



Telecom Regulatory Authority of India

Recommendations

On

Entry Level Net worth requirement of Multi-system Operators in Cable TV services



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CHAPTER 1

INTRODUCTION

1.1 Cable television came into existence in India in 1983 when Doordarshan started its services on cable networks in rural areas of Rajasthan. During 1990s, the cable and satellite TV broadcast business was largely driven by small Cable TV operators, each catering to the needs of local subscribers in a small area ranging from approximately 50 to 1000 consumers. A phenomenal increase in number of TV channels from year 2000 until 2010 resulted in operational constraints for LCOs. During this period, Multi Systems Operators (MSO) came into existence. MSOs established head-ends in metros and major towns to receive TV signals from different TV broadcasters, aggregate and distribute these signals to LCOs, who further transmit it to subscribers through cables. In some instances, MSOs also provide the services directly to their consumers.

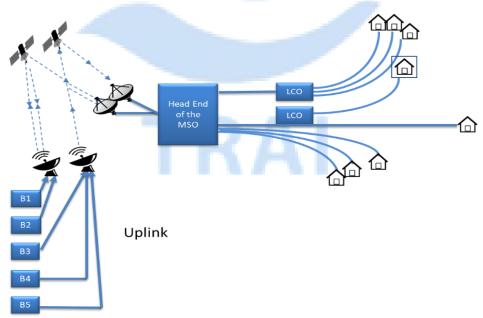


Figure -1: MSO in the centre of Distribution¹ Chain

1.2 The evolution of technology paved way for bringing digitization in the cable TV sector. With the introduction of Digital Addressable system (DAS), Government amended the Cable Television Networks Rules, 1994 by issuing Cable

¹Figure depicts MSO as a distributor. Obtaining TV channel signals from the broadcaster and further extending the same to LCOs or the end consumer.

Television Networks (Amendment) Rules, 2012 on 28th April 2012, according to which an MSO operating in DAS areas is required to take necessary permission from Ministry of Information and Broadcasting (MIB), in addition to registration as a cable operator.

1.3 The migration from analogue Cable TV distribution system began in 2012 and got completed in March 2017. In line with the progress of digitisation, the number of registered MSOs steadily increased from 2012 to 2017. The number of operational MSOs out of the total registrations has also increased during this period. At present, there are 1471 registered² MSOs out of which 1143 are operational.



Graph 1: Year wise growth of MSOs

1.4 The Operation of the Cable TV Networks is governed by the Cable Television (Networks) Regulation Act 1995 and the Cable TV Rules, as amended from time to time. As per rule 11A and 11B of the Cable Television Networks rule³, any individual/firm/company/association of persons/body of individuals can register itself with the MIB, as MSO, for providing cable TV services.

²Ministry of Information and Broadcasting data dated 27th Aug 2018 (Annexure II-A) and revised data dated 21.1.2019 in which operational MMSOs are 1143 including 2 provisionally registered MSOs

³The cable TV Network Rules 1994 as amended in 2012 vide SO 940 (E), dated 28-04-2012

- 1.5 Presently, MIB guidelines prescribe a minimum net worth requirement for broadcasters⁴ and Head-end In The Sky (HITS) operators⁵. In case of Direct To Home (DTH) operators, though the guidelines do not specify a minimum net worth, there is an entry fee that every DTH service provider is required to pay. These requirements are incorporated in the relevant licensing guidelines issued by MIB. For MSOs the guidelines do not specify any minimum value of the net worth, an MSO applicant is only required to declare its net worth.
- 1.6 As per the MIB guidelines, an application fee of Rupees One lakh only (Rs. 1,00,000/-) is prescribed as registration fee for MSOs. Initially, the MSO registration was issued for a specific city or Town or a State or on a pan-India basis as per the request of the applicant. However, vide their circular dated 27th Jan 2017, the Ministry of Information and Broadcasting (MIB) conveyed that all the MSOs with a valid registration are free to operate in any part of the country.
- 1.7 MIB vide its letter no. 2/31/2016- DAS Dated 16th May 2018 has requested TRAI to give its recommendations on the appropriate entry level net worth for the MSOs. The current framework is governed as per Rule 11(3) of CTN Rules, 1994. The rule mentions only the financial strength of the applicant for grant of MSO registration without explicitly defining or quantifying it. A copy of the MIB letter dated 16th May 2018 is enclosed at **Annexure-I**.
- 1.8 The Authority, after preliminary analysis, sought data as regards the net-worth of existing operational and non-operational MSOs. In addition, information was also sought on the structure of business entities registered as MSOs. The information was necessary to correlate the existing structure of the MSOs with the proposal to consider entry level net worth. MIB vide its reply dated 27th August 2018 and dated 13th December 2019 provided the said information. (Copies attached as **Annexure-II(A)** to **Annexure-II(F)**.

⁴ https://www.broadcastseva.gov.in/Landing%20Page%20Documents/Satellite%20TV%20Channels-2017-5-19/FinalUplinkingGuidelines05.12.2011.pdf

⁵ https://mib.gov.in/sites/default/files/headend.pdf

1.9 The eco-system of Distribution Platform Owners with Direct-To-Home (DTH) players, HITS Operators, IPTV Players and MSOs is quite exhaustive. Different players are operating across the country making the choice of TV service provider available to the consumers. The present active subscriber base of major DPOs and the areas of their presence is as per table below:

Table - 1 (Number of Subscribers of Major MSOs as on 1st April 2019)

S. No.	Name of DPO	Active Subscriber Base (mn)	State-wise Area of Operation
1	Siti Networks Ltd	11.13	Punjab, Karnataka, Rajasthan, Kerala, Delhi, Uttar Pradesh, West Bengal, Jharkhand, Madhya Pradesh, Haryana, Odisha, Chhattisgarh, Andhra Pradesh, Telangana & Bihar
2	Den Networks Limited	7.03	Gujarat, Karnataka, Rajasthan, Kerala, Uttarakhand, DELHI-NCR, Uttar Pradesh, West Bengal, Jharkhand, Madhya Pradesh, Haryana & Bihar
3	Hathway Digital Pvt. Ltd	6.69	Delhi, Karnataka, Madhya Pradesh, Maharashtra Rajasthan, Tamil Nadu, West Bengal & Telangana
4	GTPL Hathway	5.25	Rajasthan, Gujarat, Madhya Pradesh, Maharashtra, Telangana, Andhra Pradesh, Bihar, Jharkhand, West Bengal & Assam
5	IMCL	4.54	Delhi, Uttar Pradesh, Haryana, Maharashtra, Gujarat, Karnataka & Andhra Pradesh
6	Fastway	4.01	Punjab, Himachal Pradesh, Haryana, Uttar Pradesh, Uttarakhand & Chandigarh
7	ARASU(TACTV)	3.22	Tamil Nadu
8	KCCL	2.13	Kerala
9	TCCL	1.59	Tamil Nadu, Andhra Pradesh & Pondicherry
10	Asia Net	1.45	Kerala, Karnataka, Andhra Pradesh & Telangana
11	e-Digital	1.25	Karnataka, Andhra Pradesh
12	KAL Cables	1.2	Tamil Nadu, Andhra Pradesh & Pondicherry
13	VK Digital	1.1	Tamil Nadu, Andhra Pradesh, Karnataka & Pondicherry
14	UCN	1	Maharashtra & Madhya Pradesh
15	Act Digital	0.74	Karnataka, Andhra Pradesh & Telangana
Total		52.33	

