

Consultation Paper No.: 5/2013



TELECOM REGULATORY AUTHORITY OF INDIA



Consultation Paper

on

Monopoly/Market dominance in Cable TV services

3rd June, 2013

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Written comments on the consultation paper are invited from the stakeholders by 24th June 2013. Counter comments, if any, may be submitted by 1st July 2013. The comments and counter comments may be sent, preferably in electronic form to Mr. Rajkumar Upadhyay, Advisor (B & CS), Telecom Regulatory Authority of India, on the e-mail: rkupadhyay@traigov.in or traicable@yahoo.co.in. For any clarification/information, Shri Rajkumar Upadhyay, Advisor (B & CS) may be contacted at Tel. No.: +91-11-23220020, Fax: +91-11-23221198. Comments and counter comments will be posted on TRAI's website www.traigov.in.

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Introduction

1. Television has become the most prominent medium in India for the delivery of information, news, entertainment etc. With revenue of Rs. 34000¹ Crore it represents around 42 percent of the total media industry. The TV industry continues to have scope for further growth as television penetration in India is still at approximately 60 percent of total households.
2. Presently, TV channels are distributed through cable TV, Direct to Home (DTH), terrestrial and Internet Protocol Television (IPTV) networks. Majority of the distribution is through cable TV and DTH platforms. The key entities in cable TV services are Broadcasters, Multi System Operators (MSOs) and Local Cable Operators (LCOs).
3. There are currently no restrictions on the area of operation and accumulation of interest in terms of market share in a city, district, State or country by individual MSOs and LCOs in the Cable TV Sector. It has been observed in some States that a single entity has, over a period of time, acquired several MSOs and LCOs, virtually monopolising the cable TV distribution. In such States, operation of a major portion of the cable TV network is controlled by a single entity. Such monopolies/market dominance are clearly not in the best interest of consumers and may have serious implications in terms of competition, pricing, quality of service and healthy growth of the cable TV sector.
4. Technological developments, particularly use of packet switched digital communications, have made it possible to provide Internet access as well as telephone services over cable TV networks. Therefore, Cable TV networks can become a cheaper and more convenient way of providing broadband and voice services, as cable TV networks already have outreach to a large number of households. Then, there is the possibility that the effects of

¹CII PwC-India Entertainment and Media Outlook 2012

monopoly/market dominance in cable TV distribution could also extend to other services, such as voice and broadband, which are carried on cable.

5. Telecom Regulatory Authority of India (TRAI) received a reference dated 12.12.2012 from Ministry of Information and Broadcasting (MIB) (**Annexure-I**) seeking TRAI's recommendations under Section 11(1)(a) of TRAI Act. The reference states that in view of the fact that the cable TV distribution is virtually monopolized by a single entity in some States, it has become necessary to examine whether there is a need to bring in certain reasonable restrictions on MSOs and LCOs including restricting their area of operation or restricting subscriber base to prevent monopoly. TRAI has, therefore, been requested to provide its recommendations under Section 11(1)(a) of TRAI Act on the following:

“In order to ensure fair competition, improved quality of service, and equity, should any restriction be imposed on MSOs/LCOS to prevent monopolies/accumulation of interest? If yes, what restrictions should be imposed and what should be the form, nature and scope of such restrictions? Accordingly, amendments required in the Cable Television Networks (Regulation) 1995 Act and Rules framed thereunder may also be suggested.”

6. Accordingly, this Consultation paper has been prepared to seek the comments/views of the stakeholders on monopoly/market dominance in the cable TV segment. Chapter I presents a snapshot and current position of Indian cable TV industry. Chapter II discusses monopoly/market dominance issues in the cable TV industry. Summary of issues for consultation has been provided in Chapter III. International experience on cable TV distribution and guidelines on mergers and acquisitions has been placed at Appendix I. A brief description on measures of market power is placed at Appendix II.

Chapter I

Cable TV Sector: Current Position

- 1.1 The television service sector in the country mainly comprises cable TV services, DTH services, IPTV services and terrestrial TV services provided by Doordarshan, the public broadcaster. As per an industry report², total TV households in India were estimated to be 15.5 Crore at the end of year 2012. The Cable TV segment is the largest platform. It has grown significantly with the number of cable TV households increasing from just 4.1 lakh in 1992 to more than 9.4 Crore by the end of March 2012. The DTH platform is also growing with number of DTH households reaching a figure of 5.45 Crore by the end of year 2012.
- 1.2 Increase in the subscriber base has also led to commensurate growth on the supply side. India today has a large broadcasting and distribution sector, comprising 828 television channels, around 6000 multi system operators, approximately 60,000 LCOs, 7 DTH/ satellite TV operators and few IPTV service providers. Value chain of TV channel distribution through Cable, DTH, IPTV and HITS platforms is depicted in Figure 1.1:

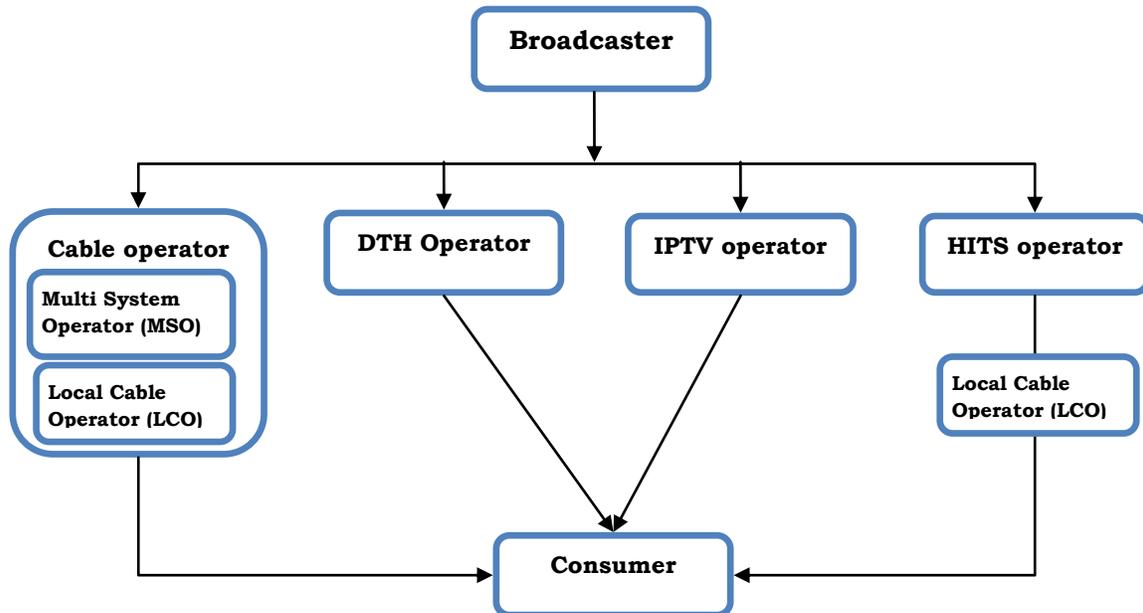


Figure 1.1: Broadcasting and Distribution Value Chain

² Media Partners Asia report: Asia Pacific Pay TV and Broadband Market 2012

A. Provisions of the Cable Television Networks (Regulation) Act, 1995 and other Acts/regulations

1.3 The cable TV operations are governed by the Cable Television Networks (Regulation) Act, 1995 (hereinafter referred to as the Cable TV Act) and the Cable Television Networks Rules, 1994 (hereinafter referred to as the Cable TV Rules). Under sub-section (1) of section 4 of the Cable TV Act, for operating a cable television network, a person is required to register as a cable operator with the registering authority. The Head Post Master of the Head Post Office of the local area has been notified as the registering authority for local cable operators. MSOs also have to register themselves as a cable operator. The eligibility conditions stipulated for LCOs are also applicable to MSOs.

1.4 With the introduction of Digital Addressable System (DAS), Government has amended the Cable Television Networks Rules, 1994 by issuing the Cable Television Networks (Amendment) Rules, 2012 on 28th April 2012, according to which an MSO operating in DAS notified areas is also required to take necessary permission from MIB in addition to registration as a cable operator.

B. Recommendations of TRAI related to Cable TV services

1.5 TRAI in its recommendations on “Restructuring of Cable TV Services” dated 25th July 2008, inter-alia recommended that the present system of registration for Cable TV operators should be replaced by a licensing framework and a separate licensing provision for Multi System Operators (MSOs) should be introduced thus recognizing them as an entity separate from Cable TV operators. This recommendation has been accepted and implemented by the Government in DAS environment and MSOs have to register with the MIB for operating in DAS notified areas.

- 1.6 TRAI in its recommendations on “Issues related to entry of certain entities into Broadcasting and Distribution activities” dated 28th December 2012, inter-alia, recommended the following:

“The Central Government Ministries and Departments, Central Government owned companies, Central Government undertakings, Joint ventures of the Central Government and the private sector and Central Government funded entities should not be allowed to enter into the business of broadcasting and/or distribution of TV channels.

State Government Departments, State Government owned companies, State Government undertakings, Joint ventures of the State Government and the private sector, and State Government funded entities should not be allowed to enter into the business of broadcasting and/or distribution of TV channels.”

