost requirement for roll out of any service based on wireless technology. Choice of technology is also dependent to a very large extent on the availability of spectrum as different technologies are suited for operation in specific frequency bands. Availability of spectrum in different bands varies from country to country on account of different levels of utilization.
- 3.2 Allocation of spectrum has to be done carefully to ensure that there is no interference with other services utilizing spectrum in adjacent bands. Moreover, the spectrum allocation has to take into account the future needs of growth of mobile television service. Harmonization of frequency spectrum across countries has a major impact on volume of production and consequently on cost of network deployment for service providers and cost of handheld devices for the subscribers.
- 3.3 The issues relating to spectrum allocation raised for consultation are mainly centered on the quantity and band of spectrum to be allocated in view of future co-existence of analog and digital terrestrial television transmissions with mobile television transmission. Apart from this, the views of stakeholders were also requested on Single Frequency Network (SFN) topology for the entire service area or Multi Frequency Network (MFN) approach.
- 3.4 Another important issue involved is the methodology to be followed for allocation of spectrum, i.e. whether frequency spectrum should be assigned through a market led approach viz. auctions or whether it should be linked with license.

Comments of the stakeholders

- 3.5 All the stakeholders, with the exception of a consumer action group and a few individuals, have suggested that digital terrestrial television transmission should not be given priority for spectrum assignment over Mobile TV. As regards earmarking of 8 MHz channels for mobile television services, different stakeholders gave different suggestions, ranging from allocation of one or two carriers of 8 MHz each to setting aside 20 carriers for both DVB-T and DVB-H.
- 3.6 There was no agreement among stakeholders on the network topology (Single Frequency Network vis-à-vis Multi Frequency Network) and the methodology for frequency spectrum assignment (auction vis-à-vis linked with license). The views of stakeholders were evenly split on both these issues.

Analysis of Comments and Recommendations of the Authority

- 3.7 The comments received on the issue indicated preference for mobile television in spectrum assignment over digital terrestrial television transmission. The issues regarding allocation of spectrum, network topology and the number of 8 MHz carriers to be set aside are complex issues. Decisions on number of channels for Digital Terrestrial Transmission and mobile television transmission, and Single Frequency/ Multi Frequency Networks depend upon availability of spectrum in the desired band. Availability of spectrum in broadcast bands is also dependent upon the existing spectrum allocation to Doordarshan and the future digitalization plan of Doordarshan.

- 3.8 Accordingly, an expert group was constituted under the aegis of TRAI to make a recommendation about spectrum allocation. The expert group deliberated on the issues relating to the spectrum requirements and its availability for mobile TV service in broadcast band with the representatives of Doordarshan. The expert group made many recommendations regarding spectrum allocation and other issues relating to mobile television. One of the key recommendations of the committee on spectrum was that UHF Band V from 582 MHz to 806 MHz should be allocated for mobile TV service using a terrestrial system and for Digital Terrestrial Transmission (DTT) service by the private operators. The expert group further recommended that a mobile television operator using terrestrial broadcast method should be allotted a carrier of 8 MHz in this band. The recommendations of this Expert Group are enclosed as Annexure-II.
- 3.9 As far as satellite broadcasting mode of mobile television transmission is concerned, both DVB-SH and S-DMB use S-Band spectrum for downlinking of signals. S-DMB system deployed by Japan and South Korea uses Ku band uplink and S-Band downlink with a bandwidth of 25 MHz from 2.630 GHz to 2.655 GHz. DVB-SH systems typically use spectrum in S-Band from 2.170 GHz to 2.200 GHz. DVB-SH has the flexibility for network providers to choose, according to their transmission band (below 3 GHz), various carrier bandwidths such as 8, 7, 6, 5 or 1.7 MHz. On the other hand, a satellite system using the S-DMB standard typically provides 14 channels of video, 22 audio channels and three data channels on a bandwidth of 25 MHz. If the entire capacity is used for the broadcasting of video channels, then a larger number of video channels can be carried in the same bandwidth.
- 3.10 The issue of providing mobile television service using satellite broadcasting route was covered in the consultation paper as well as the draft recommendations issued by the Authority. Comments have been received

on the issue from various stakeholders including the Department of Space. The issue was further discussed with Department of Space and it has transpired after discussions that presently no satellite is available for providing mobile television services covering India. However, the Department of Space have stated that S-Band using satellite frequency band 2550 – 2630 MHz will be ideally suited to provide this service along with ground segment. It is understood that due to high signal strength requirement at mobile handsets, one single beam may not be able to provide coverage with adequate power throughout India. Therefore, multiple beam transmission would become necessary in order to provide good quality mobile television reception using satellite broadcasting mode. In view of this the licensing and spectrum requirements for satellite broadcasting route will be different from those of terrestrial route. Therefore, the **Authority recommends that the Ministry of Information & Broadcasting should co-ordinate with the Department of Space and Department of Telecom regarding availability of satellite capacity and frequency for satellite based mobile television services. As and when such satellite capacity is available and if the Government intends to issue such licenses, then the matter may be referred again to the Authority for its recommendations u/s 11(1)(a)(i) and (ii) of the Telecom Regulatory Authority of India Act, 1997 on the licensing framework for satellite based mobile television service.**

- 3.11 As per the National Frequency Allocation Plan – 2002 (NFAP-2002), UHF Band V is a shared band meant for multiple services, such as Fixed, Mobile, Broadcasting, Radio Navigation and Radio Astronomy (585 – 610 MHz) and Fixed, Mobile, Broadcasting and Radio Astronomy (610 – 806 MHz). Further, as per the NFAP-2002, the frequency band 2520 – 2670 MHz in S-Band suitable for satellite mobile TV transmission is also a shared band meant for multiple services, such as Fixed, Fixed-Satellite (space-to-Earth), Mobile except aeronautical mobile, Fixed-Satellite (Earth-to-space) and Broadcasting-Satellite.

3.12 Thus, it is seen that as per NFAP, the frequency bands meant for both terrestrial transmission and satellite transmission of mobile television service are shared bands. As far as terrestrial transmission is concerned, the actual number of carriers required for mobile television service would depend upon the number of service providers, number of channels broadcast and number of service areas. Similarly, in the case of satellite transmission for mobile television, the bandwidth requirement would depend on the number of service providers, number of channels and possible frequency coordination among the multiple beams used for satellite transmission. In order to ensure proper planning and future growth of mobile TV services using terrestrial transmission and satellite transmission routes, it would be advisable to earmark suitable bandwidth in the respective shared frequency bands. Therefore, **the Authority recommends earmarking of carriers in the UHF Band V (from 585 MHz – 806 MHz) for terrestrial mode of mobile television transmission** as discussed in para 3.8 above. **The Authority further recommends that detailed exercise for earmarking of specific frequency bands may be carried out by the Ministry of Information & Broadcasting in consultation with Wireless Planning and Co-ordination wing of Department of Telecommunications for terrestrial mode of transmission. Similar exercise may be taken up involving Department of Space also in regard to specific earmarking of suitable bandwidth within the shared band (2520-2670 MHz) for mobile television transmission using satellite transmission.** Such earmarking is necessary to ensure that frequency bands are available for the future growth of mobile TV.

3.13 The recommendations of the expert group as discussed in para 3.8 for allocation of spectrum to different service providers have been examined by the Authority. The Authority noted that allocation of one carrier of 8 MHz enables a mobile television service provider to offer about 15 or more video channels depending upon the technology, which is quite adequate for rolling

out the services. Therefore, the Authority agrees with the recommendation of the group. Accordingly, **the Authority recommends that apart from Doordarshan, private operators may be assigned at least 1 slot of 8 MHz each for mobile TV operation using terrestrial systems.**

- 3.14 Co-location of transmission facilities results in channel protection and better utilization of infrastructure & spectrum. Therefore, **the Authority recommends that the sharing of terrestrial transmission infrastructure of Doordarshan should be permitted on mutual agreement basis in a non-discriminatory manner. The Authority also recommends that wherever a mobile television service provider has installed its own infrastructure, it should be made available for sharing with other such service providers. For this purpose the mobile television service licensee having its own transmission infrastructure will make available a Reference Co-location Offer for other mobile television service providers on non-discriminatory basis. Such Reference Co-location Offers shall be subject to the approval of the Telecom Regulatory Authority of India.**
- 3.15 In connection with grant of license and allotment of spectrum to a licensee, the stated position of the Authority in telecom sector has been to delink the two aspects in future licenses. The eligible entity can be granted license for providing specified telecom services under the license. In case spectrum is required for providing one of the telecom services under its license, the entity has to participate in the auction process for the spectrum. If it gets the spectrum, then it can provide such spectrum based services. In regard to mobile television service, the service provider would require spectrum as well as license for roll out of this service. Accordingly, it is possible to (a) allocate spectrum first and then automatically grant licenses to allottees of spectrum or (b) to grant licenses first and then automatically grant spectrum to licensees. At the stage of initial roll out of services, it is proposed to grant

the license first and then automatically allocate spectrum, i.e. option (b) above. It has the advantage of smooth processing of licenses as there is duality of control in terms of license and allocation of spectrum. The Ministry of Information & Broadcasting followed the route mentioned at (b) above for grant of permission to Private FM Radio stations. Licensing of Private FM Radio stations has been done in two phases so far and in both the phases, the Ministry of Information & Broadcasting granted permission to set up FM Radio stations to private agencies based on auction of license and such agencies did not have to go through another selection process for allocation of spectrum.