Table-2

DTH Operators – Subscribers as on 1st April 2019 (Pan India)			
S.No. Name of DPO Active Subscriber Base (mn)		Active Subscriber Base (mn)	
1	Dish D2H	16.6	
2	Airtel	12.1	
3	SUN Direct	6.7	
4	Independent TV	1.34	
5	Tata Sky Limited	14.35	
Total		51.09	

1.10 In addition to large MSOs and DTH operators as above, there are more than 1100 active MSOs across the country. More than five hundred such MSOs have a subscriber base less than 2500. Graph number 2 shows the subscriber wise frequency distribution chart of MSOs across the country.⁶



Graph 2: Subscriber wise Frequency Distribution of MSOs

1.11 To consider the issues in totality and to seek the suggestions/ comments from stakeholders, TRAI issued a consultation paper on "Entry Level Net worth

 $^{^{\}rm 6}$ Ministry of Information and Broadcasting data dated 21.1.2019

requirement of Multi-system Operators in Cable TV services" on 9th April, 2019. The last date for submission of the comments was 15th May 2019 and that of the counter comments was 22nd May 2019. The Authority received eighteen (18) comments and two (2) counter-comments. The comments⁷ and counter-comments are available on TRAI's website (www.trai.gov.in). Subsequently, an Open House Discussion (OHD) was held on 11th June 2019, in Delhi, to seek the views of the stakeholders on various issues. 31 stakeholders participated in the OHD, with 6 industry associations, 12 Broadcasters, 5 MSOs, 3 LCOs and 5 private individuals.

- 1.12 Based on the written submissions of the stakeholders and the discussions in the OHD, the issues have been examined in depth and recommendations have been framed.
- 1.13 The issues relating to the fixation of Entry Level Net worth of MSO in Cable TV services raised in the Consultation Paper, responses received from the stakeholders, analysis, and the recommendations have been covered in Chapter 2. The responses were widely divergent, and the Authority has taken a comprehensive view after due synthesis to arrive at the recommendations.
- 1.14 The summary of recommendations has been provided in Chapter 3.

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 $^{^{7}\,\}underline{\text{http://main.trai.gov.in/consultation-paper-entry-level-net-worth-requirement-multi-system-operators-cable-tv-services}$

CHAPTER 2:

ISSUES AND ANALYSIS

2.1 As per the Companies Act 2013 Section 2 (57),

"Net worth" means the aggregate value of the paid-up share capital and all reserves created out of the profits and securities premium account, after deducting the aggregate value of the accumulated losses, deferred expenditure and miscellaneous expenditure not written off, as per the audited balance sheet, but does not include reserves created out of revaluation of assets, writeback of depreciation and amalgamation;

- 2.2 Conceptually, Net worth is the value of all the non-financial and financial assets minus the value of all its outstanding liabilities owned by an individual or institutional unit.
- 2.3 As per Cable Television Network Rules 1994 (as amended), an applicant seeking license for operating as an MSO may be an individual, an association of individuals or body of individuals, whether incorporated or not, or a company. The eligibility criteria for an applicant Multi-System Operator as per rule 11(B)⁹ are as follows:
 - a) where the applicant is a person, he shall be a citizen of India and not less than eighteen years of age;
 - b) where the applicant is an association of Individuals or body of individuals, whether incorporated or not, the members of such an association or body shall be citizens of India and not less than eighteen years of age;
 - c) where the applicant is a company, such company shall be a company registered under the Companies Act, 1956 and shall be subject to such

⁸ http://www.mca.gov.in/SearchableActs/Section2.htm

⁹ Cable TV Amendment Rules 2012, http://digitalindiamib.com/cable_rules,2012.pdf

- conditions relating to foreign direct investment as may be decided by the central government;
- d) the applicant shall not be an undischarged insolvent;
- e) the applicant shall not be a person of unsound mind as declared by a competent court;
- f) the applicant shall not be convicted of any criminal offence.
- 2.4 An MSO has to make substantial investment for setting up the headend(s) and other components of the network. Further, additional investment is necessary for expansion of the network. The equipment also requires continuous technology up-gradation. In addition, as a business entity, an MSO faces competition from other service providers, thereby necessitating expenditure on marketing, sales and value-added services. Net-worth of a business entity may be an important parameter for gauging its financial standing.
- 2.5 The main equipment required by the MSO for start of operations are Satellite receiver and distribution equipment, Head end equipment including CAS and SMS. In addition, the MSO require to invest in Customer Premises Equipment and the rolling stock of other transmission and field items. A sample block schematic of an MSO headend and control room is as given in figure-2:

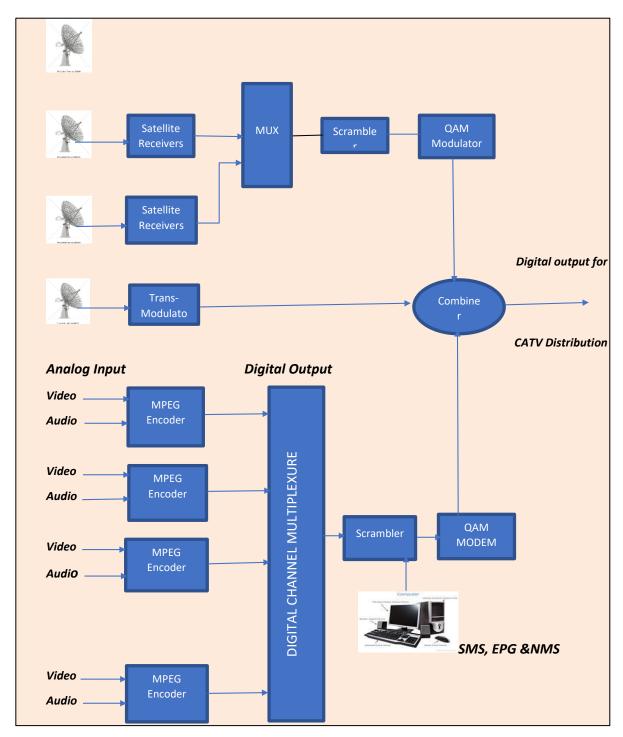


Figure -2: Block Diagram of a Digital Headend

2.6 The nature of competition in the market as well as high upfront investment can itself ensure that firms having adequate financial strength only enter the field. As such there has been no specific study or information on MSOs

becoming unviable. However, only 77.7 % of the registered MSOs are actually operational¹⁰.