C. Market Structure and dominance issues

- 1.7 It is estimated that there are around 6000 MSOs in the country. The Cable TV Act and the Cable TV Rules do not restrict the number of MSOs/LCOs operating in any particular area. There are MSOs which operate at the national level, while others operate either on regional level or in a smaller area. Some of the prominent national MSOs are DEN Networks Ltd., Digicable, Hathway Datacom, IndusInd Media and Communication Ltd. and Siti cable. Some of the prominent MSOs that are operating in regional markets are Fastway, GTPL, KAL Cables (Sumangali), Ortel, Asianet, Tamil Nadu Arasu Cable TV (TACTV) Corporation Ltd., Manthan, JAK communications and Darsh Digital. However, the majority of the remaining are small, local (city based) MSOs with a subscriber base of a few thousand.

1.8 Presently, cable TV in large parts of the country is analogue and non-addressable viz. the cable TV signal is not digital. The Government has accepted the recommendations of TRAI on implementation of an addressable digital cable TV system in India. The Cable TV Act has since been amended and a notification has been issued in November 2011, which makes it obligatory for each cable operator to transmit or re-transmit programs of any channel in encrypted form through a digital addressable system. The implementation process has been divided into four phases. The cut off dates for the first and second phase covering four metros and 38 cities were 31st October, 2012 and 31st March, 2013 respectively. The third phase, covering all urban areas other than covered under Phase I and Phase II, is to be implemented by 30th September, 2014, while the last phase covering rest of the country is scheduled to be implemented by 31st December 2014.

1.9 In the case of analogue platforms which are non-addressable, LCOs had the option of downlinking Free to Air (FTA) channels directly from broadcasters without the help from MSOs. Pay channels were obtained by LCOs through MSOs as these are transmitted by broadcasters in encrypted form. MSOs obtain signals from broadcasters, decrypt the encrypted signals and supply these to LCOs for distributing to consumers. With the implementation of DAS, the business model has undergone a change as now only MSOs can receive signals from the broadcasters as per the Cable TV Networks Rules, 1994 as amended on 28th April 2012. In the case of DAS, both FTA and pay channels received from the broadcasters are transmitted to LCOs in encrypted form by the MSO. The MSO maintains a Subscriber Management System (SMS) where details about each customer and his/her channel preferences are stored. All the channels are now decrypted at the customer end through a set top box (STB) programmed by the MSO as per details in the Subscriber Management System. Therefore, in the DAS environment, MSOs play a key role in distribution of both FTA

and pay channels. Thus, with the changed scenario in DAS, the issue of dominance in the cable TV sector needs to be addressed at the MSO level.

1.10 It has been observed that the level of competition in the MSOs' business is not uniform throughout the country; certain States (e.g. Delhi, Karnataka, Rajasthan, West Bengal and Maharashtra) have a large number of MSOs providing their services. On the other hand certain markets like Tamil Nadu, Punjab, Orissa, Kerala, Uttar Pradesh and Andhra Pradesh are characterized by dominance of a single MSO. However, the same MSO is not dominant in all States. While it could be argued that because of larger size, an MSO is able to reap the benefit of economies of scale and pass on the benefits to the customers, in practice such dominance in certain markets can and has led to non-competitive practices. In case the loss in consumer welfare due to inadequate competition outweighs the gains from economies of scale, measures will obviously be required for promoting competition. It is in this backdrop that the question arises whether there is a need for any restrictions to be imposed on MSOs/LCOs to prevent monopolies/accumulation of interest so as to ensure fair competition. In a well-functioning competitive market, where firms are competing on fair terms and there are no artificially erected barriers of entry, there may not be any need to impose restrictions. However, if there is little or no competition in the market or in case where barriers to entry are erected by incumbents, there is the distinct possibility of the abuse of market dominance by the incumbent service provider(s).

1.11 The exact market shares of the MSOs are not available because in the analogue platform the number of subscribers cannot be accurately ascertained due to non-addressability and the lack of transparency in reporting of subscriber base. Once DAS is implemented, the cable TV services will have to be provided through a set top box and it will be possible to obtain the exact number of customers through the subscriber management system of the MSO. Table 1.1 illustrates the share of set top

boxes seeded by the top 5 MSOs in markets which are covered for DAS implementation in Phase I and Phase II. It can be seen from this table that some MSOs are controlling more than 80% of the DAS market in some cities. Since subscriber figures for the State are not available, the share of STBs seeded in DAS market could be used as a proxy for market share for the entire State.

- 1.12 The size of markets catered to (across States, cities and even localities) by an MSO determines its market power and influence. One of the ways in which MSOs have tried to expand and increase their size (and influence) is by buying out LCOs and smaller MSOs. The joint venture/ subsidiary model has emerged as a result of mergers and acquisitions (M&A) of LCOs/MSOs by large MSOs. The MSOs have varying levels of ownership interest in these LCOs. Typically, MSOs provide more favorable terms and financial assistance to joint venture companies and subsidiaries. The point is that, by way of acquisition, joint venture or subsidiary, some MSOs have been increasing their presence and size leading to a situation of market dominance.
- 1.13 There are instances where the dominant MSOs are misusing their market power to create barriers of entry for new players, providing unfair terms to other stakeholders in the value chain and distorting the competition. MSOs with significant reach (i.e. a large network and customer base) are leveraging their scale of operations to bargain with broadcasters for content at a lower price and also demand higher carriage and placement fees. Such MSOs are in a position to exercise market power in negotiations with the LCOs on the one hand, and with the broadcasters on the other.
- 1.14 Large MSOs, by virtue of securing content at a lower price and charging higher carriage and placement fee from broadcasters, are in a position to offer better revenue share to LCOs. They, therefore, can incentivize LCOs to move away from smaller MSOs and align with them. Such MSOs use their

market power to provide unfavourable terms or make it difficult for the broadcasters to gain access to the distribution network for reaching the customers. There are instances where a dominant MSO has made it difficult for some broadcasters to have access to its distribution network for carrying content to consumers. Blocking content selectively can also become an obstacle to promoting plurality of viewpoints.

Table 1.1: State-wise share of top 5 MSOs* (based on the STB seeded in Phase I & II cities covered under DAS implementation)

State/UT	Cities included in Phase I & II	MSO I	MSO II	MSO III	MSO IV	MSO V
Andhra Pradesh	Hyderabad, Visakhapatnam	80.2%	11.9%	7.9%	--	--
Bihar	Patna, Ranchi	36.8%	27.6%	26.1%	7.4%	2.1%
Chandigarh	Chandigarh	80.7%	19.3%	--	--	--
Delhi	Delhi	49.0%	19.2%	9.9%	9.4%	9.3%
Gujarat	Ahmedabad, Rajkot, Surat, Vadodra	61.9%	20.1%	17.5%	--	--
Haryana	Faridabad	51.7%	26.0%	22.3%	--	--
Karnataka	Bangaluru, Mysore	45.0%	22.7%	10.7%	8.8%	7.4%
Maharashtra	Aurangabad, KalyanDumbivli, Nagpur, Nashik, Navi Mumbai, Mumbai, PimpriChinchwad, Pune, Sholapur, Thane	30.3%	22.2%	13.7%	11.4%	7.0%
Madhya Pradesh	Bhopal, Indore, Jabalpur	36.3%	30.7%	29.1%	--	--
Punjab	Amritsar, Ludhiana	85.1%	14.9%	--	--	--
Rajasthan	Jaipur, Jodhpur	38.9%	29.5%	19.6%	12.0%	--
Tamil Nadu	Coimbtore, Chennai	87.7%	12.3%	--	--	--
Uttar Pradesh	Agra, Allahabad, Ghaziabad, Kanpur, Lucknow, Meerut, Varanasi	71.8%	9.8%	9.6%	8.8%	--
West Bengal	Howrah, Kolkata	40.5%	25.2%	15.5%	9.0%	6.5%

* Top 5 MSOs are not same in all States

1.15 One such case of denial of market access was also brought to the notice of Competition Commission of India (CCI) in 2011, when a broadcaster M/s

Kansans News Private Limited alleged that a group of MSOs, operating in the State of Punjab, in which M/s Fastway Transmission Pvt. Ltd. holds majority shares, had acquired substantial market share in the cable TV distribution and denied market access to its channel. The CCI investigated the case and imposed penalties of Rs. 8.04 Crore on the MSOs for violating the provisions of sections 4(2)(c) of the Competition Act 2002, which states that there shall be an abuse of dominant position if an enterprise or a group indulges in a practice or practices resulting in denial of market access in any manner.