- 3.16 In the case of FM radio stations, grant of permission for a particular city entitled the service provider to allocation of frequency band for setting up one FM radio station in that city. If the same methodology is adopted for mobile television, then it will be necessary to clearly specify that grant of a license for a service area will entitle a licensee to get only 8 MHz spectrum in appropriate band in that service area in respect of the license so granted, irrespective of technology deployed. Such a stipulation will take care of the likely issue of future demand of more spectrum by licensees for deploying a different technology or for expansion of its mobile television service.
- 3.17 In the first phase of FM radio licensing, the grant of permission was done on the basis of open bidding for Annual License fee. This methodology resulted in the bids reaching commercially unviable levels and very few parties operationalised their FM radio stations. As against this approach, the policy on expansion of FM Radio broadcasting services through private agencies issued by the Ministry of Information & Broadcasting on 13th July 2005 provided for grant of Permission on the basis of One-Time Entry Fees (OTEF) quoted by the bidders (Closed Tender System) and every applicant and its related entities were allowed to bid for only one Channel for the

defined service area. This approach has been very successful with a large number of service providers rolling out their services.

3.18 The Authority has considered the various alternative approaches for grant of licenses for mobile television service and has come to the conclusion that the Closed Tender System on the basis of One-Time Entry Fees (OTEF) quoted by the bidders is best suited for grant of licenses for mobile television services. This is because the tendering method is the most transparent way of determining the market value for a spectrum-linked license for such services.

3.19 Accordingly, **the Authority recommends that:**

- (a) the licenses for mobile television services (for terrestrial systems) should be granted through a Closed Tender System on the basis of One Time Entry Fees (OTEF) quoted by the bidders and the reserve OTEF for a particular license area should be 50% of the highest financial bid submitted for that particular license area;**
- (b) every applicant and its related entities should be allowed to bid for only one license per service area in the first phase of mobile television licensing;**
- (c) allocation of spectrum to mobile television licensees should be automatic for successful bidders and should not require any further selection process. Such licensees should be required to pay the usual spectrum usage charges, as stipulated by the WPC in consultation with the Ministry of Information & Broadcasting;**
- (d) grant of mobile television license should entitle a licensee for allocation of 8 MHz spectrum only for terrestrial transmission, irrespective of technology and standards used; and**

(e) **The Ministry of Information & Broadcasting should seek further recommendations of this Authority for the next phase of expansion of mobile television service in the country, i.e. allocation of additional carrier to already licensed mobile TV service providers or induction of new mobile TV service providers.**

3.20 The terms and conditions of Unified Access Service License (UASL) agreement as well as Cellular Mobile Telephone Service (CMTS) license agreement already permit the delivery of video content over the networks of UASL and CMTS licensees. Any UASL/ CMTS licensee (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile television services using its existing network and spectrum would not require any additional license. However, if they (UASL/CMTS or any other telecom licensee) wish to provide this service in broadcast mode, they will need separate spectrum. As the Authority has recommended automatic allocation of spectrum for provision of mobile television service (using broadcasting technologies) to be done based on auction of license, it would be in the fitness of things that any telecom operator desirous of getting allocation of spectrum for mobile television service using broadcasting technologies must get a separate mobile television license subject to fulfillment of various terms and conditions specified for the grant of license. Therefore, **the Authority recommends that a mobile TV license may be made mandatory for any telecom licensees including UASL/ CMTS licensees, if such licensees wish to use broadcasting technologies for offering mobile television services. For this purpose, any telecom licensees (UASL/ CMTS or any other licensees) satisfying eligibility conditions given in Chapter 4 would be permitted to participate in the bidding process, like any other eligible entity.**

Chapter - 4: Licensing Issues

- 4.1 Apart from technology and spectrum, all the remaining licensing issues namely (i) eligibility criteria, (ii) net-worth requirement, (iii) foreign investment levels, (iv) license area, (v) tenure of license, (vi) entry fee, (vii) license fee, (viii) rollout obligation and liquidated damages, and (ix) bank guarantee are discussed in this chapter.
- 4.2 While making recommendations on licensing framework for mobile television services, the Authority would like to once again reiterate its position regarding provision of mobile television services by telecom operators holding Unified Access Service License (UASL)/ Cellular Mobile Telephone Service (CMTS) licenses. The terms and conditions of Unified Access Service License (UASL) agreement as well as Cellular Mobile Telephone Service (CMTS) license agreement already permit the delivery of Broadband services including triple play i.e. voice, video and data over the networks of UASL and CMTS licensees. Therefore, these telecom operators (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) will not require any additional license for providing mobile television services using their own network with spectrum already made available to them. Under the circumstances, these recommendations are primarily meant to facilitate provision of mobile television services using broadcasting technologies.
- 4.3 The Authority has made many recommendations to the Government on licensing issues for different broadcasting platforms such as private FM radio, cable television, satellite radio, private terrestrial television, DTH services, HITS etc. from time to time. However, it has to be kept in mind that each platform is unique on account of various factors like its reach, spectrum requirements, affordability for the subscribers, carriage capacity, nature of content etc. Therefore, the recommendations made for one

platform can not be directly transposed so as to apply to all other platforms. The various licensing issues relating to mobile television services have been analyzed keeping in mind the peculiar nature of mobile television service.

Comments of the stakeholders

- 4.4 All the telecom operators and industry organizations have favoured 74% FDI limit as against 20% and 49% limits suggested by a DTH operator and a broadcaster respectively. As regards, the license area, while there is divergence of views about licenses to be issued on National/ Regional/ City basis, a number of responses have also been received in favour of telecom circle wise issue of licenses. Almost all the responses are in favor of revenue share based license fee structure.
- 4.5 The UASL/ CMTS licensees have opposed any additional license fee by way of entry fee for them. Some UASL licensees have taken a stand that mobile TV is an access service and any entity interested in providing such a service should acquire a UASL license for the purpose. Most telecom operators have opposed Bank Guarantee. Different tenures for license agreement from 5 yrs to unlimited term have been recommended. Licensing structure similar to FM radio has also been recommended by some broadcasters.

Analysis of Comments and Recommendations of the Authority

- 4.6 The issue of eligibility of bidders for participation in the licensing process was also covered in the earlier recommendations of the Authority on Private Terrestrial TV Broadcast Service. The relevant extracts from the earlier recommendations dated August 29, 2005 are reproduced hereunder:-

Extracts from the recommendations made by the Authority on “Issues relating to Private Terrestrial TV Broadcast Service” to the Government on August 29, 2005

4.3.1 Eligibility

No detailed eligibility conditions need be laid for the present. However, the general disqualifications which have been adopted for Private FM Radio may be used for private terrestrial television broadcasting also. This would mean that the following would be disqualified from holding a licence :

- General disqualifications
 - o Companies not incorporated in India;
 - o Any company controlled by a person convicted of an offence involving turpitude or declared as insolvent or applied for being declared insolvent;
 - o Subsidiary company of any applicant in the same centre;
 - o Companies with the same management within a centre;
 - o More than one inter-connected undertaking at the same centre.
- Religious bodies
- Political bodies
- Advertising agencies
- Trusts, Societies, Non profit Organisations controlled/ associated companies.

- 4.7 The recommendations of the Authority did not prescribe any Net Worth requirements for establishing the financial credentials of any applicant for private terrestrial TV broadcasting license, although, the same had been laid down by the Government in its policy on expansion of FM radio broadcasting services through private agencies (Phase-II) released on 13th July, 2005. The extracts from the policy are reproduced below.

Extracts from policy on expansion of FM radio broadcasting services through private agencies (Phase-II) issued on 13th July, 2005

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:

- 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.

- 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.

- 4.8 The issue of financial competence is an important factor in so far as laying down eligibility conditions for mobile television licenses is concerned. The level of investment and technical expertise required for roll out of mobile television services is more than the level of investment and technical expertise required for launching of terrestrial TV broadcasting service. Moreover, the Authority had noted in its recommendations dated 29th August, 2005 on private terrestrial TV broadcast service that "...The level of interest in private terrestrial television has been limited...". However, there has been a lot of interest during the consultation process about mobile television services. To ensure that non serious players do not derail the process of introduction of mobile television services in the country, it is essential to lay down the eligibility criteria which include the minimum net worth requirement as well.