- 2.7 The reference from MIB specifically mentioned that area of operation (i.e. district/s, state/s or pan India basis) and fixed/ variable costs may be kept in view while considering the issues as regards to the fixation of entry level net worth for MSO registration.
- 2.8 In accordance with the MIB reference and with a view to identify the factors to determine an entry level net-worth for the MSO Registration, the Authority raised various pertinent issues in the Consultation Paper (CP) on different relevant aspects covering following sub-heads:
 - a. General issues with regards to the eligibility and net worth.
 - b. Criteria based on the area of operation and relaxation of entry level net worth, if any, for North-East and J&K.
 - c. Criteria based on fixed & variable cost and scale of operation.
 - d. Documents required for assessing the net worth.
- 2.9 Responses received from the stakeholders in the form of comments, countercomments and submissions during the Open House Discussions on the issues listed above have been duly deliberated and analysed in the following sections.

A. General issues with regards to the eligibility and net worth:

2.10 The fundamental point of the MIB reference is, whether there is a need for prescribing an entry level minimum net worth for the MSOs. If so, what should be the procedure to check and verify the net-worth in case of individual or group of individuals including business entities like proprietor-ship firm, partnership firm, LLP or Company?

¹⁰ Ministry of Information and Broadcasting data dated 27th Aug 2018 (Annexure II-A) and revised data dated 21.1.2019 in which operational MMSOs are 1143 including 2 provisionally registered MSOs.

- 2.11 A few stakeholders', including broadcasters, their associations and few MSOs are in favour of prescribing an entry level minimum net worth for the MSOs. These stakeholders contended that MSO business, being capital intensive, requires a considerable funds to create basic infrastructure. Coupled with requirement of a substantial working/operating capital, for providing a good quality of service, the total capital required is quite substantive. In addition, there were some comments suggesting that MSO registration should only be considered for registered business entities and there is no need to consider individuals or group of individuals for registration as MSOs.
- 2.12 On the contrary, quite-a-few other stakeholders have suggested that there is no need to redefine the net worth for MSOs as it will help only the established businesses. The business has to encourage talented, service minded entities including new generation entrepreneurs. Also, cable TV business has run successfully for nearly three decades and stabilized. Introducing new norms may unsettle the established, self-funded business model adopted by most MSOs.
- 2.13 As regards the basis of evaluating the net worth of individuals or group of individuals, there were comments that the net worth may be gauged from Bankers Certificate, Income tax return for last three years, property tax payment, Succession certificate, Property documents, Digital Portfolio from DP service provider, Investment documents, CIBIL report etc. However, some stakeholders agreed that specifying a standard format may be useful.
- 2.14 During the Open House Discussion, the views of stakeholders were more inclusive and balanced. Most of the stakeholders (some even going beyond their earlier comments) were not in favour of prescribing any entry level net worth criteria for registration. The arguments advanced during the deliberations were based on the current vibrancy of the sector wherein many operators had started as small business entities. It was noted that some of those who started as individuals are still active due to their dedication and efforts and are adopting sound business practices. Some participants also highlighted associated complexities that may arise due to the of applicability of net worth criteria on the existing players. The stakeholders commented in

detail that the applicability of such revision on existing payers, especially to those seeking renewal of their registration, may raise needles complications. It may be possible that some existing MSOs may not qualify on net-worth criteria. Some stakeholders suggested that the revised rules may only be applied to new applicants. However, others argued that such exemption to existing players will be anti-competitive and discriminatory for new entrants. They also felt that it may work as entry barrier.

Analysis:

- 2.15 While analysing the divergent views on the need of net worth criteria, it is seen that those who favoured definining of Networth felt that MSOs must have financial strength to invest in sales and marketing and value added services to stay in this competitive and capital intensive sector. However, based on the data received from MIB it is found that the declared net worth among current active MSOs varies from less than Rs. One lac to well over a Crore. On the other hand, among the non-operational MSOs also similar variance of net worth from less than Rs. One Lac to well over a Crore INR was noticed. As such, there seems to be no direct correlation between the net-worth of an applicant and successful operations. Further, in a Digital Addressable System (DAS) based environment, the quality of service is dependent on the CAS and SMS system. Once a DAS based system is established properly in full compliance to the regulatory provisions and made functional, it ensures the Quality of Service (QOS).
- 2.16 In any regulatory regime the purpose of any eligibility criteria in terms of net worth would be to assure the registration authority that the public resources or scarce resources if any, granted on such registration, are put to most efficient usage. In case of MSO registration, no public or scarce resources are granted for exclusive or non-exclusive use. Another purpose for fixation of entry level net worth-based eligibility criterion can be to bring seriousness to business. However, MSOs are granted registration as per their application on non-exclusive basis. They are further allowed to operate in any part of the country irrespective of their registration for specified DAS notified area. Thus,

the sector is by design already a multi-operator and competitive sector with presence of other MSOs as well as DTH players. Fixation of net worth based eligibility criteria seems unwarranted from this perspective either, as there is no limit on number of service providers that can provide service in a defined area. As a business entity the MSO in the course of running the business will necessary be involved in the financial transaction with other market players, in action. Such conditions would prevail in any business. Any entity runs its business by integrating itself into the system between suppliers and buyers.

2.17 In addition, the New Regulatory Framework¹¹ for the Broadcasting and Cable TV sector, which has come into effect from 29th December 2018, also prescribes norms for establishing the headend and other equipment. The Telecommunications (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations 2017' lay down the minimum QOS standards and it is incumbent upon every MSO to maintain the same. The Telecommunications (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations 2017' (hereinafter referred as the Interconnection Regulations) prescribe the technical and techno-commercial criteria that are to be met by the MSO. The schedule III of the 'Interconnection Regulations' lays down the technical parameters and the benchmarks. Regulation 10(6) of the 'Interconnection Regulations' prescribes that the equipment and head-end deployed by the MSO must fulfil these criteria. As per provisions [Regulations 10 (7) of the 'Interconnection Regulations'] a Broadcaster can cause audit of the systems and equipment of the MSO, if it considers that the same does not fulfil the criterions as prescribed vide schedule III of the Interconnection Regulations 2017. As the regulatory framework provides adequate details and clarity, any new applicant would be well aware of the requirements. This in-turn also means that such entity would be aware of the requisite investments into the system. Thereby the present set-up makes the MSO business market driven and it is the entrepreneur's self-assessment that enables the business. Therefore, QOS

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¹¹ The 'Telecommunications (Broadcasting and Cable) Services Interconnection (Addressable Systems) Regulations 2017', 'The Telecommunications (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations 2017' and the 'Telecommunications (Broadcasting and Cable) Services (EIGHTH) (Addressable Systems) Tariff Order 2017, together are termed as New Regulatory Framework.

related concern does not warrant fixation of entry level net worth for MSO registration.