- 1.16 CCI, during investigation, also gathered information regarding the market share of the group and noted that the number of subscribers of the group is more than 85% of the total subscribers in the relevant market of Punjab and Chandigarh. It was also noted that no competitor of this group in the State of Punjab has more than 10,000 subscribers whereas the subscriber base of the group is about 40 lakh. CCI observed that the group held a dominant position in the relevant market of Punjab and Chandigarh.
- 1.17 In another development, the Government of Tamil Nadu has incorporated Tamil Nadu Arasu Cable TV (TACTV) Corporation Ltd. on 02.09.2011 for distribution of cable TV in Tamil Nadu. It has taken over 27 Headends from the private MSOs. TACTV Corporation is providing cable TV services with most pay channels at a cost of Rs.70/- per month to the public through local cable operators. Prior to this, another MSO, M/s KAL (Sumangali) Cable, which is a subsidiary of the SUN group, had dominance in the cable TV services in Tamil Nadu. However, KAL Cable continues to be dominant in Chennai city, where TACTV has not been registered as an MSO under DAS. Interestingly, channels of the SUN group, an integrated player providing both broadcasting and distribution services, were not available on the TACTV network for quite some time. In this context, it merits mention that, in its recommendations on “Issues related to entry of certain entities into Broadcasting and Distribution activities” dated 28th December

2012, TRAI, inter alia, had recommended that the Central Government, State Governments and their entities should not be permitted to enter into the business of broadcasting and distribution of TV channels. (refer para 1.6)

- 1.18 At present Tamil Nadu has approximately 14% of the total cable TV homes in the country³. This translates to approximately 1.3 Crore cable TV homes in Tamil Nadu considering about 9.4 Crore cable TV homes in the country. According to the Information Technology Department of Tamil Nadu, the subscriber base of TACTV Corporation Limited was around 0.5 Crore on 30.04.2012 and is expected to increase to 1 Crore⁴.
- 1.19 Monopoly/market dominance generally leads to deterioration in quality of service in the long run. Also, with monopoly/ market dominance, there would be a lack of incentive for making additional investments towards new technologies/innovations. As a part of regulatory framework for the DAS, TRAI has issued regulations on the Quality of Service and Consumer Complaint Redressal framework. These regulations cover provisions for connection, disconnection, transfer and shifting of cable TV services. It also prescribes the procedure for billing and handling of subscribers' complaints. A situation of fair competition would compel operators to offer better quality of service in order to differentiate themselves.
- 1.20 It may be argued that due to availability of multiple distribution platforms a monopoly of a single platform like cable TV cannot arise. Presently, the multiple TV channel distribution platforms in India are cable TV, DTH, IPTV and HITS. Penetration of IPTV is very low. HITS is just in the process of starting operations. Thus, there are primarily two distribution platforms viz. cable TV and DTH.

³TRAI Consultation Paper on "Tariff issues related to Cable TV Services in Non-CAS Areas" dated 25th March 2010.

⁴Policy Note 2012-2013 released by Department of Information Technology, Govt. of Tamil Nadu

1.21 Though DTH has emerged as an alternate to Cable TV and its subscriber base is growing at a faster rate compared to cable TV, the percentage of cable TV homes is significantly larger vis-à-vis DTH subscribers. Cable TV subscribers constitute approximately 60% of the total TV homes in the country, whereas the share of DTH is about 35% (Figure 1.2). DTH operates on a national basis and transmits all channels throughout the country irrespective of variations in demand of channels in different markets. Cable TV networks on the other hand operate on a regional basis and can choose channels to be supplied according to the demand in the area served. In the pay DTH sector, there are six major players providing services on a national basis. In contrast, Cable TV operators are limited in a particular area and in most cases the customer is served by a single local cable operator. On the technical front also, there are differences between DTH and cable TV in terms of the number of channels the platform can support, acquisition cost for the consumer, type of services supported etc.

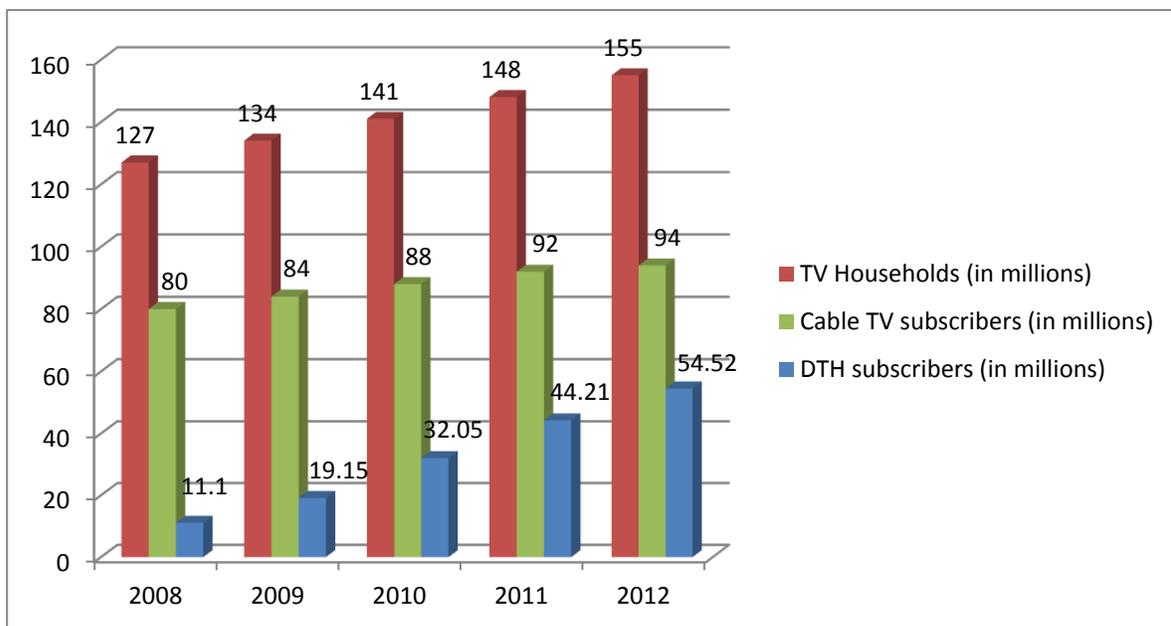


Figure 1.2: Growth of Cable TV & DTH subscribers

1.22 In sum, though DTH and cable TV are competing platforms, they are not perfect substitutes of each other and their operating circumstances and environment vary significantly. Hence, the monopoly/market dominance issue in cable TV continues to be of significance, if only because of the sheer size of the cable TV segment in the overall distribution market.

Issue for consultation

Q 1. Do you agree that there is a need to address the issue of monopoly/market dominance in cable TV distribution? In case the answer is in the negative, please elaborate with justification as to how the ill effects of monopoly/market dominance can be addressed?

Chapter II

Monopoly/Market dominance issues in Cable TV industry

- 2.1 TV channels across the world are distributed through multiple platforms including cable TV. The experiences from US, UK, Canada and South Korea pertaining to regulatory framework, competition, distribution and services offered by cable operators have been studied and are available in the Appendix I. In India, the cable TV sector has developed in a different manner than in other parts of the world. In most countries distribution through terrestrial network is privatized and multiple operators operate through terrestrial network and choice is available to the consumers for receiving TV programs. In India, cable TV has evolved as an important platform because transmission through the terrestrial network is limited only to channels provided by Doordarshan, the public broadcaster. As discussed in the previous chapter, dominance and barriers to entry have choked competition in the cable TV market in some States. A competitive market is clearly desirable to ensure that all stakeholders in the value chain can compete fairly on a level-playing field. Measures may be required to address issues of dominance and monopolistic practices in the cable TV market.
- 2.2 One of the examples in the broadcasting sector, where ex-ante restrictions have been prescribed to prevent monopoly, is FM radio. The restrictions applicable in the case of FM Radio are:
- “No company or Group of companies can operate more than 40% of the total FM Radio channels in each city and the total number of channels that a company or Group of companies can operate cannot exceed 15% of the total number of channels allocated in the country.”
- 2.3 No such restrictions exist for MSOs and LCOs in the extant Cable TV Rules. It is pertinent that in the case of FM radio, licences for operating an

FM radio channel are auctioned city wise and successful bidders are granted the license along with the frequency associated with the channel. In each city the number of channels is limited due to frequency band limitations. However, in the case of MSOs, no resources are required to be allotted by the Government for their operations. Even though there are no restrictions on the number of MSOs which can operate in a market, monopolistic tendencies are observed in some States and need to be addressed.

Metrics for measuring Market Power

2.4 To ascertain whether a firm operating in a market is in a dominant position, metrics have to be used to measure market power. Typically, the metrics used to detect the presence of market power include market concentration, Lerner indices, rates of return, and q ratios, frequently referred to as Tobin's q ratios. A brief on these measures of market power may be seen at Appendix II. Each of these measures, in its own way, correlates market power with market characteristics; the characteristic varies from measure to measure. Because of difficulties in computing the Lerner Index, Rates of Return and q ratios, the level of concentration in the market is often used as an indicator of market power. The Herfindahl-Hirschman Index (HHI) is commonly used for measuring market concentration or the level of competition in a particular market.

2.5 HHI⁵ is calculated based on the market shares of different firms operating in the relevant market. With ongoing digitization of cable TV sector, which is targeted to be completed by December 2014, it will be possible to ascertain the exact number of subscriptions through the subscriber management system. Once, the number of subscriptions is known, it can

⁵ HHI = $\sum_{i=1}^n s_i^2$, where s_i is the percentage market share of i^{th} firm operating in a relevant market.

be used to calculate market share for each operator and accordingly, HHI can be ascertained to determine the concentration and presence of market power.