Grant of license

- 4.9 The Authority has already recommended (in Chapter 3 of these recommendations) that the licenses for terrestrial mobile television systems should be granted through a Closed Tender System on the basis of One Time Entry Fees (OTEF) quoted by the bidders. The eligibility, net worth and other conditions relating to grant of license are discussed in the following paragraphs.
- 4.10 The recommendations of the Authority relating to allocation of spectrum (in Chapter 3 of these recommendations) envisage auction of license and thereafter automatic grant of spectrum to successful bidders as was followed by the Ministry of Information & Broadcasting in Phase-II of licensing of Private FM Radio stations. **The Authority, therefore, recommends that the detailed methodology for grant of license through**

Closed Tender System on the basis of One Time Entry Fees (OTEF) quoted by the bidders should be broadly based on the bidding process followed for licensing (Phase-II) of Private FM Radio stations. However, the reserve OTEF for a particular license area should be 50% of the highest financial bid submitted for that particular license area. The details of methodology followed by the Ministry of Information & Broadcasting for grant of licenses to Private FM Radio stations are enclosed as Annexure-III to these recommendations.

- 4.11 While calling for bids for grant of mobile television licenses, the Ministry of Information & Broadcasting should clearly specify the frequency bands in which spectrum would be allocated to licensees for specific license areas for the terrestrial mobile television systems. This is important as different technologies are suited for operation in specific frequency bands and availability as well as cost of equipment would depend upon the specific frequency bands which would be allocated to licensees. **The Authority accordingly recommends that the Ministry of Information & Broadcasting should consult with the Wireless Planning and Co-ordination wing of Department of Telecommunications with regard to identification of specific frequency bands to be made available to mobile television licensees before calling for the bids. The information regarding specific frequency bands to be allocated to mobile television licensees should be incorporated in the tender documents.**

License Area

- 4.12 For terrestrial mobile television network the license area can be either city wise or region wise. However, looking at the scarcity of spectrum, and likelihood of interference problems in case of a large number of different operators rolling out their services in nearby cities, it is advisable to issue licenses state wise. This will enable the service providers to roll out their services in different cities of the state with minimum interference.

Moreover, since the states have been divided on linguistic basis, the service provider will be able to offer content as per the cultural and linguistic background of the subscribers. Having a larger license area would enable the licensees to leverage economies of scale in procurement, installation and maintenance of network. **Therefore, the Authority recommends that a state should be the license area for a mobile television terrestrial service license. Further, the Authority recommends that some of the smaller states can be combined to form an appropriate license area in order to enable financially and operationally viable model.**

Eligibility

4.13 In view of the discussion in earlier paragraphs, the Authority **recommends that the general disqualifications which have been adopted for Private FM Radio and which have been listed below may be used for mobile television service also. The disqualifications are:-**

- (a) Companies not incorporated in India;**
- (b) Any company controlled by a person convicted of an offence involving moral turpitude or declared as insolvent or applied for being declared insolvent;**
- (c) A company which is an associate of or controlled by a Trust, Society or Non Profit Organization;**
- (d) A company controlled by or associated with a religious body;**
- (e) A company controlled by or associated with a political body;**
- (f) Any company which is functioning as an advertising agency or is an associate of an advertising agency or is controlled by an advertising agency or person associated with an advertising agency;**
- (g) Subsidiary company of any applicant in the same license area;**
- (h) Holding company of any applicant in the same license area;**
- (i) Companies with the Same Management within a license area;**
- (j) More than one Inter-Connected Undertaking at the same license area;**

(k) A company that has been debarred from taking part in the bidding process or its associate company with the same management.

Net-worth of the Company

4.14 As regards the minimum net worth requirements are concerned, the Authority has recommended minimum net worth requirement of Rs. 40 Crores for a company for being eligible for a Headend In The Sky (HITS) license. This license covers the whole country. On the other hand, the mobile television license is proposed to be granted state-wise. Hence, the net worth requirement need not be as stringent as for HITS and a sum of Rs. 3 Crores for each service area is likely to be sufficient for keeping out non serious players. Accordingly, **the Authority recommends that minimum net worth requirement of Rs. 3 Crores for each service area in terrestrial mobile television licenses should be laid down for being eligible to participate in the licensing process.**

Composite FDI and FII Limits

4.15 The comments received on the issues of FDI indicate the interest of various stakeholders in the mobile television services. The telecom operators want the FDI limit to be 74% so that they are not required to offload foreign holdings in order to be eligible to offer mobile television services. Similarly, the DTH operator wants to be able to offer mobile television service itself, but would like its competitors to be subjected to an FDI limit similar to itself. Same is the case with broadcaster having interest in cable distribution.

4.16 The Authority has raised the issue of divergent FDI limits for different sectors in its recommendations to the Government from time to time. The need to undertake a complete review of the FDI policy for the broadcasting sector has been highlighted time and again by the Authority in these

recommendations. (Extracts of the earlier recommendations are enclosed as Annexure – IV). This is necessary for consistency in policy and a level playing field among competing technologies in view of convergence of technologies. The issue of FDI has been covered by the Authority in its recommendations on Headend-In-The-Sky (HITS) sent to the Government on October 17, 2007. In these recommendations, the issue of media being a sensitive sector has also been covered and it has been pointed out that:-

1 “2.35As far as the issue of media being a sensitive sector is concerned, it is to be kept in mind that HITS operation is only a means of carriage of the content of different broadcasters. Even today, for non news broadcasters, there is no FDI ceiling specified and these channels are being governed primarily by the downlinking guidelines. Therefore, when foreign investments can be allowed without any ceiling for content producers such as non-news broadcasters, there is no reason why HITS, which is only a carriage service provider, should be mandated to have a foreign investment ceiling of only 49%.

2 2.36 Therefore the Authority is of the view that there should be consistency in foreign investment policy and to ensure level playing field among competing technologies and therefore recommends that there is a need for a complete review of the FDI policy relating to carriage aspects of electronic media so that it is consistent across all sectors. This would ensure that policies are not a stumbling block where there is a natural convergence of technologies.

3 2.37 The Authority recommends that the total foreign investment including FDI for HITS should be 74% as in case of telecom sector in view of convergence of technologies.”

4.17 There is one similarity between HITS and mobile television service in the sense that mobile television service is also a carriage service provider. **Accordingly, while reiterating its earlier recommendation for a complete review of the FDI policy relating to carriage aspects of electronic media so that it is consistent across all sectors, the Authority recommends that the composite foreign investment limit including FDI should be 74% for mobile television service. Within this limit, foreign**

investments upto 49% may be permitted under the automatic route, beyond which FIPB approval will be required. This will be necessary for this license in view of the fact that UASL/ CMTS licensees are also eligible to provide this service, where such limit is 74%.

Tenure of License

4.18 The tenure of the license should have the features of stability and reasonable tenure to attract investors/ entrepreneurs for participating in licensing process and rolling out services. A period of ten years is reasonable as tenure of the mobile television service license. At the same time a provision for automatic renewal for a further period of ten years at the option of the licensee, would encourage licensees to make larger investments in terms of network deployment and sourcing of content. Therefore, **the Authority recommends that the tenure of mobile television license should be for 10 years. The tenure of the license should be automatically extended for a further period of 10 years at the option of the licensee with payment of 100% of One Time Entry Fee (OTEF) paid by the latest licensee to acquire the mobile television license for that service area. If no such license has been granted for that service area after issue of a license to the licensee, then the licensee should be required to pay 100% of One Time Entry Fee (OTEF) paid at the time of acquiring the license. For the purpose of renewal, the licensees should be required to make an application to the Ministry of Information & Broadcasting at least six months in advance from the due date of expiry of the original license.**

Transfer of License

4.19 It is also to be ensured that the only genuinely interested parties take part in the bidding process and to check speculation some restrictions have to be placed on transfer of license. Therefore, the Authority recommends that **the Licensee should not either directly or indirectly assign or transfer its**

rights under the license in any manner to any other party except with prior approval of the Ministry of Information & Broadcasting.

License Fee

4.20 Considering the acute scarcity of spectrum, the Authority considers that the best possible utilization of spectrum can be achieved by having allocation of license and associated spectrum through an auction based one time entry fee. Revenue share based license fee regimes have been very successful in telecom as well as private FM radio. As observed by the Authority in its recommendations on the Private FM Radio

“...The Revenue share mechanism has the advantage that it corrects automatically for the size of the market. As the market develops and more revenues come in there would be an automatic adjustment in the amount of fees to be paid. This is also a good model in that the licensees have to pay a lower amount initially when costs are high and revenues are low and progressively pay more as the market develops and margins increase...”