- 2.18 Some broadcasters have expressed the view that ascertaining the financial strength of MSO is necessary as they provide content to the MSOs without any advance payment. Generally, as per business and billing cycle, at least two months of payments of broadcasters remain due from MSOs. It is important to note that it is a general business activity where vertically integrated suppliers provides material or content to the next level in the distribution value chain. The provision of TV Channels to MSOs is a normal business activity that is carried out as per the terms of agreement between a broadcaster and an MSO. Any outstanding or unpaid dues can be settled as per the terms of such contracts. Prescription of an entry level net worth is not likely to address the issues related to non-payment or delayed payment by MSOs.
- 2.19 The 'New Regulatory Framework' has not only addressed many of the market asymmetries prevailing earlier in the sector but also introduced provisions that enable smaller MSOs. A detailed white paper¹² has been published and issued by TRAI that highlights the benefits of new framework for small MSOs. The new framework provides an enabling environment for aspiring LCOs to move further in their business and become an MSO either on their own or by forming LCO groups (in form of Cooperative or joint associations). The new framework, in this regard fulfils the policy objectives of the government of India to promote entrepreneurship and enable small business. As the new framework has come into force quite recently, it will be prudent that the opportunities continue to remain available for such vertical upgradation to the existing last mile players of the industry. Introduction of minimum net worth as eligibility criteria for MSO registration is likely to stifle these last mile operators, especially the smaller players.
- 2.20 The MSO is an important link in the television distribution chain. Given the diversity of the country where vernacular language changes in every twenty five to fifty kilometres, the local MSOs can provide a platform where local

¹² https://main.trai.gov.in/sites/default/files/WhitePaper 23042019.pdf

content is distributed on the local platform channels. One might consider that India has more than 1000 operational MSO which is quite large a number, yet given the size of the country, there is ample scope for further development and expansion of the sector. From the point of plurality and diversity of content the regional MSOs are necessary in the cable TV sector as they can better provide the program diversity to cater to the regional/local tastes. A minimum net-worth criterion or entry could discourage the growth of smaller MSOs in far-flung areas and in-turn may hinder the incubation and growth of local and regional channels. Thus, an entry barrier like fixing a minimum net-worth requirement may adversely affect overall program diversity and development of local and regional content.

- 2.21 The Authority recommends that there is no necessity for fixation of a minimum entry level net worth for MSO registration. As at present, any individual, company, Corporate firm or LLP that fulfils provisions of the Cable TV Rules, may be granted MSO registration.
- 2.22 As per above, it is concluded that fixing a minimum entry level net-worth criterion is not necessary. However, in view of the specific mention in the MIB reference to consider area of operation or fixed and variable costs criteria as the basis for prescribing a minimum net worth, it has been analysed from these perspectives as-well in the following sections.

B. Net-Worth Criteria based on the area of operation and relaxation of entry level net worth, if any, for North-East and J&K.

2.23 The stakeholders' opinion seems to be divided on the issue of whether to prescribe an entry level minimum net worth for the MSOs on the basis of the area of operation and if so, what should be the mechanism and criteria to classify existing MSOs. Most of the broadcasters, their associations and few MSOs are of the view that an entry level minimum net worth for the MSOs must be based on the area of operation i.e. National Level (catering to five states or more), State level (catering to less than five states) and District level (catering to

one district or more). They felt that existing MSOs are to be reclassified on basis of existing area of operation & should meet minimum net worth criteria. Further, license of the existing MSO is to be revoked and fresh license needs to be issued depending upon their choice of area of operation.

- 2.24 Further, broadcasters in general have expressed that area-based registration will be helpful and reflected upon the TRAI recommendations on 'Restructuring of Cable TV Services'¹³ made in July 2008. Vide the said recommendation the authority recommended minimum net worth based on proposed area of operation. Ministry of Information and Broadcasting, while accepting some of the recommendations had prescribed entry fee of Rs One Lakh only for MSO registration. However, at that time, no amount was fixed for the net worth.
- 2.25 On the other hand, many MSOs, LCOs and their associations are of the view that since MIB has permitted operation on pan India basis, there is no logic to prescribe net worth on the basis of the area of operation.
- 2.26 Some stakeholders referred to the MIB notification no. 2/108/2015-DAS dated 27/01/2017 and suggested that the Authority must consider the background and reasons for the said circular. They dwelt upon the issues arising out of frequent requests to MIB for expansions/ extension of their registration as MSOs. The stakeholders also brought the issue of time taken in processing the registrations for MSOs.
- 2.27 During the deliberations in Open House, majority including the representatives of major MSO associations submitted that it is not practical to introduce area of operations-based registrations. The house in general discussed the issues arising out of area-based registration. Questions were raised as to who will enforce the area-based license? What will be the oversight mechanism? What will happen to existing registered MSO? Will they be limited to some area of operation immediately or there will be a review at the time of seeking renewal of registration?
- 2.28 The general opinion except one/ two stakeholders in Open House Discussion was not in favour of area of operation-based criteria. It was also pointed out

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¹³ https://main.trai.gov.in/sites/default/files/recom25july08.pdf

that due to demographic variation from region to region, such a classification can't be applied uniformly.

Analysis:

- 2.29 As per the guidelines issued by the MIB vide notification No. 2/108/2015-DAS dated 27/01/2017, all registered MSOs are free to operate in any part of the country, irrespective of registration for specified DAS notified area(s) granted by the Ministry of I&B. This development is aligned with the final implementation of the DAS regime. Pursuant to implementation of DAS, quite-a-few MSOs expanded through the merger and joint venture route. Almost all large MSOs have multiple joint ventures in different regions. By reintroduction of any registration based on the area of operation, all the issues that caused the issuance of above-mentioned letter will re-surface causing hindrance to stakeholders.
- 2.30 The New Regulatory Framework vide interconnection regulations 2017 ¹⁴, regulation 11 (2) provides for conditions and enabling provision vide which an MSO can expand territory of interconnect agreement while expanding to new areas. The purpose of the said regulation is explained in the Explanatory memorandum to the said regulations vide para 113, 114 and 115. As per para 115, 'The Authority noted that in non-addressable systems, due to the requirement of specific assessment on the basis of a ground survey for number of subscribers before entering into interconnection agreement for a territory, separate agreements were required. These requirements no more exist after the emergence of the addressable systems and recording of subscriber details in the SMS. It is in the interest of broadcasters that reach of their channels is increased so that they get better subscription revenue as well as the advertisement revenue.'
- 2.31 From the above, it is explicit that the DAS implementation has enabled a new system, whereby the emphasis has shifted from area of operation to the actual number of subscriptions. It is on record that in its recommendations on 'Restructuring of Cable TV Services'10 in July 2008 the authority had

¹⁴ https://main.trai.gov.in/sites/default/files/Interconnection_Regulation_03_mar_2917.pdf

recommended area wise registrations for MSO. However, at that time the context was different. The sector was evolving from an unorganized, informal structure and was primarily analog transmission with no addressability. Since the implementation of DAS the context and the structure of Cable TV distribution have undergone a change and the sector has evolved to a formalized structure. Therefore, the said recommendations do not hold merit now, in view of the changed market and distribution structure.