Relevant Market for measuring monopoly/market dominance

- 2.6 It is essential that the market power is measured in the relevant market. The relevant market means a market comprising the area in which the conditions of competition for supply of goods or provision of services or demand of goods or services are distinctly homogeneous and can be distinguished from the conditions prevailing in the neighbouring areas.
- 2.7 The relevant market for cable TV could be the entire market i.e. the whole country or a State or district. It may be argued that defining the whole country may not be appropriate as India is a large country with diverse cultures and socio-economic variations. Many States have a local language (e.g. Tamil, Malayalam, Kannada, Telugu, Marathi, Gujarati, Bengali etc.) and there is strong presence of a large number of regional channels based on these languages. Obviously the predominant customer base for the regional channels will be in the concerned State and accordingly the demand and the supply of various channels will vary by State.
- 2.8 The purpose of defining relevant market is to measure competition in that market. Some of the MSOs operate on the national level having significant presence in some States. However, there are also MSOs which mainly operate in regional markets having large networks in a particular State. Table 2.1 provides the share of MSOs in the national market assuming that the percentage of set top boxes seeded in DAS markets can be taken as a proxy for market share. In contrast to Table 1.1 where the share of individual MSO in certain markets exceeds 80%, the largest share of an MSO in the national market is only 23.5%. The HHI of the national market is 1436, indicating enough competition in the national market compared to State markets where the contribution to HHI by a single MSO itself crosses

6000 in certain markets (refer Table 2.3). In these circumstances, the incidence of abuse of dominance has been observed in States rather than on a national basis.

Table 2.1: Share of MSOs based on the STB seeded in Phase I & II cities

MSOs	Share of STBs seeded in all Phase I & II cities in the country	Contribution to HHI
Hathway	23.5%	552
Den	18.5%	342
Siti cable	11.0%	121
IMCL	10.6%	112
Digicable	10.1%	102
Fastway	6.3%	40
GTPL	6.0%	36
KAL cables	3.0%	9
others	11.0%	121
Total	100.0%	1436

2.9 What is more, even if restrictions are framed taking the nation as a relevant market, there could still be market dominance and monopolistic practices in the States. For instance, if a restriction of say 25 % of market share is applied on a national basis, the MSO could still monopolise/dominate multiple State markets as the share of cable TV homes in States varies significantly and can be as small as 1% of the national market (refer Table 2.2). In the light of the foregoing discussion, defining pan-India as a relevant market may not serve the purpose.

Table 2.2: Share of different States in all India Cable TV homes⁶

State	Cable TV homes (% of all India Cable TV homes)
Andhra Pradesh	15
Assam	1
Bihar	3
Delhi	5
Gujarat	6
Haryana	3
Karnataka	9
Kerala	4
Maharashtra & Goa	13
MP & Chhattisgarh	6
Orissa	1
Punjab & HP	3
Rajasthan	3
Tamil Nadu	14
UP & Uttrakhand	6
West Bengal	8

2.10 Alternatively, the space for measurement of the relevant market could be either the State or the district. Digitization in cable TV is progressing and targeted to be completed by December 2014. In the process of digitisation substantial costs will have to be incurred for setting up/upgradation of head-ends by the MSOs. Because of these costs, it could be argued that setting up of independent operations at each district level may not be efficient. Further, with the spread of optical fibre network across the country and its further strengthening through the optical fibre network being rolled out through various schemes/projects, it will be easier to distribute content across the State through a centralized head end(s) in the State leading to reduced CAPEX and OPEX. Centralised operations at State level will also lead to benefits of economies of scale. Therefore, MSOs are more likely to compete at the State level than the district level. Further, in

⁶ Based on TRAI Consultation Paper on “Tariff issues related to Cable TV Services in Non-CAS Areas” dated 25th March 2010.

terms of language and supply of channels there may not be significant differences between individual districts and the State as a whole. The areas served by the channels which are based on the local language generally span the State. Defining the district as the relevant market will also pose difficulties in measurement as competition will have to be monitored in all districts which are large in number. Therefore, a State may be preferred over a district for defining the relevant market for measuring market power. Accordingly, for dealing with monopoly and market dominance in cable TV services, the State could be considered as a unit of operation.

Issue for consultation

Q 2. Do you agree that the State should be the relevant market for measuring market power in the cable TV sector? If the answer is in the negative, please suggest what should be the relevant market for measuring market power? Please elaborate your response with justifications.

Framing of Restrictions

2.11 Having dealt with the metric to be used for determining market power and the relevant market, we need to formulate restrictions that could be applied to prevent monopolization of a market and abuse of market power. As explained earlier, HHI is a well-established metric to measure the concentration or level of competition in the market. One way to reduce concentration and prevent a single MSO dominating in the State could be to prescribe restrictions on the geographical area served by an individual MSO. By restricting the area of operation for an MSO in the relevant market, a greater number of MSOs will be required to serve the entire market leading to a reduction in the concentration level in the market. Another way to reduce concentration could be to prescribe reasonable limits on market share in the relevant market that can be acquired by an individual MSO on its own or through the merger and acquisition route.

Restrictions on accumulation of market share will also ensure that multiple MSOs provide their services in the relevant market.

Area based restriction

- 2.12 In case the restriction is applied on geographical area of operation, the boundaries of the area served by an MSO should be clear and unambiguous. One of the options could be to divide the State market based on districts, as districts have well-defined boundaries. By restricting the area of operation for an MSO in a relevant market more players will be serving a relevant market. Even though the area in a relevant market is restricted for operation by an MSO, there could still be situations where an MSO becomes a monopoly in its area of operation. Therefore, restricting the area of operation may not serve the purpose particularly if the area served is large.
- 2.13 As per the Cable TV Act/Rules, there are no restrictions on the area of operation in which an MSO can operate. According to information available on the website of MIB, a total 140 registrations have been issued to MSOs to operate in DAS notified areas⁷. It can be observed from the list of registered MSOs that there is no uniformity in the areas of operation opted by MSOs. The MSOs have opted for a wide range of areas which include small areas within a city, one city, multiple cities (within a State or across several States), one State, multiple States or the entire nation.
- 2.14 Several MSOs have obtained registrations on a pan-India basis and, prima facie, it appears that there will be adequate competition among MSOs. However, since the entry fee is Rs. 1 lakh irrespective of the area of operation, MSOs may tend to take registration for the entire country even though they may not intend to roll out their network across the country. Having permitted an MSO to operate on a pan-India basis without any area

⁷ <http://mib.nic.in/ShowContent.aspx?uid1=2&uid2=124&uid3=0&uid4=0&uid5=0&uid6=0&uid7=0> accessed on 16-05-2013

restriction, it could be argued that applying restrictions on the area of operation would be a retrograde measure. Another complicating issue in applying area-based restrictions would be the criterion to be used to allocate an area for operation in a State among MSOs, as some areas will be financially more lucrative than others.

Market share based restrictions

- 2.15 Another way to ensure that multiple MSOs serve in the market is to impose restrictions on acquisition of market share by a single MSO. A reasonable limit on the market share in the relevant market, which an MSO is allowed to acquire, could be defined. As an example, a cap of 40% market share will ensure that at least three MSOs operate in the relevant market and no single MSO becomes dominant or assumes monopoly. However, applying restrictions based on market share will have to deal with certain issues which are discussed below.
- 2.16 First, some MSOs may already have market shares exceeding the limit to be prescribed in the respective relevant markets. It can be argued that it will pose a challenge for an MSO, which already possesses market share beyond a stipulated threshold, to ask its consumers to leave its network so as to meet the restrictions on market share. There could also be the view that imposing a restriction on market share may hurt efficient firms which may be in a position to gain market share based on services offered at lower prices, better service, innovative packaging etc. Further, wouldn't consumers' choice be constrained if availing of services of such a firm is restricted on account of market share limitations? Therefore, a possible position to argue is that if an MSO is able to build its market share based on its efficiency, applying restrictions based on market share to such an MSO may not be appropriate. However, it will have to be ensured that such a dominant MSO does not abuse its market power. In such cases, either the licensor or the regulator will need to take into account any distortions

in the competition or any barriers of entry artificially erected or otherwise created by such MSOs who acquire a dominant position in the market.

2.17 Market share can also be built through mergers and acquisitions (M&A). While it may be argued that M&A can promote efficiency, it may also eliminate or reduce competition in the market. Therefore, restrictions will surely have to be considered for those M&A which raise competitive concerns.

2.18 Some MSOs have been acquiring other MSOs and LCOs to scale up their operations and increase market share. A few of them have built monopolistic positions through this route. The world over restrictions have been imposed on mergers and acquisitions that compromise competition in the market. A brief on M&A guidelines followed in US, UK, Canada and South Korea is discussed in Appendix I.

2.19 In its recommendation on “Spectrum Management and Licensing Framework”, dated 3rd November, 2011, TRAI, inter alia, recommended the following guidelines in respect of mergers of CMTS/UAS licences:

- i. Prior approval of the Licensor shall be mandatory for merger of the licence. Merger of licences shall be restricted to the same service area.
- ii. Where the market share of the Resultant entity in the relevant market is not above 35% of the total subscriber base or the AGR in a licensed service area, the Government may grant permission at its level. However, where, in either of these criteria, it exceeds 35% but is below 60%, Government may decide the case after receipt of recommendations from the TRAI. Cases where the market share is above 60% shall not be considered.

2.20 In the cable TV sector, it would be desirable to stipulate restrictions on M&A to prevent firms from acquiring monopoly positions or market

dominance through reduced competition. The M&A ought to be permitted only if it does not lead to inadequate competition.