Accordingly, apart from the one time entry fee, a license fee based on revenue share is likely to be best suited. Hence, **the Authority recommends a license fee based on revenue sharing principle for mobile television service license.**

4.21 The revenue sharing scheme for Phase-II of private FM Radio licenses provided for a minimum amount also which is required to be paid by the licensees by way of license fees. The annual license fee is charged @ 4% of Gross Revenue for each year or @ 10% of the Reserve One Time Entry Fee limit for the concerned license area, whichever is higher. However, considering the fact that the mobile television service can also be provided by UASL/ CMTS licensees which are subject to license fee on a higher

revenue share percentage, it is necessary to have a similar license fee for mobile television service also, to have a level playing field. Accordingly, **the Authority recommends that the license fee should be charged @ 4% of Gross Revenue for each year or @ 10% of the Reserve One Time Entry Fee limit for the concerned license area, whichever is higher. The license fee should be payable in advance for every quarter (on the basis of 10% of Reserve OTEF for the first year and on the basis of 4% of gross revenue of the previous year or 10% of reserve OTEF, whichever is higher from the second year onwards).**

- 4.22 As already pointed out earlier, any UASL/ CMTS licensee (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile television services using its existing network and spectrum would not require any additional license. As far as treatment of revenues from mobile TV operations in such cases is concerned, **for the purpose of license fee and other levies, the UASL/ CMTS licensees (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile television services using their existing network and spectrum will have to pay all levies and fees required to be paid for offering any service permitted under the said license.**

Roll-out Obligation

- 4.23 In a revenue sharing system, the licensee does not have to pay the revenue share till the services are rolled out. This can lead to delay in roll out of services. Further, spectrum is a scarce resource and it should not be allowed to remain unutilized, once allotted. The people residing in the license area also should not be deprived of the mobile television service once license for the same has been granted. Therefore, to counter such situations, there should be an obligation on the licensee to operationalise the license within a reasonable time frame. In the case of a licensee using the terrestrial mode of transmission, it is expected that the licensee will roll out the services city by

city in a phased manner. **The Authority recommends that in such cases of terrestrial transmission mode, the licensee should be required to discharge the roll out obligations at the most in two phases. In the first phase, the licensee must commence the mobile television transmission in at least one city having a population of more than one million or the city with the largest population (as per 2001 census) within the license area within eighteen months from the date of allocation of spectrum. The licensee would be required to pay liquidated damages in case of any delay in commencement of mobile television service in the first phase mentioned above. Further, the second phase of roll out obligations would require all the cities having a population of more than one million within the license area to be covered within a period of four years from the date of allocation of spectrum. The roll out obligations should be secured through a Performance Bank Guarantee as discussed in para 4.26 ahead. Compliance with the roll out obligations should be monitored by the Licensor.**

Liquidated Damages (LD) and Termination of license

4.24 As already discussed earlier, the licensee would be required to pay liquidated damages in the event of any delay on its part in commencement of the mobile television service. The quantum of liquidated damages should be such that the liquidated damages for one year are approximately equal to half of the Performance Bank Guarantee. Hence, **the Authority recommends that the licensees should be required to pay liquidated damages @ 1% of the Performance Bank Guarantee for delay of each week or part of the week in commencement of the mobile television service beyond the first eighteen months, but within a period of two and a half years after the date of allocation of spectrum, subject to a maximum of 50% of the Performance Bank Guarantee.**

4.25 Thus, no liquidated damages are payable if the mobile television licensee commences the mobile television service within eighteen months of signing of the license agreement. **The Authority recommends that the liquidated damages should be paid by the mobile television licensee upto the date of commencement of the service for the delayed period beyond eighteen months. The facility of commencement of services on payment of liquidated damages is available only upto two and a half years from the date of allocation of spectrum. Where a mobile television licensee is unable to meet the roll out obligation even in two and a half years from the date of allocation of spectrum, the entire Performance Bank Guarantee should be forfeited. Simultaneously, the Government should proceed to cancel the mobile television service license issued to such a licensee including surrender of spectrum and begin the process of fresh allocation of license. On the other hand, once a licensee commences the mobile television service (maximum within a period of two and a half years from the date of allocation of spectrum), 50% of the Performance Bank Guarantee should be returned after receiving payments towards the liquidated damages, if any. The balance 50% of Performance Bank Guarantee should be retained to ensure compliance with the second phase of roll out obligations, namely, covering all the cities having a population of more than one million in the license area within a period of four years from the date of allocation of spectrum. If a mobile television licensee holding a license for a terrestrial system is unable to roll out mobile television services in all the cities in the license area which have a population of more than one million (as per 2001 census) within four years from the date of allocation of spectrum, then the available Performance Bank Guarantee (being equal to 50% of the original Performance Bank Guarantee) should be forfeited. In addition, the license area and spectrum allocation to such a licensee should be restricted to the cities within the license area where mobile television services have been rolled out by the licensee within the said period of**

four years as communicated to the Ministry of Information & Broadcasting. For the remaining part of the license area, the Government will be at liberty to issue a fresh license for which separate recommendations may be sought from the Authority at appropriate time, and the spectrum not utilized by the licensee may be re-allocated to ensure that mobile television service is available in all the cities in the license area which have a population of more than one million (as per 2001 census).

Performance Bank Guarantee

4.26 As per the DTH license agreement, the DTH licensees are required to furnish a Bank Guarantee of Rs. 40 Crores, which is valid for the duration of the license. Similar performance bank guarantee of Rs. 40 Crores has been recommended for Headend-In-The-Sky (HITS) licensees by the Authority. The amount of Performance Bank Guarantee for a terrestrial mobile television service provider with a State as the license area should be less than the Performance Bank Guarantee specified for an all India license. Accordingly, **the Authority recommends that the mobile television licensees having statewide licenses (for terrestrial systems) should be required to furnish a Performance Bank Guarantee of Rs. 2 Crores for each license area.**

Financial Bank Guarantee

4.27 In order to securitize the payments of License Fee by the licensees, the licensees should be required to furnish a Financial Bank Guarantee. **Initially, the Financial Bank Guarantee should be for an amount of Rs. 2 Crores for mobile television licensees having statewide licenses (for terrestrial systems) for each license area. Subsequently, from the second year onwards, the Financial Bank Guarantee should be revised to the estimated sum payable as license fee for two quarters and other dues not otherwise securitized.**

Cross Holding Restrictions

4.28 The eligibility conditions listed in the DTH policy guidelines impose cross holding restrictions on applicants for DTH licenses. The cross holding restriction has been reflected in clause 1.4 and 1.5 of the DTH license agreement as under:-

“1.4 The Licensee shall not allow Broadcasting Companies and/or Cable Network Companies to collectively hold or own more than 20% of the total paid up equity in its company at any time during the License period. The Licensee shall submit the equity distribution of the Company in the prescribed proforma (Table I and II of Form-A) once within one month of start of every financial year. The Government will also be able to call for details of equity holding of Licensee company at such times as considered necessary.

1.5 The Licensee company not to hold or own more than 20% equity share in a broadcasting and/or Cable Network Company. The Licensee shall submit the details of investment made by the Licensee company every year once within one month of start of that financial year. The Government will also be able to call for details of investment made by the Licensee company in the equity of other companies at such times as considered necessary.”

Similar cross holding restrictions have also been recommended by the Authority in its recommendations on Headend-In-The-Sky (HITS) sent to the Government on October 17, 2007.

4.29 The purpose of imposing cross holding restrictions is to ensure that content providers and different distribution platforms do not become vertically or horizontally integrated as such a situation would be against the interests of subscribers. Mobile television will also be a distribution platform for television channels. Accordingly, it would be appropriate for cross holding restrictions to be placed on the mobile television licensees vis a vis broadcasters to prevent monopolization of content and to foster healthy competition. Hence, **the Authority recommends that any mobile television licensee should not allow any broadcasting company or group of broadcasting companies to collectively hold or own more than 20% of the total paid up equity in its company at any time during the License period. Simultaneously, the mobile television licensee should not hold or own more than 20% equity share in a broadcasting company. Further, any entity or person (other than a financial institution) holding more than 20% equity in a mobile television license should not hold more than 20% equity in any other broadcasting company or broadcasting companies and vice-versa. However, there would not be any restriction on equity holdings between a mobile television licensee and a DTH licensee or a HITS licensee or a MSO/cable operator company.**

Content Regulation for Mobile TV services using broadcast route

4.30 The mobile TV service providers providing this service under mobile TV license through the broadcast route can provide video content taken from TV broadcasters as well as from other content providers. It would be necessary to regulate this content appropriately. **Therefore, the Authority recommends as follows:-**

- (i) **In regard to transmission of channels from broadcasters who have received up-linking/ down-linking permission from the Government of India (Ministry of Information and Broadcasting), such channels will be transmitted by mobile TV licensees in exactly the same form**

(unaltered). In such cases, the responsibility to ensure that content is in accordance with the extant laws, rules, regulations etc shall be that of the broadcaster and the mobile TV licensee will not be held responsible.

(ii) In case of contents other than above stated TV channels from broadcasters, such mobile TV licensee shall be responsible for observing program code and advertisement code and such program code and advertisement code shall be the same as provided in Cable Television Network (Regulation) Act 1995 and Rules made thereunder. In addition to this, such licensees will also be bound by various Acts, instructions, directions, guidelines issued by the government from time to time to regulate the content.