- 2.32 The Authority recommends that there is no basis for introducing minimum net worth classification based on the area of operation for MSO registration. The DAS system enables subscription-based billing and there is no rationale for introducing area-wise registration.
- 2.33 As the area-wise minimum net worth classification for registration of MSO is not required, there is no need to prescribe minimum net worth for remote areas of Jammu & Kashmir or North-East region.

C. Criteria based on fixed & variable cost and scale of operation.

- 2.34 The issue has also been examined from the point of view of the correlation of fixed/variable cost with the scale of operation i.e. on channel carrying capacity and also on the proposed number of subscribers.
- 2.35 A typical MSO requires to put core equipment at its Head-end and control centre. The equipment includes subs-systems for: 1) Satellite signal receivers; 2) Head-End Equipment; 3) CAS/ SMS system; 4) Mux/ De-Mux and Switches; and 5) Electrical/ Electronic infra (Power systems/ UPS etc.). Indicative network diagram of a typical MSO Headend and Control room is as shown in figure-2 (page 12).
- 2.36 The investment on the equipment and the network varies to a great extent. A typical estimate provided by M/s BECIL India Ltd for a 250 Channel capacity

with few HD channels and MPEG4 Headend costs ~Rs. 27.53 Lac. (Annexure-III). However, there are variable costs on account of the Set-Top-Box (STB), Transmission system etc. Sometimes MSOs lay their own intracity fibre across various parts of the city to extend their signal to various LCO / societies etc. Such costs have wide variance and cannot be uniformly applied for large number of MSOs. One stakeholder has submitted that a head-end cost may vary from Rs. 40 lacs to Rs. 2 Crore depending upon the quality of equipment.

- 2.37 While the estimated cost as projected by different stakeholders varies from Rs. Ten Lacs to Crores for similar network sizes, opinion on applicability of fixed & variable costs on net worth was also divided. Some stakeholders suggested that if there is a registration process, then the capacity to establish the infrastructure must be checked before issuance of the registration. One stakeholder suggested that the applicant must provide his project plan and projected subscriber base in first year of operation.
- 2.38 Some other stakeholders have opined that net-worth based on fixed/variable cost may not be accurate measure as it varies from operator to operator. Fixed cost may vary on the channel carrying capacity (total number of channels carried by an MSO) of head-end/number of STBs to be seeded. The variable cost may depend upon the number of subscribers catered in a coverage area. One of the stakeholders suggested that there is a minimum investment required to start operation as an MSO. Further, a new entrant needs to have infrastructure to carry at least 300 channels for it to be able to sustain in the market. Also, the channel carrying capacity of the head-end has no direct linkages to the number of subscribers it can serve. The subscriber capacity is more dependent upon type of Conditional Access System and Subscriber Management System along with the transport network deployed in the network.

Analysis:

2.39 At present, the MSOs after receiving the registration from MIB, are required to report to the Ministry about the start of their operation along with the capacity

of their network/ head-end. A standard clause in the registration letter states, "You have to operationalize the service within 6 months of issue of this registration. If you operationalize the service in any part of the country, it would be treated as fulfilment of this condition on your part. However, you have to submit the details of the Headend, SMS, Subscriber list and a self-certificate that you are carrying all the mandatory TV channels, within six months from the date of MSO registration, to the Ministry of Information & Broadcasting, failing which your MSO registration is liable to be cancelled/ suspended." The ministry depends on the information provided by the newly registered MSO to ascertain its status of operation.

- 2.40 The Authority considered the views of the stakeholders that have suggested that MSO is required to invest in a minimum number of channels in order to remain competitive. An MSO incurs upfront cost on the establishment of headend, CAS & SMS installation, STB deployment and laying of the cable. However, while granting the registration to an applicant MSO, the Government does not allocate any public resources exclusively. The guidelines do not stipulate that only a certain number of applicants can be registered for a certain area. An applicant faces competition not only from other MSOs but also from multiple DTH players who have pan India presence.
- 2.41 For a registration, an applicant is required to pay Rs One Lakh as upfront registration fee. The registration enables the said entity to seek signals from broadcasters as per interconnect regulations. However, it has to first satisfy the broadcasters with its head-end and network in regard to its conformity to DAS system. So, an MSO has make upfront investments in its headend and control centre before it can carry out any business operations. Essentially, an applicant seeking registration is aware that as soon as it gets a registration, an investment will be required to establish the head-end, CAS, SMS and other equipment. In this way, the MSO business is akin to any other business entity where an entrant establishes a new business by taking entrepreneurial risk. Adding a requirement of any entry level net worth can at best be an additional entry barrier without any distinct advantage.

- 2.42 Any new applicant must make their own business plan to survive in the competitive market. It is the decision of the applicant MSO to maintain necessary capital and working capital for smooth conduct of business. Naturally, in case of operation of business in free market, there is no need for any stipulation by the Government. Any business entity has full freedom as to how it manages the resources such as land, labour and capital.
- 2.43 As the network cost can vary from a few lakhs to a few crores, no objective criteria can establish a value on the basis of fixed or variable costs that can be fixed as entry level net worth criteria. Any fixation of net worth based on network cost does not create identifiable benefit or help the orderly growth of the sector. Such criteria may rather impinge upon the free entrepreneurial spirit of the last mile player and may affect the business adversely.
- 2.44 The Authority recommends that there is no merit in introducing minimum net worth for registration of MSOs based on network cost criteria.

D. Documents required for assessing the net worth.

- 2.45 An integral issue related to net worth based eligibility criteria would be regarding documents to be furnished at the time of registration. The documents should be able to ascertain the net worth for individual applicants as well as for other categories i.e. body of individuals, partnership firms and companies. Should some suitable proforma for establishing the net worth for the new applicants be prescribed?
- 2.46 On this issue stakeholders, not in favour of considering individuals for registration as MSO, were of the opinion that it would be difficult to gauge the net worth of individuals because there is no statutory requirement for them for preparing Balance Sheet and Profit & Loss statements. For other entities it was opined by such stakeholders that documents like Profit & Loss statements, Income Tax Returns, Auditors' certificates, certificates from registered Chartered Accountants etc could be used to verify net worth. On

the other hand, some stakeholders were of the view that net worth of individuals can be verified from documents like income tax return of last 3 years, property tax payment details, inheritance documents such as succession certificates, CIBIL reports etc.

2.47 Regarding proforma for calculation of net worth, general opinion was in agreement with the sample proforma which was provided in the consultation paper. There were some suggestions to incorporate FDI component, if any, in the sample proforma.