2.21 The U.S. Department of Justice and the Federal Trade Commission⁸ considers the following benchmarks for classifying competitive positions in markets based on concentration:

- Un-concentrated Markets: HHI below 1500
- Moderately Concentrated Markets: HHI between 1500 and 2500
- Highly Concentrated Markets: HHI above 2500

2.22 The Federal Trade Commission (USA) has laid down the following general standards for relevant markets:

- *Small Change in Concentration:* Mergers involving an increase in the HHI of less than 100 points are unlikely to have adverse competitive effects and ordinarily require no further analysis. (irrespective of level of concentration in the market)
- *Un-concentrated Markets:* Mergers resulting in un-concentrated markets are unlikely to have adverse competitive effects and ordinarily require no further analysis.
- *Moderately Concentrated Markets:* Mergers resulting in moderately concentrated markets that involve an increase in the HHI of more than 100 points potentially raise significant competitive concerns and often warrant scrutiny.
- *Highly Concentrated Markets:* Mergers resulting in highly concentrated markets that involve an increase in the HHI of between 100 points and 200 points potentially raise significant competitive concerns and often warrant scrutiny. Mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power.

⁸ Horizontal merger guidelines, U.S. Department of Justice and the Federal Trade Commission, August 19, 2010

- 2.23 In order to measure concentration levels, the European Commission also uses the HHI. The Commission is unlikely to identify horizontal competition concerns in a market with a post-merger HHI below 1000. Such markets normally do not require extensive analysis. The Commission is also unlikely to identify competition concerns in a merger with a post-merger HHI between 1000 and 2000 and an increase in HHI below 250, or a merger with a post-merger HHI above 2000 and an increase in HHI below 150.
- 2.24 Similar restrictions on M&A could be considered to prevent high concentration in the cable TV market in the country. M&A in the cable TV market will refer to M&A between two MSOs or between an MSO and a LCO. Varying levels of concentration among States are to be expected as there are significant differences across States in terms of population, area and GDP. Smaller States may get served by a fewer number of players and have higher concentration compared to large States. It could be deemed desirable that at least three to five reasonably sized MSOs operate in each relevant market. For a market served by three equally sized operators, the HHI of the market will be around 3300. Similarly, if the market is served by five operators of the same size, the HHI of the market will be 2000.
- 2.25 The HHI level in various States covered in Phase I & II under DAS implementation, calculated by taking the percentage of set top boxes seeded in markets (as a proxy for market share) is shown in Table 2.3. It can be seen that in 7 out of 14 States/UTs, the HHI is more than 3300. In these markets contribution to HHI by a single MSO is more than 2500, indicating high levels of concentration. It is desirable that M&A do not create a situation leading to higher concentration and thereby result in inadequate competition.

**Table 2.3: Contribution of top 5 MSOs* to HHI and overall HHI in States
(based on the STBs seeded in Phase I & II cities covered under DAS implementation)**

State/UT	Cities included in Phase I & II	Contribution to HHI						Overall HHI
		MSO I	MSO II	MSO III	MSO IV	MSO V	All other MSOs	
Andhra Pradesh	Hyderabad, Visakhapatnam	6432	142	62			3	6639
Bihar	Patna, Ranchi	1354	762	681	55	4	1	2857
Chandigarh	Chandigarh	6504	374				1	6880
Delhi	Delhi	2401	369	98	88	86	19	3061
Gujarat	Ahmedabad, Rajkot, Surat, Vadodra	3826	404	305			0.3	4535
Haryana	Faridabad	2673	676	497			0.5	3847
Karnataka	Bengaluru, Mysore	2025	515	114	77	55	18	2805
Maharashtra	Aurangabad, Kalyan Dumbivli, Nagpur, Nashik, Navi Mumbai, Mumbai, PimpriChinchwad, Pune, Sholapur, Thane	918	493	188	130	49	41	1818
Madhya Pradesh	Bhopal, Indore, Jabalpur	1318	942	847			13	3120
Punjab	Amritsar, Ludhiana	7239	223				0	7462
Rajasthan	Jaipur, Jodhpur	1513	870	384	144		0	2911
Tamil Nadu	Coimbtore, Chennai	7691	151				0	7842
Uttar Pradesh	Agra, Allahabad, Ghaziabad, Kanpur, Lucknow, Meerut, Varanasi	5155	96	92	77		4	5425
West Bengal	Howrah, Kolkata	1640	635	240	81	42	7	2646

* Top 5 MSOs are not same in all States

2.26 M&A could be permitted without any restrictions provided that post-merger the HHI level does not cross a threshold level, say, 2000. Similarly, M&A involving an increase in the level of HHI of less than 100 could be allowed, irrespective of the level of concentration in the market, as small changes in HHI may not adversely impact competition and will provide an opportunity for small firms to join with big firms, should such

a need arise. To ensure that the market remains competitive, restrictions on M&A could be imposed, if the M&A result in the post-merger HHI going beyond the threshold of 2000. Also, a minimum of three operators of reasonable size should remain in the market after M&A takes place. Different conditions may need to be defined for different levels of concentration in the market. For markets with higher concentration even small changes in HHI, as a result of M&A, may raise significant competitive concerns. Therefore, restrictions should be so stipulated that consequent to M&A competition is not eroded, while enough scope is left for M&A which do not raise significant competitive concerns. M&A could be permitted provided the following conditions are met:

- i. Post merger HHI does not cross a threshold X (say 2000)
- ii. For markets with post merger HHI between X and Y (say 3300), M&A of MSO/LCO does not result in increase in the HHI (delta) of more than, say, 250 points in the relevant market;
- iii. For markets with post merger HHI beyond Y, M&A of MSO/LCO does not result in increase in the HHI (delta) of more than, say, 100 points in the relevant market;

In the cases where the conditions stipulated above are not met following a merger or acquisition, the case may require examination, after seeking recommendations from TRAI, for competitive concerns of M&A.

These conditions are tabulated below:

Post M&A HHI in relevant market	Increase in HHI (delta) as a result of M&A	M&A permitted /needs examination
< X (2000)	Not relevant	Permitted
≥X ≤ Y(3300)	≤250	Permitted
	>250	Needs examination
≥ Y	≤100	Permitted
	>100	Needs examination

Issues for Consultation

Q 3. To curb market dominance and monopolistic trends, should restrictions in the relevant cable TV market be:

- (i) Based on area of operation?**
- (ii) Based on market share?**
- (iii) Any other?**

Please elaborate your response with justifications.

Q 4. In case your response to Q3 is (i), please comment as to how the area of a relevant market ought to be divided amongst MSOs for providing cable TV service. Please elaborate your response with justifications.

Q 5. In case your response to Q3 is (ii), please comment as to what should be the threshold value of market share beyond which an MSO is not allowed to build market share on its own? How could this be achieved in markets where an MSO already possesses market share beyond the threshold value? Please elaborate your response with justifications.

Q 6. In case your response to Q3 is (ii), please comment on the suitability of the rules defined in para 2.26 for imposing restrictions on M&A. Do you agree with the threshold values of HHI and increase in HHI (X,Y and Delta) indicated in this para. If the answer is in the negative, what threshold values for HHI and delta could be prescribed for defining restrictions? Please elaborate your response with justifications.

2.27 Even if the restrictions mentioned above are imposed, it may be possible that an association or body of individuals or a group companies may try to gain dominance in a State by registering as MSO with different names or creating new corporate entities under a complex ownership structure. It could also transpire that a person or a company may acquire substantial control in other companies operating as MSOs in the same relevant market,

as happened in certain States. A group of such MSOs through these control arrangements could dominate the market.

2.28 Therefore, ‘control’ over other firms, directly or indirectly, in the same business may also lead to decreased competition. Through these controls firms may work as a ‘group’ in the market and distort competition. Therefore, there is also a need to impose restrictions on acquiring substantial control by an entity in other firms which may lead to reduced competition. One such way could be to add together the contribution to HHI of all the firms an entity owns or has substantial control over for the purpose of arriving at a measure of market power of all the enterprises combined together.

2.29 The definition of control and group given in clause (a) & (b) of the explanation to Section 5 of the Competition Act, 2002 is reproduced below:

“(a) "control" includes controlling the affairs or management by—

- (i) one or more enterprises, either jointly or singly, over another enterprise or group;*
- (ii) one or more groups, either jointly or singly, over another group or enterprise;*

(b) "group" means two or more enterprises which, directly or indirectly, are in a position to —

- (i) exercise twenty-six per cent or more of the voting rights in the other enterprise; or*
- (ii) appoint more than fifty per cent of the members of the board of directors in the other enterprise; or*
- (iii) control the management or affairs of the other enterprise;”*

2.30 If an MSO has control over the management or affairs of the other MSOs, these will be treated as interconnected undertakings and will be treated as a single group. For example, if MSO A who has market share X, has substantial control over MSO B, which has a market share of Y in the same market, then MSO A and MSO B will be treated as a group for the purpose

of calculation of HHI and the contribution of HHI from the group consisting of A and B will be taken as the square of (X+Y). Table 2.4 illustrates one such example.