(iii) The mobile TV licensees should carry only those news channels which are permitted by the Ministry of Information & Broadcasting.

Content Regulation for Mobile TV services as part of UASL/ CMTS license

4.31 As already pointed out earlier, any UASL/ CMTS licensee (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile television services using its existing network and spectrum would not require any additional license. In so far as regulation of content in such cases is concerned, the Ministry of Information & Broadcasting regulates broadcasting content. In case, the UASL/ CMTS licensees use the content made available by broadcasters for their mobile services, then they should transmit only such channels in exactly same form (unaltered) for which broadcasters have received up-linking/ down-linking permission from Government of India (Ministry of Information and Broadcasting). In such cases, the responsibility to ensure that content is in accordance with the extant laws, rules, regulations etc will be that of the broadcaster. In case of broadcast of content other than permitted TV Channels of broadcasters, the UASL/ CMTS licensee shall be responsible for observing program code and advertisement code and such program code and advertisement code shall be the same as provided in Cable Television

Network (Regulation) Act 1995 and Rules thereunder. In addition to this, such licensees will also be bound by various Acts, instructions, directions, guidelines issued by the government from time to time to regulate the content.

4.32 In order to enable the Ministry of Information & Broadcasting to monitor the content, it should be obligatory for the UASL/ CMTS licensee (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) using their existing network and spectrum to provide mobile TV service to report the commencement of its service to the Ministry of Information & Broadcasting for purposes of content regulation and monitoring.

4.33 Therefore, **the Authority recommends that the telecom licenses should be amended in the following manner to require the UASL/ CMTS licensees (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile television services using their existing network and spectrum:-**

(a) **Such UASL/ CMTS licensees shall report the commencement of their mobile television services to the Ministry of Information & Broadcasting.**

(b) **Such UASL/ CMTS licensees shall transmit only such channels in exactly same form (unaltered) for which broadcasters have received up-linking/down-linking permission from Government of India (Ministry of Information and Broadcasting). In such cases, the responsibility to ensure that content is in accordance with the extant laws, rules, regulations etc shall be that of the broadcaster and telecom licensee will not be held responsible.**

(c) **In case of content other than TV Channels from broadcasters, such telecom licensee shall be responsible for observing program code and advertisement code and such program code and advertisement**

code shall be the same as provided in Cable Television Network (Regulation) Act 1995 and Rules made thereunder. In addition to this, such licensees will also be bound by various Acts, instructions, directions, guidelines issued by the government from time to time to regulate the content.

- 4.34 Concerns have been raised that UASL/ CMTS licensees providing mobile TV services can also produce and show their own news channels, which is highly regulated and where the maximum FDI is limited to 26% for news broadcasters. Hence such UASL/ CMTS licensees will be able to bypass present FDI provisions if they commence their own news broadcast as part of their mobile service. The Authority has deliberated on this issue and recommends that **the UASL/ CMTS licensees (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile TV service as part of UASL/ CMTS license should carry only those news channels which are permitted by the Ministry of Information & Broadcasting.**
- 4.35 Ministry of Information & Broadcasting acts upon cases of non compliance of content regulations related to its jurisdiction. Operational details like time limit to keep a copy of the contents shown on mobile TV, monitoring requirements etc can be worked out by DOT based on the feedback from Ministry of Information & Broadcasting. **Any violation of prevailing Acts/ Rules/ guidelines relating to content by UASL/ CMTS licensees (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile TV service as part of UASL/ CMTS license shall be reported to DoT by Ministry of Information & Broadcasting. The decision of the Ministry of Information & Broadcasting regarding violation of the law/ direction/ guidelines in respect to content shall be final and DOT will take further followup action in time bound manner.**

Chapter - 5: Summary of Recommendations

5.1 TECHNOLOGY

- 5.1.1. The chosen technology should be digital.
- 5.1.2. The choice of technology should be left to the service provider with the condition that the technology to be deployed for providing mobile television should be based on standards issued by International Telecommunication Union (ITU), Telecom Engineering Centre of India (TEC) or any other International Standards Organization/ body such as the European Telecommunications Standards Institute (ETSI) or any other standardization organization/ body specified by the Government of India.
- 5.1.3. The chosen technology should be a proven one. For this purpose, any digital technology having been used for a global customer base of fifty thousand or more for a continuous period of one year to be reckoned from the date of commercial launch anywhere in the world, should be permissible for use regardless of its changed versions. A certificate from the manufacturers of mobile television equipment about satisfactory working for a global customer base of fifty thousand or more over the period of one year from the date of commercial launch should be treated as established technology. This certificate from the manufacturer should be accompanied by certificate(s) from the service providers deploying the technology.
- 5.1.4. In case the handset is provided by the licensee, it should be ensured that if the subscribers desire to migrate to any other licensee using the same technology and standards, they should be able to migrate without changing the handsets.
- 5.1.5. Licenses for the terrestrial transmission route only should be offered for the time being.

5.2 ALLOCATION OF SPECTRUM

- 5.2.1. The Ministry of Information & Broadcasting should co-ordinate with the Department of Space and Department of Telecom regarding availability of satellite capacity and frequency for satellite based mobile television services. As and when such satellite capacity is available and if the Government intends to issue such licenses, then the matter may be referred again to the Authority for its recommendations u/s 11(1)(a)(i) and (ii) of the Telecom Regulatory Authority of India Act, 1997 on the licensing framework for satellite based mobile television service.
- 5.2.2. Earmarking of carriers in the UHF Band V (from 585 MHz – 806 MHz) for terrestrial mode of mobile television transmission has been recommended.
- 5.2.3. A detailed exercise for earmarking of specific frequency bands may be carried out by the Ministry of Information & Broadcasting in consultation with Wireless Planning and Co-ordination wing of Department of Telecommunications for terrestrial mode of transmission. Similar exercise may be taken up involving Department of Space also in regard to specific earmarking of suitable bandwidth within the shared band (2520-2670 MHz) for mobile television transmission using satellite transmission.
- 5.2.4. Apart from Doordarshan, private operators may be assigned at least 1 slot of 8 MHz each for mobile TV operation using terrestrial systems.
- 5.2.5. Sharing of terrestrial transmission infrastructure of Doordarshan should be permitted on mutual agreement basis in a non-discriminatory manner.
- 5.2.6. Wherever a mobile television service provider has installed its own infrastructure, it should be made available for sharing with other such service providers. For this purpose the mobile television service licensee having its own transmission

infrastructure will make available a Reference Co-location Offer for other mobile television service providers on non-discriminatory basis. Such Reference Co-location Offers shall be subject to the approval of the Telecom Regulatory Authority of India.

- 5.2.7. The licenses for mobile television services (for terrestrial systems) should be granted through a Closed Tender System on the basis of One Time Entry Fees (OTEF) quoted by the bidders and the reserve OTEF for a particular license area should be 50% of the highest financial bid submitted for that particular license area.
- 5.2.8. Every applicant and its related entities should be allowed to bid for only one license per service area in the first phase of mobile television licensing.
- 5.2.9. Allocation of spectrum to mobile television licensees should be automatic for successful bidders and should not require any further selection process. Such licensees should be required to pay the usual spectrum usage charges, as stipulated by the WPC in consultation with the Ministry of Information & Broadcasting.
- 5.2.10. Grant of mobile television license should entitle a licensee for allocation of 8 MHz spectrum only for terrestrial transmission, irrespective of technology and standards used.
- 5.2.11. The Ministry of Information & Broadcasting should seek further recommendations of the Authority for the next phase of expansion of mobile television service in the country, i.e. allocation of additional carrier to already licensed mobile TV service providers or induction of new mobile TV service providers.
- 5.2.12. A mobile TV license may be made mandatory for any telecom licensees including UASL/ CMTS licensees, if such licensees wish to use broadcasting technologies for offering mobile television services. For this purpose, any telecom licensees (UASL/ CMTS or any other licensees) satisfying eligibility conditions given in

Chapter 4 would be permitted to participate in the bidding process, like any other eligible entity.