Analysis:

- 2.48 As per Cable Television Network Rules 1994, an applicant seeking license for operating as an MSO can be an individual, an association of individuals or body of individuals, whether incorporated or not, or a company. Further, as per the Registration procedure of MIB for MSO, there is no stipulation in terms of a minimum net worth requirement. Applicants are only required to produce a certificate of net worth along with Balance sheet and P&L account etc.
- 2.49 An applicant entity can be an existing player or a new entity. As per the statutory requirements for an existing business entity, the companies are required to prepare Balance sheet and P&L account¹⁵. Further, in the case of firms, the obligation to maintain book of accounts and audited financial reports is governed by sections 44AA and 44AB of Income Tax Act. Firms are required to maintain book of accounts, if the income from business, total sales, turnover or gross receipts exceeds a certain minimum amount. In case of new entities, either individuals or firms or companies, it is not possible to produce balance sheets and other financial reports. Therefore, in such cases, to ascertain net worth, different procedure for assessing the net worth will be required.
- 2.50 It can be seen from the preceding comments that the parameters for assessment of net worth may be different for different categories of entities and

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¹⁵ As per section 129 of The Companies Act, 2013.

also depend upon whether it is an existing concern or a new entity. In such a situation, without prejudice to the applicability or otherwise of minimum net worth as an eligibility criteria for MSO, a standard proforma conforming to definition of net worth as per Companies Act and having provisions applicable to different category of applicants is desirable in order to have uniformity and clarity in self declaration of net worth by applicants. In this regard a suggested template is annexed at Annexure-IV, which may be suitably augmented to make provisions for applicable parameters for different categories of applicants.

2.51 The Authority recommends that MIB may prescribe a standard proforma for self-declaration of net worth by applicants seeking registration as MSOs.

E. Other Factors:

- 2.52 The consultation process focused on the factors related to financial parameters and fixing of the net worth criteria on certain quantifiable parameters as per the MIB reference. However, some stakeholders raised some other pertinent issues. Though these may not have direct bearing on the issue of net worth, the Authority considers it prudent to deal with these issues also.
- 2.53 Few stakeholders suggested that many MSOs suffer due to supply of inferior quality encoder etc. by the network equipment suppliers. Many times, the small operators with limited technical know-how and limited means are unable to comprehend the difference between various types and end-up buying sub-standard equipment. While the Set-Top-Box has got BIS Standards, no other equipment related to DPO operations has minimum applicable standards for conformity. Not only the hardware equipment's standard is necessary, there is issue with software standards and conformity for CAS and SMS equipment. Being integral part of the DAS based system, it is necessary that certain benchmark testing or certification of the equipment is prescribed. This will help small and medium size new MSOs and it is these who are likely to end up buying sub-standard equipment for saving initial

- capital. The authority has noted a few cases where the CAS/ SMS suppliers have withered away or the supplier of CAS/ SMS from an international vendor is not providing technical support.
- 2.54 As regards the CAS system, it is noteworthy that Ministry of Electronics and Information Technology (MeitY) has actively engaged itself in development of Indian CAS (iCAS) and also provided monetary support for the same. The Ministry may like to consider taking necessary measures with relevant agencies/ bodies like BIS or TEC or similar agency to specify standards for the equipment.
- 2.55 Stakeholders also raised the issue of lack of technically skilled manpower availability for the MSOs. The Authority vide its recommendations on 'Ease of Doing Business' has suggested the Ministry to consider establishment of 'Broadcasting Centre of Excellence' to cater to the skilled manpower need of this sector. The MSOs also require technically competent skilled manpower to manage the network and equipment. MIB may consider coordinating with Ministry of Skill Development to introduce skill certificate short term/ medium term courses for providing trained manpower to MSOs.
- 2.56 The Authority recommends that MIB may consider skill development requirement of the sector and take appropriate action so that trained manpower is available to perform specialised task.

CHAPTER 3:

SUMMARY OF RECOMMENDATIONS

- The Authority recommends that there is no necessity for fixation of a minimum entry level net worth for MSO registration. As at present, any individual, company, Corporate firm or LLP that fulfils provisions of the Cable TV Rules, may be granted MSO registration. [Para 2.21]
- 2. The Authority recommends that there is no basis for introducing minimum net worth classification based on the area of operation for MSO registration. The DAS system enables subscription-based billing and there is no rationale of introducing area-wise registration. [Para 2.32]
- 3. As the area-wise minimum net worth classification for registration of MSO is not required, there is no need to prescribe minimum net worth for remote areas of Jammu & Kashmir or North-East region. [Para 2.33]
- 4. The Authority recommends that there is no merit in introducing minimum net worth for registration of MSOs based on network cost criteria. [Para 2.44]
- 5. The Authority recommends that MIB may prescribe a standard proforma for self-declaration of net worth by applicants seeking registration as MSOs. [Para 2.51]
- 6. The Authority recommends that MIB may consider skill development requirement of the sector and take appropriate action so that trained manpower is available to perform specialised tasks. [Para 2.56]

No. 2/31/2016-DAS Government of India Ministry of Information and Broadcasting Room No.116, 'A' Wing, Shastri Bhawan, New Delhi

Dated 16 ff May, 2018

To,

Shri Sunil K. Gupta,
Secretary
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan
(next to Zakir Hussain College)
Jawaharlal Nehru Marg (Old Minto Road)
New Delhi: 110 002

Sub: Fixation of entry level net worth of the Multisystem Operator(MSO) for operationalizing Cable TV Digitization across the country.

The Ministry of Information & Broadcasting has been granting MSO registration to the desirous applicants since 2012 to operate in DAS notified areas. The Ministry is considering a fixation of entry level net worth of the areas. The Ministry is considering a fixation of entry level net worth of the Multisystem Operator(MSO) for operationalizing Cable TV Digitization across the country as Rule 11(3) of CTN Rules, 1994 speaks only of financial strength of the applicant for grant of MSO registration without defining it.

- 2. Since the Ministry is also carrying out changes in the Cable TV Rules for LCO registration, if the financial strength i.e. quantum of the Net-worth is fixed, the same will be incorporated in the Rule 11B under the eligibility for Multi System Operators. Further, the Net-worth of an MSO could be based on whether the MSO wants to operate in district/s, State/s or PAN India.
- 3. In view of the above, TRAI is requested to give the considered recommendations on the appropriate levels for Net-worth for fixation of entry level net worth of the Multisystem Operator(MSO) for operationalizing Cable TV Digitization across the country, keeping in view the fixed costs & the variable costs that are incurred in the operations.

Yours sincerely

Shanker Lal)

Deputy Secretary(DAS) Tel: 23385528

ANNEXURE-II(A)

By Speed Post

No. 2/31/2016-DAS Government of India Ministry of Information and Broadcasting Room No.116, 'A' Wing, Shastri Bhawan, New Delhi

Dated the 27th August, 2018

To.

The Secretary Telecom Regulatory Authority of India Mahanagar Doorsanchar Bhawan (next to Zakir Hussain College) Jawaharlal Nehru Marg (Old Minto Road) New Delhi: 110 002

Sub: Fixation of entry level net worth of the Multi-System Operators (MSO) for operationalizing Cable TV Digitisation across the country - regarding.