Table 2.4: Contribution to HHI in case of merger or acquiring substantial control over other MSO/LCO

Measure	MSO A	MSO B	MSO C	Contribution of MSO A and MSO B when these operate independently	Contribution of MSO A and MSO B when A acquires substantial control over B or vice versa
% Market Share	30	25	45	30 (A) and 25 (B)	55
Contribution to HHI	900	625	2025	1525 (900+625)	3025 (55x55)
HHI of the market	3550 (900+625+2025) (A and B do not have any control arrangement)				5050 (3025+2025) (when A acquires substantial control over B or vice versa)
Increase in HHI (delta) when A acquires substantial control over B or vice versa	1500 (3025-1525) or (5050-3550)				

2.31 Accordingly, acquisition of substantial control can be treated as M&A irrespective of whether such control is direct or indirect. An MSO could be permitted to have control as defined in para 2.29 in other MSOs/LCOs provided it does not result in HHI crossing a threshold level, say, 2000 after acquiring the control. Restrictions on control could be imposed, if the acquisition of control results in HHI going beyond this threshold. Here too, different conditions may need to be defined for different levels of concentration in the market. An MSO could be permitted to acquire control provided the following conditions are met:

- i. Post-control HHI does not cross a threshold X (say 2000)

- ii. For markets with post-control HHI between X and Y (say 3300), acquiring control over another MSO/LCO does not result in an increase in the HHI (delta) of more than, say, 250 points in the relevant market;
- iii. For markets with post-control HHI beyond Y, acquiring control over another MSO/LCO does not result in increase in the HHI (delta) of more than, say, 100 points in the relevant market;

Issues for Consultation

Q 7. Should 'control' of an entity over other MSOs/LCOs be decided as per the conditions mentioned in para 2.29? In case the answer is in the negative, what measures should be used to define control? Please elaborate your response with justifications.

Q 8. Please comment on the suitability of the rules defined in para 2.31 for imposing restrictions on control. Do you agree with the threshold values of HHI and increase in HHI (X, Y and Delta) indicated in this para. If the answer is in the negative, what threshold values for HHI and delta could be prescribed for defining restrictions? Please elaborate your response with justifications.

Q 9. In case your response to Q3 is (iii), you may support your view with a fully developed methodology indicating a measure arrived at to determine market power and proposed restrictions to prevent monopoly/ market dominance in the relevant market.

2.32 Another issue that needs attention is whether the restrictions on control discussed in the preceding paras should be applicable retrospectively or prospectively. In case an MSO exercises control in other MSOs/LCOs, it should be feasible to dilute such control. Therefore, the rules outlined in para 2.31, ought to be complied by MSOs who acquire control in other MSOs/LCOs at a later date as well as by existing MSOs who continue to

have control in other MSOs/LCOs on the date the restrictions come into force. Once the restrictions come into force on a particular date, the control an MSO holds in other MSOs/LCOs will be decided based on the stipulation in para 2.29 and the HHI of the market as well as delta will be arrived at based on the illustration in Table 2.4. If HHI figures do not meet the conditions specified in para 2.31, the MSO will have to dilute control. However, the applicability of these rules with immediate effect, for MSOs who are in breach of the conditions on the date of the restrictions coming into force, might pose challenges. To ensure smooth implementation of the restrictions on control defined in para 2.31, some amount of time may have to be granted to these MSOs for transitioning to compliance with the rules, once new rules are implemented.

Issues for Consultation

Q 10. In case rules defined in para 2.31 are laid down, how much time should be given to existing entities in the cable TV sector (which are in breach of these rules as on date), for complying with the prescribed rules by diluting their control? Please elaborate your response with justifications.

Monitoring and Disclosure

2.33 The restrictions prescribed for curbing market dominance should be easily enforceable and amenable to be easily monitored. A framework of monitoring has to be put in place to ensure that the restrictions are implemented and complied with. For effective monitoring, there will be a need to collect information from MSOs on a periodic basis. The variables that are likely to be handy for monitoring and enforcing compliance of the restrictions with respect to market dominance, if any, as well as for determining the control/concentration of different entities/companies in cable TV are:

- a. Equity structure of the entity/company

- b. Share holding pattern of the entity/company
- c. FDI pattern of the entity/company
- d. Interests of the entity /company in other entities/companies engaged in Cable TV distribution
- e. Interests of other entities/companies, having shareholding beyond a threshold in the Cable TV entity/company under consideration
- f. Shareholders agreements, loan agreements
- g. Details of key executives and Board of Directors of the entity/Company.
- h. Details of Subscribers served
- i. Details of areas of cable TV operation
- j. Details of revenue earned from services provided through cable TV network

In order to ensure transparency, it would be necessary to put some/all of the information provided under the mandatory disclosure in public domain.

Issues for consultation

Q 11. Whether the parameters listed in para 2.33 are adequate with respect to mandatory disclosures for effective monitoring and compliance of restrictions on market dominance in Cable TV sector? What additional variables could be relevant? Please elaborate your response with justifications.

Q 12. What should be the periodicity of such disclosures?

Q 13. Which of the disclosures made by the Cable TV entities should be made available in the public domain? Please elaborate your response with justifications.

Amendments in Statutory rules/ executive orders

2.34 Various alternatives in order to curb the market dominance and monopolistic trends in the cable TV sector have been discussed. This includes the restrictions based on area of operation and those based on market share. It has also been discussed that currently as per the prevailing statutes/orders there are no restrictions either on area of operation of an MSO or accumulation of interest in terms of market share. Restrictions to curb the market dominance may, therefore, also involve changes in the statutory rules/ executive orders. The exact changes, however, would depend upon the nature of restrictions to be imposed.

Issue for consultation

Q 14. What according to you are the amendments, if any, to be made in the statutory rules/ executive orders for implementing the restrictions suggested by you to curb market dominance in Cable TV sector?

Other Issues

Q 15. Stakeholders may also provide their comments on any other issue relevant to the present consultation.

Chapter III
Summary of issues for Consultation

Q 1. Do you agree that there is a need to address the issue of monopoly/market dominance in cable TV distribution? In case the answer is in the negative, please elaborate with justification as to how the ill effects of monopoly/market dominance can be addressed?

Q 2. Do you agree that the State should be the relevant market for measuring market power in the cable TV sector? If the answer is in the negative, please suggest what should be the relevant market for measuring market power? Please elaborate your response with justifications.

Q 3. To curb market dominance and monopolistic trends, should restrictions in the relevant cable TV market be:

- (i) Based on area of operation?**
- (ii) Based on market share?**
- (iii) Any other?**

Please elaborate your response with justifications.

Q 4. In case your response to Q3 is (i), please comment as to how the area of a relevant market ought to be divided amongst MSOs for providing cable TV service. Please elaborate your response with justifications.

Q 5. In case your response to Q3 is (ii), please comment as to what should be the threshold value of market share beyond which an MSO is not allowed to build market share on its own? How could this be achieved in markets where an MSO already possesses market share beyond the threshold value? Please elaborate your response with justifications.

Q 6. In case your response to Q3 is (ii), please comment on the suitability of the rules defined in para 2.26 for imposing restrictions on M&A. Do

you agree with the threshold values of HHI and increase in HHI (X, Y and Delta) indicated in this para. If the answer is in the negative, what threshold values for HHI and delta could be prescribed for defining restrictions? Please elaborate your response with justifications.

Q 7. Should 'control' of an entity over other MSOs/LCOs be decided as per the conditions mentioned in para 2.29? In case the answer is in the negative, what measures should be used to define control? Please elaborate your response with justifications.

Q 8. Please comment on the suitability of the rules defined in para 2.31 for imposing restrictions on control. Do you agree with the threshold values of HHI and increase in HHI (X, Y and Delta) indicated in this para. If the answer is in the negative, what threshold values for HHI and delta could be prescribed for defining restrictions? Please elaborate your response with justifications.

Q 9. In case your response to Q3 is (iii), you may support your view with a fully developed methodology indicating a measure arrived at to determine market power and proposed restrictions to prevent monopoly/ market dominance in the relevant market.

Q 10. In case rules defined in para 2.31 are laid down, how much time should be given to existing entities in the cable TV sector (which are in breach of these rules as on date), for complying with the prescribed rules by diluting their control? Please elaborate your response with justifications.

Q 11. Whether the parameters listed in para 2.33 are adequate with respect to mandatory disclosures for effective monitoring and compliance of restrictions on market dominance in Cable TV sector? What additional variables could be relevant? Please elaborate your response with justifications.

Q 12. What should be the periodicity of such disclosures?

Q 13. Which of the disclosures made by the Cable TV entities should be made available in the public domain? Please elaborate your response with justifications.

Q 14. What according to you are the amendments, if any, to be made in the statutory rules/ executive orders for implementing the restrictions suggested by you to curb market dominance in Cable TV sector?

Q 15. Stakeholders may also provide their comments on any other issue relevant to the present consultation.