5.3 LICENSING ISSUES

- 5.3.1. The detailed methodology for grant of license through Closed Tender System on the basis of One Time Entry Fees (OTEF) quoted by the bidders should be broadly based on the bidding process followed for licensing (Phase-II) of Private FM Radio stations. However, the reserve OTEF for a particular license area should be 50% of the highest financial bid submitted for that particular license area.
- 5.3.2. The Ministry of Information & Broadcasting should consult with the Wireless Planning and Co-ordination wing of Department of Telecommunications with regard to identification of specific frequency bands to be made available to mobile television licensees before calling for the bids. The information regarding specific frequency bands to be allocated to mobile television licensees should be incorporated in the tender documents.
- 5.3.3. A state should be the license area for a mobile television terrestrial service license.
- 5.3.4. Some of the smaller states can be combined to form an appropriate license area in order to enable financially and operationally viable model.
- 5.3.5. The general disqualifications which have been adopted for Private FM Radio may be used for mobile television service also. The disqualifications are:-
 - (a) Companies not incorporated in India;
 - (b) Any company controlled by a person convicted of an offence involving moral turpitude or declared as insolvent or applied for being declared insolvent;

- (c) A company which is an associate of or controlled by a Trust, Society or Non Profit Organization;
 - (d) A company controlled by or associated with a religious body;
 - (e) A company controlled by or associated with a political body;
 - (f) Any company which is functioning as an advertising agency or is an associate of an advertising agency or is controlled by an advertising agency or person associated with an advertising agency;
 - (g) Subsidiary company of any applicant in the same license area;
 - (h) Holding company of any applicant in the same license area;
 - (i) Companies with the Same Management within a license area;
 - (j) More than one Inter-Connected Undertaking at the same license area;
 - (k) A company that has been debarred from taking part in the bidding process or its associate company with the same management.
- 5.3.6. Minimum net worth requirement of Rs. 3 Crores for each service area in terrestrial mobile television licenses should be laid down for being eligible to participate in the licensing process.
- 5.3.7. The composite foreign investment limit including FDI of 74% for mobile television service has been recommended by the Authority while reiterating its earlier recommendation for a complete review of the FDI policy relating to carriage aspects of electronic media so that it is consistent across all sectors. Within this limit, foreign investments upto 49% may be permitted under the automatic route, beyond which FIPB approval will be required.
- 5.3.8. The tenure of mobile television licenses should be for 10 years. The tenure of the license should be automatically extended for a further period of 10 years at the option of the licensee with payment of 100% of One Time Entry Fee (OTEF) paid by the latest licensee to acquire the mobile television license for that

service area. If no such license has been granted for that service area after issue of a license to the licensee, then the licensee should be required to pay 100% of One Time Entry Fee (OTEF) paid at the time of acquiring the license. For the purpose of renewal, the licensees should be required to make an application to the Ministry of Information & Broadcasting at least six months in advance from the due date of expiry of the original license.

- 5.3.9. The Licensee should not either directly or indirectly assign or transfer its rights under the license in any manner to any other party except with prior approval of the Ministry of Information & Broadcasting.
- 5.3.10. The license fee should be based on revenue sharing principle for mobile television service license.
- 5.3.11. The license fee should be charged @ 4% of Gross Revenue for each year or @ 10% of the Reserve One Time Entry Fee limit for the concerned license area, whichever is higher. The license fee should be payable in advance for every quarter (on the basis of 10% of Reserve OTEF for the first year and on the basis of 4% of gross revenue of the previous year or 10% of reserve OTEF, whichever is higher from the second year onwards).
- 5.3.12. For the purpose of license fee and other levies, the UASL/ CMTS licensees (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile television services using their existing network and spectrum will have to pay all levies and fees required to be paid for offering any service permitted under the said license.
- 5.3.13. In cases of terrestrial transmission mode, the licensee should be required to discharge the roll out obligations at the most in two phases. In the first phase, the licensee must commence the mobile television transmission in at least one city having a population of more than one million or the city with the largest population (as

per 2001 census) within the license area within eighteen months from the date of allocation of spectrum. The licensee would be required to pay liquidated damages in case of any delay in commencement of mobile television service in the first phase mentioned above. Further, the second phase of roll out obligations would require all the cities having a population of more than one million within the license area to be covered within a period of four years from the date of allocation of spectrum.

- 5.3.14. The roll out obligations should be secured through a Performance Bank Guarantee. Compliance with the roll out obligations should be monitored by the Licensor.
- 5.3.15. The licensees should be required to pay liquidated damages @ 1% of the Performance Bank Guarantee for delay of each week or part of the week in commencement of the mobile television service beyond the first eighteen months, but within a period of two and a half years after the date of allocation of spectrum, subject to a maximum of 50% of the Performance Bank Guarantee.
- 5.3.16. The liquidated damages should be paid by the mobile television licensee upto the date of commencement of the service for the delayed period beyond eighteen months. The facility of commencement of services on payment of liquidated damages is available only upto two and a half years from the date of allocation of spectrum. Where a mobile television licensee is unable to meet the roll out obligation even in two and a half years from the date of allocation of spectrum, the entire Performance Bank Guarantee should be forfeited. Simultaneously, the Government should proceed to cancel the mobile television service license issued to such a licensee including surrender of spectrum and begin the process of fresh allocation of license.
- 5.3.17. Once a licensee commences the mobile television service (maximum within a period of two and a half years from the date of

allocation of spectrum), 50% of the Performance Bank Guarantee should be returned after receiving payments towards the liquidated damages, if any. The balance 50% of Performance Bank Guarantee should be retained to ensure compliance with the second phase of roll out obligations, namely, covering all the cities having a population of more than one million in the license area within a period of four years from the date of allocation of spectrum. If a mobile television licensee holding a license for a terrestrial system is unable to roll out mobile television services in all the cities in the license area which have a population of more than one million (as per 2001 census) within four years from the date of allocation of spectrum, then the available Performance Bank Guarantee (being equal to 50% of the original Performance Bank Guarantee) should be forfeited. In addition, the license area and spectrum allocation to such a licensee should be restricted to the cities within the license area where mobile television services have been rolled out by the licensee within the said period of four years as communicated to the Ministry of Information & Broadcasting. For the remaining part of the license area, the Government will be at liberty to issue a fresh license for which separate recommendations may be sought from the Authority at appropriate time, and the spectrum not utilized by the licensee may be re-allocated to ensure that mobile television service is available in all the cities in the license area which have a population of more than one million (as per 2001 census).

- 5.3.18. The mobile television licensees having statewide licenses (for terrestrial systems) should be required to furnish a Performance Bank Guarantee of Rs. 2 Crores for each license area.
- 5.3.19. Initially, the Financial Bank Guarantee should be for an amount of Rs. 2 Crores for mobile television licensees having statewide licenses (for terrestrial systems) for each license area.

Subsequently, from the second year onwards, the Financial Bank Guarantee should be revised to the estimated sum payable as license fee for two quarters and other dues not otherwise securitized.

5.3.20. Any mobile television licensee should not allow any broadcasting company or group of broadcasting companies to collectively hold or own more than 20% of the total paid up equity in its company at any time during the License period. Simultaneously, the mobile television licensee should not hold or own more than 20% equity share in a broadcasting company. Further, any entity or person (other than a financial institution) holding more than 20% equity in a mobile television license should not hold more than 20% equity in any other broadcasting company or broadcasting companies and vice-versa. However, there would not be any restriction on equity holdings between a mobile television licensee and a DTH licensee or a HITS licensee or a MSO/cable operator company.

5.3.21. (i) In regard to transmission of channels from broadcasters who have received up-linking/ down-linking permission from the Government of India (Ministry of Information and Broadcasting), such channels will be transmitted by mobile TV licensees in exactly the same form (unaltered). In such cases, the responsibility to ensure that content is in accordance with the extant laws, rules, regulations etc shall be that of the broadcaster and the mobile TV licensee will not be held responsible.

(ii) In case of contents other than above stated TV channels from broadcasters, such mobile TV licensee shall be responsible for observing program code and advertisement code and such program code and advertisement code shall be the same as provided in Cable Television Network (Regulation) Act 1995 and Rules made thereunder. In addition to this, such licensees will also be bound

by various Acts, instructions, directions, guidelines issued by the Government from time to time to regulate the content.

(iii) The mobile TV licensees should carry only those news channels which are permitted by the Ministry of Information & Broadcasting.

5.3.22. The telecom licenses should be amended in the following manner to require the UASL/ CMTS licensees (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile television services using their existing network and spectrum:-

(a) Such UASL/ CMTS licensees shall report the commencement of their mobile television services to the Ministry of Information & Broadcasting.

(b) Such UASL/ CMTS licensees shall transmit only such channels in exactly same form (unaltered) for which broadcasters have received up-linking/down-linking permission from Government of India (Ministry of Information and Broadcasting). In such cases, the responsibility to ensure that content is in accordance with the extant laws, rules, regulations etc shall be that of the broadcaster and telecom licensee will not be held responsible.

(c) In case of content other than TV Channels from broadcasters, such telecom licensee shall be responsible for observing program code and advertisement code and such program code and advertisement code shall be the same as provided in Cable Television Network (Regulation) Act 1995 and Rules made thereunder. In addition to this, such licensees will also be bound by various Acts, instructions, directions, guidelines issued by the Government from time to time to regulate the content.

5.3.23. The UASL/ CMTS licensees (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile TV

service as part of UASL/ CMTS license should carry only those news channels which are permitted by the Ministry of Information & Broadcasting.