Sir,

I am directed to refer to TRAI's letter No. 21-02/2018-B&CS dated 25th July, 2018 regarding furnishing of certain specific details of MSQ's registration and operation in the above matter and to say that the Ministry has granted 1471 registrations to the MSOs to operate in DAS. Out of 1471 registered MSOs, 1121 MSOs are operationalize and they are feeding their STBs seeded in the MIS Portal developed by the Ministry.

- With regard to details of data in respect of registered MSOs, sought by the TRAI, it is submitted that the Networth of the MSOs available with the Ministry is quite old since these are submitted by the applicant at the time of submission of their application for MSO registration. Further, to access the Networth from all 1121 MSOs from their relevant files is not practically feasible. Accordingly, as decided by the Ministry, the requisite information in respect of 25 MSOs in each category i.e. Company, Partnership firm and Proprietorship is enclosed herewith for further necessary action.
- This issues with the approval of Competent Authority.

Yours sincerely,

Under Secretary(DAS)

Tel: 2338 1478

ANNEXURE-II(B)

LIST OF 25 MSOs IN INDIVIDUALS CATEGORY WITH THEIR DETAILS OF NETWORTH

S. No	Name of the MSO	Registration No.	Networth of the MSO as Declared by them in Form 6 (in Rs.)
1	Ashiana Communication Mcr	9/16/2012-BP&L	6,977,615.52
2	Live Satellite	9/64/2012-BP&L	25,186,969.39
3	Bhaskar Cable Network	9/14/2013-BP&L	15,000,000.00
4	Chandni Cable Network	9/111/2013-BP&L	24,748,672.00
5	International Digital Services, Mumbai	9/101/2012-BP&L	272,000.00
6	Krystal Cable Network	9/75/2013-BP&L	3,955,276.00
7	Nandini vision Cable Network	9/74/2013-BP&L	159,990.00
8	Poona Cable System & Services	9/39/2013-BP&L	249,850.00
9	Satellite Communication Network	9/35/2013-BP&L	569,950.00
10	Abhilash Communications	9/127/2013-BP&L	9,020,379.00
11	AJK T.V	9/106/2012-BP&L	4,105,988.00
12	Baba Enterprises Delhi	9/92/2012-BP&L	636,853.00
13	Citi Cable Network	9/112/2013-BP&L	11,813,136.00
14	J. K. Satellite	9/132/2013-BP&L	899,000.00
15	Mona Netvision	9/105/2013-BP&L	1,909,901.00
16	Antariksha Cable Network	9/236/2015-DAS	1,229,615.00
17	Atmkur Communication Network	9/203/2015-DAS	14,600.000.20
18	City Cable	9/410/2015-DAS	13.86 Lacs.
19	Chandrama Cable Network	9/309/2015-DAS	933,750.00
20	Damoh Cable Network	9/430/2015-DAS	Not Available
21	Amba Cable Network	9/177/2016-DAS	868,302.00
22	Aman Cable Network	9/64/2016-DAS	2,235,000.00
23	A S Cable Network	9/20/2017-DAS	2,737,470.00
24	Maithri Channel	9/46/2017-DAS	27,007,930.00
25	Aama TV Cable Network	9/05/2017-DAS	2,515,176.00

ANNEXURE-II(C)

LIST OF 25 MSOs IN PARTNERSHIP CATEGORY WITH THEIR DETAILS OF NETWORTH

S. No	Name of the MSO	Registration No.	MSO as declared by them in Form 6 (in Rs.)
1	Vaji Communications.	9/138/2012-BP&L	1,040,959
2	Ajanta Cable Network	9/18/2014-BP&L	Not Available
3	Bhima Ridhi Digital Services	9/144/2012-BP&L	5,620,000.74
4	Blue Sky Network	9/124/2013-BP&L	2,327,810.00
5	Home Cable Networks	9/98/2013-BP&L	22,500,000.00
6	Jai Mata Di Cable Network	9/62/2014-BP&L	3,638,366.00
7	Karuvai Communications LLP	9/53/2013-BP&L	Not Available
8	Sri Sai Communications	9/63/2013-BP&L	1,700,607.55
9	T.A. Digital Cable Network	9/115/2013-BP&L	6,028,800.00
10	Andaman Cable Network	9/156/2015-DAS	287,300.00
11	Balaji Cable Network	9/187/2015-DAS	102000
12	Ankita Star Vision	9/580/2015-DAS	47158460
13	Bharat Digital Cable Network	9/241/2015-DAS	11,333,153.00
14	Blue Star Digital Network	9/346/2015-DAS	18,991,423.00
15	AMA – ABA Multipurpose Co-Operative Society Limited	9/08/2016-DAS	32,809,071.00
16	Emami Cable Network	9/634/2015-DAS	6,194,366.00
17	World Vision Cable Network	9/399/2016-DAS	2,227,475.88
18	Venkata Sai Communications	9/446/2016-DAS	291,834.00
19	Ekta Cable Network	9/357/2016-DAS	1,254,238.00
20	Devi Cable TV Network	9/46/2015-DAS	11,256,400.00
21	Uttaranchal Cable Network	9/32/2014-BP&L	2,900,000.00
22	Surbhi Diginet	9/120/2016-DAS	11,305,647.00
23	Tanuku Communication Network	9/125/2014-BP&L	150,000,000.00
24	Master Channel Network	9/498/2016-DAS	1,225,000.00
25	Swasticom	9/511/2016-DAS	2,577,827.00

ANNEXURE-II(D)