List of Acronyms

Abbreviation	Description
CAPEX	Capital Expenditure
CCI	Competition Commission of India
DAS	Digital Addressable System
DD	Doordarshan
DTH	Direct to Home
FM	Frequency Modulated
FTA	Free to Air
GDP	Gross Domestic Product
HHI	Herfindahl Hirschman Index
HITS	Headend in the sky
IPTV	Internet Protocol Television
LCO	Local Cable Operator
M & A	Merger and Acquisition
MIB	Ministry of Information and Broadcasting
MSO	Multi System Operator
OPEX	Operational Expenditure
SMS	Subscriber Management System
STB	Set Top Box
TACTV	Tamil Nadu Arasu Cable TV
TRAI	Telecom Regulatory Authority of India
TV	Television
UT	Union Territory
VoD	Video on Demand

International Experience

Experiences from US, UK, Canada and South Korea have been studied in respect of cable TV distribution. The provisions related to regulatory framework, competition, distribution and services offered by cable operators in these countries are discussed in subsequent paragraphs. The merger & acquisition guidelines prevailing in these countries have also been discussed.

USA^{9,10}**Regulatory Framework**

In US laws and regulations for cable television exist at the federal, state and local level. At the federal level, cable television is regulated by the Federal Communications Commission (FCC) in accordance with the provisions of ‘Cable Television Consumer Protection and Competition Act of 1992’ and the ‘Telecommunications Act of 1996’. In most states there are one or more state laws specifically applicable to cable television, dealing most commonly with such subjects as franchising, theft of service, pole attachments, rate regulation and taxation. According to the 1992 Cable Act, local and/or state authorities are allowed to select cable franchisee and to regulate in any areas that FCC did not pre-empt. Under the 1992 Cable Act, local franchising authorities have specific responsibility for regulating the rates for basic cable service and equipment.

B. Distribution

The distribution is carried out through distributors called multichannel video programming distributor (MVPD). A multichannel video programming distributor (MVPD) is an entity that makes available for purchase multiple channels of video programming. The MVPD group includes cable operators, direct broadcast satellite service (DBS) operators, and telephone companies that offer multiple channels of video programming. There are 42 cable MVPDs with over 20,000

⁹<http://www.fcc.gov/encyclopedia/evolution-cable-television#TOC>

¹⁰<http://www.gpo.gov/fdsys/pkg/CFR-2010-title47-vol4/pdf/CFR-2010-title47-vol4-part76.pdf>

subscribers each and over 1,000 cable MVPDs with less than 20,000 subscribers each, two DBS MVPDs (DIRECTV and DISH Network), two large telephone company MVPDs (AT&T and Verizon) and numerous smaller telephone company MVPDs. Cable MVPDs accounted for almost 60 percent of all MVPD subscribers at the end of 2010.

C. Competition

Historically, cable companies rarely competed with one another in the same geographic area. In some locations, cable operators built cable systems where cable MVPDs already provided video service, but this is the exception, not the rule. The introduction of DBS MVPDs with national footprints in the 1990s changed the competitive landscape and increased competition in the market for the delivery of video programming. The DBS companies compete with one another and with the incumbent cable MVPDs. The level of competition increased again with the entry of Verizon in 2005 and AT&T in 2006, two large facilities-based telephone MVPDs, which began offering video service in geographic areas already served by cable MVPDs. Today, a small number of geographic areas have as many as five MVPDs (i.e., two cable MVPDs, two DBS MVPDs, and a telephone MVPD) directly competing with one another in the delivery of video programming.

D. Services

The major MVPDs now offer hundreds of television channels as well as thousands of video programs through VOD services. The major MVPDs offer video programming as a standalone service or in combination with Internet access and telephone services. Cable MVPDs typically offer video, Internet access, and telephone services using their own facilities. Cable operators have the largest coverage area of 85 percent in wireline broadband segment¹¹. Telephone MVPDs offer video, Internet access, and telephone services using their own facilities where they have upgraded systems. Where they have not upgraded systems, telephone MVPDs usually offer video through cooperative arrangements with DBS MVPDs¹².

¹¹FCC : Eighth Broadband Progress Report, August 21, 2012

¹²FCC website: Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Adopted: July 18, 2012,

E. Merger and Acquisition¹³

According to Horizontal Merger Guidelines issued by U.S. Department of Justice and the Federal Trade Commission, a market in which the HHI is below 1500 is considered as un-concentrated market; a market in which the HHI is between 1500 and 2500 is considered as moderately concentrated market and a market in which the HHI exceeds 2500 is considered as highly concentrated market. Following general standards for the relevant markets have been defined:

Small Change in Concentration: Mergers involving an increase in the HHI of less than 100 points are unlikely to have adverse competitive effects and ordinarily require no further analysis.

- *Unconcentrated Markets:* Mergers resulting in unconcentrated markets are unlikely to have adverse competitive effects and ordinarily require no further analysis.
- *Moderately Concentrated Markets:* Mergers resulting in moderately concentrated markets that involve an increase in the HHI of more than 100 points potentially raise significant competitive concerns and often warrant scrutiny.
- *Highly Concentrated Markets:* Mergers resulting in highly concentrated markets that involve an increase in the HHI of between 100 points and 200 points potentially raise significant competitive concerns and often warrant scrutiny. Mergers resulting in highly concentrated markets that involve an increase in the HHI of more than 200 points will be presumed to be likely to enhance market power.

UK

A. Regulatory Framework

Scheduled radio and television broadcasting services need a licence from OFCOM under the Broadcasting Act 1990 or 1996, and must comply with the Ofcom Broadcasting Code made under section 319 of the Communication Act

¹³ U.S. Department of Justice and the Federal Trade Commission: Horizontal Merger Guidelines, August 19, 2010

2003, together with a number of other codes relating to access, electronic programme guides, advertising, and so on.

B. Distribution

In UK, there are three primary platforms through which digital television services can be accessed - digital terrestrial, digital satellite and digital cable. In some areas, consumers can also access video on-demand digital television services via existing telephone lines using ADSL technology and a special set-top box¹⁴.

As per Ofcom's Communications Market Report 2012, at the end of March 2012, 96% of all households received digital TV. Digital terrestrial television and satellite are the most important platforms, while cable homes are also almost 100% digital. More than 10 million households received digital terrestrial television (only), almost 12 million satellite (free and pay) and 3.7 million cable.¹⁵

C. Competition

Cable TV systems in UK were originally operated under a geographical franchise system by a number of independent companies. Following consolidation of the industry, most of these original companies have now been merged with Virgin Media, the main cable TV operator in the UK¹⁶. Currently there are three players in the UK cable market; Virgin Media, Plusnet & BT¹⁷.

D. Services

The cable providers operating in the UK are very different from one another with each having its own range of services and its own strengths. Virgin Media is the largest UK cable provider and offers the widest range of cable services including cable TV, cable broadband and cable phone services. BT joined the cable market in recent years with its fibre optic broadband service BT Infinity. As TV transmission from BT is terrestrial and received by customers' aerials, and BT Vision on-demand content is carried via broadband. Plusnet is another company

¹⁴www.ofcom.org.uk/static/archive/itc/itc.../itc.../view_note87.html

¹⁵<http://mavise.obs.coe.int/country?tid=14>

¹⁶ OFCOM research document: Technical delivery options for local television services in the UK (September 2010)

¹⁷<http://www.cable.co.uk/providers/cable-providers/>

that has recently joined the cable market in the UK¹⁸. In UK, Fixed voice and broadband is the most popular communications bundle.¹⁹

E. Mergers and Acquisition²⁰

Merger Assessment Guidelines issued in September 2010 by Competition Commission and Office of Fair Trading mentions following threshold related to market concentration:

- any market with a post-merger HHI exceeding 1,000 may be regarded as concentrated
- any market with a post-merger HHI exceeding 2,000 as highly concentrated.

In a concentrated market, a horizontal merger generating a delta of less than 250 is not likely to give cause for concern. In a highly concentrated market, a horizontal merger generating a delta of less than 150 is not likely to give cause for concern.

Canada

A. Regulatory Framework²¹

In Canada, broadcasting services are regulated by the Canadian Radio-television and Telecommunications Commission (CRTC) under the provisions of the Broadcasting Act, 1967-68. The CRTC grants, amends, renews or revokes licences for all broadcasting undertakings, including radio, television and cable Television.

B. Distribution

Cable television is a very common method of television programming delivery in Canada. Many Canadian cities have cable penetration rates of 90 per cent or more of television households. There are currently 739 licensed cable distributors in Canada. Few years back there were about 2000 licensed cable distributors.

¹⁸<http://www.cable.co.uk/providers/cable-providers/>

¹⁹Ofcom's Communications Market Report 2012, 18 July 2012

²⁰Competition Commission and Office of Fair Trading: Merger Assessment Guidelines, September 2010

²¹CRTC website & <http://www.thecanadianencyclopedia.com/articles/canadian-radiotelevision-and-telecommunications-commission>

Subsequently, major cable companies acquired smaller distributors. Further, CRTC also amended the rules according to which independent cable operators with fewer than 2,000 subscribers are no longer required to operate under full CRTC licences.

C. Competition

Most Canadian cities are served by only one cable company. If a city is served by more than one cable company, each company is restricted to a specific geographical division within the market. For instance, in the city of Hamilton, Cogeco Cable, Mountain Cablevision and Source Cable are all licensed operators, but each has a monopoly in a specific area of the city²².

D. Services

Cable companies offer digital cable packages in most Canadian cities, including a number of channels which have been licensed exclusively for digital package distribution. Digital cable also typically includes a range of audio broadcast services. In some markets, digital cable service may also include local radio stations; where this is offered, it has largely replaced the availability of cable FM service. Many cable companies also offer high speed cable Internet service²³.