- 5.3.24. Any violation of prevailing Acts/ Rules/ guidelines relating to content by UASL/ CMTS licensees (including Mahanagar Telephone Nigam Ltd. and Bharat Sanchar Nigam Ltd.) providing mobile TV service as part of UASL/ CMTS license shall be reported to DoT by Ministry of Information & Broadcasting. The decision of the Ministry of Information & Broadcasting regarding violation of the law/ direction/ guidelines in respect to content shall be final and DOT will take further followup action in time bound manner.



Asha Swarup
Tel: 23386530

D.O. letter No. 9/11/2007-BP&L

623/CP/07
26/6/07



सचिव
SECRETARY
सूचना और प्रसारण
INFORMATION & BROADCASTING
भारत सरकार
GOVERNMENT OF INDIA

नई दिल्ली-१, तारीख २००
Dated New Delhi-1, the 200

June 21, 2007

Dear Shri Mishra,

As you might be aware that Doordarshan has launched its TV on mobile service using the DVB-H technology in the last month. A number of other private service providers have also shown interest in making available mobile television service. Government of India does not as yet have a policy on the subject. Looking at the new business & employment opportunities that will be opened up and the interest already being shown by the stakeholders, it is desirable that we may frame a policy on mobile television as early as possible.

2. Since Broadcasting has been notified as a telecommunication service under Section 2(1)(k) of the TRAI Act, recommendations of TRAI are sought under Section 11(1)(a)(i) and (ii) with respect to mobile television services. I would be happy to receive recommendations on various issues involved therein especially the international practice, the eligibility criteria, networth requirement, foreign direct and indirect investment levels to be permitted in the applicant company, the technology which should be adopted for India, revenue sharing, entry fees and Bank Guarantee requirements, spectrum to be used and other related issues.

3. I am also enclosing relevant pages of the Sub Group IV Report of the Working Group for the I&B Ministry constituted by the Planning Commission to make recommendations for the 11th Five Year Plan on expansion of transmission network and the digitalization/mobile media. A Sub Group headed by the Additional Secretary, Ministry of Information & Broadcasting in their recommendations have suggested sharing of infrastructure between broadcasters and telecom operators as well as between Prasar Bharati and the private players which will result in additional revenues for Prasar Bharati and simultaneously reduce the fixed costs for the private operators. Sub Group had also suggested a road map for launching of mobile TV in India. While sending the recommendations, the recommendations of the Sub Group may also be kept in view. We are also in receipt of a paper on comparative study and policy discussion on mobile television from the MIH Group on the subject which is also being annexed for your reference.

- 2 -

4. As the Government intends to take a policy decision to provide a fillip to the mobile television service, it is requested that the recommendations of the Authority may kindly be sent at an early date.

with regards,

Yours sincerely,

Asha Swarup

(Asha Swarup)

Encl: As stated.

Shri Nripendra Mishra
Chairman
Telecom Regulatory Authority of India
Mahanagar Door Sanchar Bhawan
Jawaharlal Nehru Marg, Old Minto Road,
New Delhi.

Telecom Regulatory Authority of India

Dated: 08.11.2007

The committee consisting of following officers met on 7th November, 2007 at 1130 hrs to deliberate on the issues relating to the spectrum requirements for terrestrial transmission and its availability for mobile TV service in broadcast band with the officials of Doordarshan. The committee also deliberated on additional issues relating to license for mobile TV service.

TRAI:

Shri R. N. Choubey, Pr. Advisor (B&CS)
Shri N. Parameswaran, Pr. Advisor (RE)
Shri Luv Gupta, Pr. Advisor (FN)
Shri Sudhir Gupta, Advisor (MN)

Doordarshan:

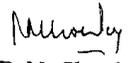
Shri R. R. Prasad, Chief Engineer
Shri A. K. Wadhwa, Director (E)

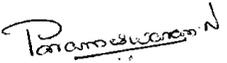
2. Based on the discussions, the Committee recommends the following:
 - i. The terrestrial television transmission needs to be opened up for the private sector. Issuing the license for mobile TV service will essentially mean the opening up of terrestrial TV transmission for private sector.
 - ii. The mobile TV transmission should be defined as one which can be received by a handheld device such as PDAs, cell phones, small screen in moving vehicle etc. However, such transmission may or may not be receivable by conventional TV with the set top box attached to it. Recommendations for licensing conditions would be worked out separately.
 - iii. Such mobile TV transmission should be digital only.
 - iv. Area of operation of a licensee should be coterminus with state boundaries.
 - v. Since the service is not essential in nature, no roll out obligation should be imposed.
 - vi. Spectrum in UHF Band V below 806 MHz should be allocated for mobile TV service and Digital Terrestrial Transmission (DTT) service by the private operators.
 - vii. The UHF Band V (582 MHz - 806 MHz) is a shared band among Fixed, Mobile, Broadcasting and radio Navigation etc. The wireless broadband (especially for rural areas) is also a potential emerging service in this band.

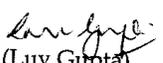
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The committee is of the view that while allocating the spectrum, the preference should be given to the broadcasting sector for DTT and mobile TV services by WPC wing.

- viii. Apart from Doordarshan, initially 2 private operators may be assigned 1 slot of 8 Mhz each for mobile TV operation. With the present technology, one channel of 8 Mhz is capable of delivering around 15 video channels on mobile device.
- ix. For better utilization of spectrum, the transmitters of private operators should be co-located with the transmitter of Doordarshan wherever feasible.


(R. N. Choubey)
Pr. Advisor (B&CS)


(N. Parameswaran)
Pr. Advisor (RE)


(Luv Gupta)
Pr. Advisor (FN)


(Sudhir Gupta)
Advisor (MN)

**EXTRACTS FROM THE TENDER DOCUMENT FOR FM RADIO
BROADCASTING PHASE II THROUGH PRIVATE AGENCIES**

1.3. BIDDING PROCESS

1.3.1 Stage I

Any company incorporated under the Companies Act, 1956 satisfying the eligibility criteria as specified in section 2 hereinafter, may choose to apply under the Bidding Process. All interested parties shall refer to this Tender Document and submit the details of their eligibility as per the formats specified in Appendix A & B hereto, all other necessary documents in accordance with Bid Pack for Stage I and a demand draft for an amount of Rs. Ten thousands only drawn in favour of the Pay & Accounts Officer, Ministry of I&B, Government of India towards processing fee. All applicants found meeting the eligibility criteria as specified in section 2 shall be invited to participate in Stage II of the Bidding Process. All such eligible applicants would be referred to as Qualified Interested Parties (“QIPs”).

1.3.2 Stage II

A QIP desirous of participating in the Bidding Process shall submit its financial bid for the grant of Permission for operation of a Channel as per the Bid Pack for Stage II, comprising:

- (i) the Financial Bid, (i.e. the one time entry fee to be paid by the QIP) in the format specified in Appendix C hereto;
- (ii) deposit of an amount equivalent to 50% of its Financial Bid (“**Financial Bid Deposit Amount**”) through an A/c Payee Demand Draft drawn on any scheduled bank and in favour of Pay & Accounts Officer, Ministry of I&B, New Delhi payable at Delhi; and
- (iii) an irrevocable, unconditional and confirmed Performance Bank Guarantee in favour of the Ministry of I&B, Government of India, equivalent to 50% of the Financial Bid (“**PBG I**”) in the format, to be prescribed separately. PBG I shall be for not less than one year and shall be kept valid for a period of two years from the date of opening of Financial Bids.

2.8. EVALUATION PROCESS

2.8.1 Evaluation of Stage I (Eligibility criteria)

The applications submitted by the applicants through bid pack for Stage I will be evaluated on the basis of the eligibility conditions specified above. Incomplete applications or applications without all relevant prescribed documents shall be summarily rejected and the bid pack for stage I returned through registered post, after forfeiting the processing fee. In case there is still time for submission of applications, fresh application may be filed in accordance with the terms and conditions of the Tender Document . The Ministry of I&B will undertake the process of evaluation on the basis of documents submitted by the applicant companies, in consultation with other Ministries, wherever required. The Ministry of I&B will inform each applicant of the result of such evaluation, and the reasons thereof, in writing through registered post. In the event of being pre - qualified, the Government of India shall also intimate details of other relevant documents such as the drafts of the proposed Letters of Intent/Grant of Permission Agreements/Lease Agreements with Prasar Bharti/Service Agreements with BECIL etc. that each QIP may need to take into account to finalize its Financial Bid for each city.

2.8.2 Evaluation of Stage II (Financial Bids)

On the basis of the Financial Bids received by the Government of India for each City, the Government of India shall determine the Reserve One Time Entry Fees for such City (“**Reserve OTEF** ”), which shall be an amount equivalent to 25% of the highest Financial Bid submitted for the particular City. Only such Financial Bids as are for an amount equal to or above the Reserve OTEF shall qualify and be regarded as valid Financial Bids for the purpose of this Bidding Process. The amount indicated in the Financial Bid submitted by the QIPs will be the sole criteria for selection of the Successful Bidders.