E. Mergers and Acquisition²⁴

According to the 'Merger Enforcement Guidelines' issued the Competition Bureau, the following thresholds have been established to identify and distinguish mergers that are unlikely to have anti-competitive consequences from those that require a more detailed analysis:

- The Bureau generally will not challenge a merger on the basis of a concern related to the unilateral exercise of market power when the post-merger market share of the merged firm would be less than 35 percent.
- The Bureau generally will not challenge a merger on the basis of a concern related to a coordinated exercise of market power when:

²²http://en.wikipedia.org/wiki/Media_of_Canada#Cable_television

²³http://en.wikipedia.org/wiki/Media_of_Canada#Cable_television

²⁴ http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/03420.html#s5_0

- i. the post-merger market share accounted for by the four largest firms in the market (known as the four-firm concentration ratio or CR4) would be less than 65 percent; or
- ii. the post-merger market share of the merged firm would be less than 10 percent.

In addition to the CR4, the Bureau may examine changes in HHI to observe the relative change in concentration before and after a merger.

Korea²⁵

A. Regulatory Framework

Korea's broadcasting related Acts, together with the Fair Trade Act, regulate the following unfair trading practices: boycotts in relation to channels and programmes, contract dealings based on restrictive conditions, unfair transaction coercion and transaction discrimination. Other regulated practices include sales bundling to sell products combining TV, internet, broadcastings and telecommunication services; limitations on or suspensions/rejections of access to essential facilities for broadcasting service provisions; and changes to channel arrangements. Attempts to delay or deny profit sharing, hinder viewing of other broadcasters' channels, or obstruct service contracting with other broadcasters are also punishable through these Acts.

Both the Korea Fair Trade Commission (KFTC) and the Korea Communication Commission (KCC) have overlapping jurisdiction over unfair trading practices.

B. Distribution

Distribution of TV channels is done on three platforms –through cable, satellite and IPTV. Initially in Korea, only cable system operators (SOs) provided TV/broadcasting services and the market was not very competitive. However, with the launch of satellite broadcasting in 2000 and IPTV in 2008, consumers are now able to benefit from a true choice in the market. Currently, in each region of the country, people can choose from the services of at least 5 to 6

²⁵ OECD :competition issues in television and broadcasting- Contribution from Korea (27 Feb2013)

different providers, including one cable TV operator, three IPTV operators, and one satellite broadcaster.

C. Competition

Each broadcasting operator is required to obtain government approval to operate. Market entry regulations may exist for some broadcasting services where permission is required to launch a business such as news media, home-shopping, terrestrial broadcasting, and SOs, whereas for some other services, such as the case of programme providers, no such regulations exist. Korea has been deemed to have fewer competition restrictive aspects in its TV/broadcasting entrance regulations and in its consumers' rights to choose services.

D. Services

Some cable TV service providers offer various services which include Internet and Internet telephony. Subscription charges differ according to the package, the length of time selected for a contract and the location²⁶.

E. Mergers and Acquisition²⁷

According to the 'Guidelines for the combination of enterprises Review' issued by the Korea Fair Trade Commission (KFTC), HHI is used to measure the degree of concentration in the market. Analyzing market concentration is regarded as a starting point of assessing a merger's effect on competition.

In case of horizontal M&As, wherein post-merger market concentration and the significance of its changes in a particular business area fall under any of the followings, they shall not be viewed to be substantially anti-competitive, otherwise the possibility of substantial competition restriction shall be considered existent:

- Less than 1,200 HHI
- 1,200 to 2,500 HHI, HHI increase of less than 250
- More than 2,500 HHI, and HHI increase of less than 150

²⁶ <http://southkorea.angloinfo.com/housing/setting-up-home/television/>

²⁷ http://eng.ftc.go.kr/files/static/Legal_Authority/Guidelines%20for%20the%20combination%20of%20enterprises%20Review_mar%2014%202012.pdf

Measures of market power

Tools to detect the presence of market power include market concentration, Lerner indices, rates of return, and q ratios, frequently referred to as Tobin's q ratios.

(a) Market Concentration

One of the most popular measurements for market concentration is the percentage of total market shares accounted for by the top three or four firms (CR3/CR4). As an example, a four firm concentration ratio (CR4) of 80% will imply more monopoly power than a four firm concentration ratio of 40%. Herfindahl–Hirschman Index (HHI) is another commonly used measure of market concentration or level of competition in the market. Unlike traditional concentration ratio, HHI reflects both the distribution of the market shares of the top firms and the composition of the market outside the top firms. It also gives proportionately greater weight to market shares of larger firms. It is calculated by squaring the market share of each firm operating in a market, and then summing the resulting numbers. Quantitatively, HHI is expressed as below:

$$\text{HHI} = \sum_{i=1}^n s_i^2$$

where 'n' is the number of firms and s_i is the percentage market share of i^{th} firm operating in a relevant market. The HHI number can range from close to zero to 10,000, when market shares are expressed as percentages. For example, if there is only one firm in a relevant market, it would have 100% market share and, therefore, the HHI would be 10,000 (100x100) indicating a monopoly. On the other hand if there were thousands of firms competing in the same market, each of them would have nearly 0% market share, and the HHI would be close to zero, indicating near zero concentration.

(b) Lerner Index

The Lerner Index is defined as $L = (p-c)/p$, where p =price and c =marginal cost. Values of $L > 0$ are an indicator of market power. With each firm's marginal cost denoted by c_i and market share by s_i , the Lerner index of industry can be expressed by $L = (p-c_{avg})/p$, where $C_{avg} = \sum_{i=1}^n s_i c_i$.

Higher value of L will be suggestive of market power.

(c) Rate of return

Rate of return is another metric to measure market power. In case of a firm with market power this will rise to levels leading to super normal profits. Under such circumstances, the firms with market power will consistently outperform the risk-adjusted return available to similar investments.

(d) q ratios

Rates of return are difficult to measure, however, and this has led economists to a market measure of profitability, q ratios, where $q = \text{Firm Market Value}/\text{Replacement Cost of Tangible Capital}$. A competitive firm typically exhibits a $q \approx 1$. When market values rise, relative to the cost of duplicating the physical assets of the firm, the event is signaled by a $q \gg 1$. This outcome is suggestive of market power, although the source of the market power may reflect firm's superior efficiency and business acumen.

Letter from MIB

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GOVERNMENT OF INDIA
MINISTRY OF INFORMATION & BROADCASTING
SHASTRI BHAWAN, NEW DELHI-110001

12.12.2012

Dear Dr. Khullar,

Multi System Operators (MSOs) and Local Cable Operators (LCOs) are required to be registered with local Post Offices to be able to operate in the permitted areas of registration. However as per recent amendments in the Cable Television Networks (Regulation) Amendment Rules 2012, it has become mandatory for MSOs to get themselves registered with the Ministry of Information and Broadcasting to operate in those areas which are notified for analogue switch off under Rule 11C of the said Rules. This provision is quoted as below:

On being satisfied that the applicant fulfils the eligibility criteria specified under rule 11B and the requirements of rule 11A, the registering authority shall, subject to the terms and conditions specified in rule 11D and the security clearance from the Central Government, issue certificate of registration.

2. There are no restrictions on the issue of accumulation of interest in terms of market share in a City, District, State or country by individual MSOs and LCOs in the Cable Sector. MSOs and LCOs are, therefore, free to operate in any area(s) of their choice after obtaining registration from the Ministry.

3. As TRAI is already aware, the accumulation of interest restrictions are applicable in case of FM Radios where no company or Group of companies can operate more than 40% of the total FM Radio channels in each city. Further, the total number of channels that a company or Group of Companies can operate cannot exceed 15% of the total number of channels allocated in the country. This stipulation was imposed to ensure equity, fair play and to restrict monopolies. This restriction also ensures that there will be adequate competition in the market and the same shall ensure diversity in content. However, no such restrictions exist for MSOs or LCOs in the extant Cable Rules.

4. It has been observed that the cable TV distribution is virtually monopolized in some States as operation of the entire cable TV network is dominated by a single entity in that State. It is felt that such monopolies may not be in the interest of consumers and may have serious implications in terms of competition, pricing and healthy growth of cable TV sector in that market. Competition is good for the consumers as it leads to better quality of service at reasonable prices. Competition also gives a choice of service provider to the consumer.

Contd. Page-2/-

5. TRAI may be aware that the Competition Commission of India has recently passed an order with regard to the monopolistic practices adopted by a Multi System Operator and three others operating in a particular State and has also imposed certain penalties.

6. In view of above, it has become necessary to examine whether there is a need to bring in certain reasonable restrictions on MSOs and LCOs including restricting their area of operation or restricting subscriber base to prevent monopoly. TRAI is, therefore, requested to provide its recommendations under Section 11(1) (a) on the following:

"In order to ensure fair competition, improved quality of service, and equity, should any restriction be imposed on MSOs/LCOs to prevent monopolies/accumulation of interest? If yes, what restrictions should be imposed and what should be the form, nature and scope of such restrictions? Accordingly, amendments required in the Cable Television Networks (Regulation) 1995 Act and Rules framed thereunder may also be suggested."

Regards,

Yours sincerely,

Uday Kumar Varma
(Uday Kumar Varma)

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