Note: However in the event of an unreasonably low highest bid for a city, the Government of India reserves the right to reject all the bids. In case, the highest bid for a city is lower than the average of the Reserve OTEF in the same category of cities in (i) a region in the case of B, C & D categories and (ii) the entire country in the case of A+ and A categories, it will be termed as unreasonably low bid and all bids for that city shall be rejected.

2.9 SELECTION PROCESS

2.9.1 Upon submission and evaluation by the Government of India of the Financial Bids received in satisfaction of the other eligibility conditions as specified, the QIPs with the highest valid Financial Bids equal to the number of available channels for the respective City shall be selected as the Successful Bidders.

2.9.2 In the event of the Government of India receiving such number of valid Financial Bids being more than the number of frequencies available in the City, the QIPs who submit unsuccessful but valid Financial Bids shall have the option whereby with their consent the Government of India may retain the PBG-I, maintained in descending order of the value of their Financial Bids in a waiting list (“**Waiting List**”) for a period of two years from the date of opening of bids. Each bidder should indicate in the financial bid whether or not it consents to remain in the waiting list. However, an unsuccessful QIP may withdraw its consent at any time after the declaration of the successful bidders. The respective demand drafts for the Financial Bid Deposit Amounts of all unsuccessful QIPs if not otherwise forfeited by the Government of India, and the PBGs I of those who do not wish to be in the waiting list, shall be returned to them upon the announcement of the Successful Bidders in respect of various cities.

2.10 PAYMENT OF BID AMOUNT AND ISSUE OF LETTER OF INTENT

2.10.1 The Successful Bidders, shall pay to the Government of India, the balance 50% of their respective Financial Bids within a period of seven days from date of announcement of Successful Bidders by the Government of India (“**Balance Bid** ”); failing which the Financial Bid Deposit Amount shall be forfeited and such defaulting Successful Bidder shall automatically stand disqualified from participating in any fresh bidding process for FM radio in India up to a period of five (5) years.

2.10.2 Upon deposit by the Successful Bidders of the balance 50% of their respective Financial Bids within a period of seven days from date of announcement of Successful Bidders by the Government of India and on fulfillment of other eligibility conditions within the prescribed period, the Successful Bidders will be issued a Letter of Intent (“**LOI**”) in the format, to be prescribed separately, along with return of the PBG-I.

2.10.3 The purpose and objective of issuing the Letter of Intent would be to enable the Successful Bidder to obtain frequency allocation, SACFA clearance, achieve financial closure, appoint all key executives, enter into agreements with Prasar Bharati (DD/AIR) /BECIL, deposit the requisite amounts towards land/tower lease rent, common transmission infrastructure etc., furnish an irrevocable, unconditional and confirmed

performance bank guarantee in favour of the Government of India for an amount equivalent to 10% of the Reserve OTEF (“**PBG II**” in the format to be prescribed separately) and comply with the requisite conditions of eligibility for signing the formal document for the grant of Permission. PBGII shall be initially valid for a period of two years and shall be renewed at least one month prior to the expiry of each two years’ term.

2.10.4 Each successful bidder shall enter into an agreement with Prasar Bharati (DD/AIR) for land/tower lease as referred above in the format to be prescribed separately within 60 days of the issue of LOI and agreement with BECIL within 30 days thereafter for Common Transmission Infrastructure on the format to be prescribed separately.

2.10.5 Upon issue of the Letter of Intent, the Successful Bidder shall be liable to comply with all necessary eligibility conditions as specified by the Government of India in writing and shall be liable to execute the Grant of Permission Agreement within a period of nine months from the date of issue of the Letter of Intent and comply with such other written instructions as received from the Government of India. The grant of permission agreement shall be in the format, which will be prescribed separately.

2.10.6 In the event of failure of a Successful Bidder/ Letter of Intent holder to comply with the conditions for the Grant of Permission Agreement or failure to execute the Grant of Permission Agreement within the time period prescribed by the Government of India, the entire amount of the Financial Bid deposited by such Successful Bidder shall, without any further notice, be forfeited forthwith by the Government of India, and the Letter of Intent and allocation of frequency, if any, shall stand cancelled immediately.

2.10.7 In case of failure of the highest successful bidder so notified, to comply with any of the formalities for completion of the transaction, Ministry of I&B, Government of India shall have the right to reject the Financial Bid and select the next highest QIP from the waiting list, without any impact on **Reserve OTEF for that city.**

2.10.8 Notwithstanding anything to the contrary contained in this Tender Document, Government of India has the right, exercisable at its sole discretion, to reject any Bid or withdraw any LOI, for reasons of national security or public interest. Government of India shall not be obligated to any QIP to disclose the basis for its decision in relation to the selection of Successful Bidders.

2.11 GRANT OF PERMISSION

2.11.1 Within 3 days of execution of the Grant of Permission Agreement by the LOI holder, the Government of India shall grant Permission to enable it (“**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 execution of 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.

2.11.2 In the event of the failure/inability of a Permission Holder to operationalise the channel within the prescribed time period, the Government of India shall be entitled to recover the Annual Fee for the first year from such Permission Holder, and in the event of his default, by invoking the PBG II. Further, the Permission Holder shall also be liable to furnish a fresh PBG for the succeeding year’s Annual Fee. **In the event of default in operationalisation of a channel being attributable to delay beyond reasonable period by BECIL/Prasar Bharati/Wireless Planning & Coordination Wing, Ministry of Communications & IT, the prescribed time limit for operationalisation may, at the request of the Permission Holder, be extended by such period of delay by the Secretary, Ministry of Information & Broadcasting, whose decision shall be final and binding on both the parties.**

2.11.3 In case of further failure by the Permission Holder to operationalise the Channel within the extended time period not exceeding eighteen months, excluding any extension under clause

2.11.2, from the date of signing the Grant of Permission Agreement, or failure to furnish a fresh performance bank guarantee for the succeeding year's Annual Fee as aforesaid within a period of three months from the date of invocation of PBG II by the Government of India, whichever is earlier, the Government of India shall have the right to revoke the Grant of Permission Agreement. Further, the Permission Holder shall be debarred from bidding for the same city for a period of five years from the date of such revocation of Permission.

2.11.4 In the event of failure of the Permission Holder to pay any installment of Annual Fee by the due date, and encashment of the PBG-II either in full or part thereof, the permission holder shall furnish a fresh PBG-II for the amount recovered through PBG-II, within 15 days of such encashment.

2.11.5 The Successful Bidder shall not be entitled to any interest on the amounts deposited by it as per the requirements of the Bidding Process herein.

Extracts from relevant recommendations of the Authority wherein a review of FDI policy has been recommended

A. In its recommendations on “2nd Phase of Private FM Radio Broadcasting” dated 11th August, 2004, the Authority had pointed out “... The rules regarding FDI vary from segment to segment in the media sector. ... This leads to anomalies in media policy – whereas foreign news channels can be seen even for news, FDI is not permitted even for pure entertainment FM radio.” The Authority had recommended “...It is therefore necessary for the Government to review the policy in a holistic manner and bring about a greater degree of consistency in the rules for various segments.”

B. Thereafter, in its recommendations on “Issues relating to Broadcasting and Distribution of TV Channels” dated 1st October, 2004 the Authority recommended “...The Foreign Direct Investment limit in Cable TV as well as related sectors like DTH should be reviewed and a consistent policy adopted.”

C. The issue was again covered in the recommendations on “Issues Relating to Private Terrestrial TV Broadcast Service” dated 29th August, 2005 by the Authority. Regarding FDI for private terrestrial television, the Authority recommended “...In the case of terrestrial TV, a decision would have to be taken on this issue as there has been no such service in the past. This could be kept at 20% to be on par with FM radio since both involve terrestrial broadcasting and have wide reach. However it may be better to take a consolidated view of all media related sectors – in addition note would have to be taken of the likely convergence in this sector with the telecom services also.

Thus as has been recommended earlier by the Authority in the context of Private FM Radio, the rules regarding foreign investment need to be reviewed to bring about a greater consistency in the rules of various segments of the media sector. Given the interest of the telecom sector in this area, this review would also need to take note of the likely convergence in future between telecommunications and broadcasting.”

D. The recommendations on Digitalization of Cable Television dated 14th September 2005 reiterated the earlier recommendations on the issue by stating “...The Authority has already stated in its recommendation on “Issues relating to Broadcasting and Distribution of TV channels” that there should be consistency in policy and level playing field between competing technologies and therefore had recommended that there is need for a complete review of the FDI policy so that it is consistent across all sectors. This would ensure that policies are not a stumbling block where there is a natural convergence of technologies. This recommendation is reiterated in the context of digitalisation also.”

E. The recommendations on “Issues Relating to Convergence and Competition in Broadcasting and Telecommunications” dated 20th March 2006 referred to earlier recommendations on the issue and stated “...The Authority has already taken a view on this issue in several of its recommendations and would again urge the Government to undertake a complete review of the FDI policy for the various sub sectors in telecommunications and broadcasting so that there is consistency in policy and a level playing field between competing technologies.”