LIST OF 25 MSOs IN COMPANY CATEGORY WITH THEIR DETAILS OF NETWORTH

S. No	Name of the MSO	Registration No.	Networth of the MSO as declared by them in Form 6 (in Rs.)
1	Advance Multisystem Broadband Communications Ltd	9/55/2012-BP&L	N/A
2	Barasat Cable TV Network Pvt. Ltd	9/61/2012-BP&L	2,317,273.24
3	Bhagyanagar Digital Services Pvt. Ltd. Hyderabad	9/99/2012-BP&L	File is not traceable
4	Bhawani Rajesh Cable And Digitech Services Pvt. Ltd	9/36/2012-BP&L	NIL
5	Citi Link Digital Networks Private Limited	9/66/2012-BP&L	2,797,999.00
6	City Online Services Ltd	9/108/2012-BP&L	37,484,672
7	Darpita Trading Company Pvt Ltd	9/29/2013-BP&L	34,898,023
8	Darsh Digital Network Pvt. Ltd	9/4/2013-BP&L	34,041,000
9	DEN Enjoy Cable Networks Pvt. Ltd.	9/30/2013-BP&L	73,378,844
10	Fastway Transmission Private Limited	9/353/2015-BP&L	43,487,790
11	Aadhar Digital Vision Pvt. Ltd	9/56/2012-BP&L	5,00,00
12	ABS Entertainment Pvt. Ltd	9/63/2012-BP&L	33,073,050.00
13	ACN Digital Pvt. Ltd	9/13/2014-BP&L	5,000,000.00
14	ACT Digital Home Entertainment Pvt Ltd.	9/137/2012-BP&L	2,471,000.89
15	Akash Tori Infocom Services Pvt.	9/144/2013-BP&L	Not Available
16	A.C.N Cable Pvt. Limited	9/44/2013-BP&L	34,711.256.00
17	ABS Digital Cable Pvt. Ltd	9/45/2014-BP&L	50000000
18	Cable Combine Communication Pvt. Ltd	9/161/2015-DAS	18,599,477.93
19	Agile Broadband Pvt. Ltd	9/244/2015-DAS	48,00000
20	Alwar Telelink Pvt. Ltd	9/308/2015-DAS	2198105
21	DL GTPL Cabinet Pvt. Ltd	9/134/2012-BP&L	469,000,000
22	Alleppepy Digital Pvt. Ltd	9/101/2016-DAS	365,750
23	High Media Infotainment India Ltd.	9/79/2017-DAS	20,615,562
24	Arkays Digital Media Pvt Ltd	9/80/2017-DAS	2,500,000
25	Hornbill Media Pvt. Ltd	9/15/2017-DAS	50,00000.00

No. 2/31/2016-DAS Government of India

Ministry of Information and Broadcasting Room No.116, 'A' Wing, Shastri Bhawan, New Delhi

Dated: 13th December, 2018

To.

Shri Rajesi Matto, Sr. Research Officer (B&CS), Telecom Regulatory Authority of India Mahanagar Doorsanchar Bhawan (next to Zakir Hussain College) Jawaharlal Nehru Marg (Old Minto Road) New Delhi: 110 002

Sub: Fixation of entry level net worth of the Multisystem Operator(MSO) for operationalizing Cable TV Digitization across the country.

Sir,

I am directed to refer to TRAI's letter No. 21-2/2018 B&CS dated 03/10/2018 regarding furnishing additional information for fixing quantum of networth required for grant of MSO registration.

- The information sought by TRAI is furnished as follows:
 - i) For Point a): Rule 11(3) of CTN Rules, 1994 speaks only of financial strength of the applicant for grant of MSO registration without defining quantum of net worth. Ministry is also carrying out changes in the Cable TV Rules for LCO registration, if the financial strength i.e. quantum of the Networth is fixed, the same will be incorporated in the Rule 11B under the eligibility for Multi System Operators.
 - ii) For Point b): The Ministry has been granting MSO registration to those applicants who have positive net-worth without fixing any minimum monetary ceiling.
 - iii) For Point c): The Ministry only considers the application of those applicants who have declared the net-worth.
 - iv) For Point d): No such data is maintained in the Ministry.
 - v) For Point e): The requisite information of 25 MSOs is enclosed herewith.
- This issues with the approval of the competent authority.

Thanking you,

Encl: As stone.

Yours sincerely, thanklal (3/14/8) (Shanker Lal)

Deputy Secretary(DAS)

ANNEXURE-II(F)

S.No.	Name of MSO	Registration No.	Net-worth
1	Microscope Winds David	with Date 9/528/2015-DAS	Declared in MSO
1	Microsense Wireless Pvt. Ltd	dt. 21/11/2016	8,13,191
2	N. Nagarajan	9/262/2015-DAS	1,30,00,000
		dt. 8/2/2016 9/367/2015-DAS	1,00,00,00
3	Nagar Cable Network	dt. 10/6/2016	95,81,634
4	Nakshyatra Enterprise	9/301/2015-DAS	4.01.500
		dt. 13/7/2015	4,01,568
5	Nathan Digital	9/174/2015-DAS	10,20,000
	Communication Pvt. Ltd	dt. 18/1/2016 9/130/2015-DAS	10,20,000
6	National Cable TV Nilgiris	dt. 21/7/2015	1,67,37,000
7	Novem Cable Nature 1	9/596/2015-DAS	
-	Nayan Cable Network	dt. 3/2/2016	19,30,000
8	Netsky News (p) Ltd.	9/350/2015-DAS	23,50,000
	Netvision Elegant Networks	dt. 27/5/2016	
9	Pvt. Ltd.	9/32/2015-DAS dt.	77,000
10		1/1/2016 9/486/2015-DAS	
10	New Mewar Vision	dt. 17/11/2016	6,00,000
11	Next Digital	9/434/2015-DAS	15,00,000
	Nilgiri Digital Services Pvt.	dt. 15/3/2016	15,00,000
12	Ltd.	9/376/2015-DAS	9,55,757
10		dt. 17/5/2016 9/199/2015-DAS	
13	Om Cable Network	dt. 29/3/2017	19,38,779
14	Om Cable Network	9/584/2015-DAS	24,60,000
	0.0000000000000000000000000000000000000	dt. 1/1/2016	24,00,000
15	Om Cable Network	9/207/2015-DAS dt. 2/6/2016	51,43,343
16	Dollars Nt. 1	9/270/2015-DAS	
10	Pallava Network	dt. 20/11/2015	50,59,000
17	Panduranga Cable Network	9/17/2015-DAS dt.	1,42,32,300
	and a second free world	29/3/2017	1,72,02,000
18	Paul Cable Operator	9/526/2015-DAS dt. 26/2/2016	14,99,620
19	Dominus I O' O 11	9/256/2015-DAS	
19	Periyakumal City Cable	dt. 12/1/2016	29,27,900
20	R.K. Digital Cable TV Network	9/461/2015-DAS	30,03,000
	Rainbow Digi Link Private	dt. 14/12/2016	
41 1	Limited	9/115/2015-DAS dt. 21/9/2015	10,00,000
		9/541/2015-DAS	
	Raj Cable Network	dt. 7/12/2015	25,79,000
(1)	Rajasthan Sky Television Pvt.	9/393/2015-DAS	89,000
	Ltd.	dt. 24/3/2017	05,000
24	RCN Digital	9/225/2015-DAS dt. 29/3/2017	14,61,000
25	Rockline Telecommunications	9/625/2015-DAS	
25	Pvt. Ltd.	dt. 11/3/2016	2,00,00,000

ANNEXURE-III

	Headend Estimate for 250 Channels					
SL. No.	Category	Equipment Name	QTY.	Par Unit Price (Approx.)	Total Cost (Approx.)	
	Satellite signal	Dish Antenna	5	20,000.00	100,000.00	
1	receiving and	Power Divider	30	250.00	7,500.00	
1	distribution	Connectors			10,000.00	
		Cable	300 Mtr.	20.00	6,000.00	
		ONLINE UPS 10 KVA with battery	1	250,000.00	250,000.00	
2	Infrastructure	Power Backup: Digital Generator	1			
	inirastructure	AC	2	50,000.00	100,000.00	
		False Flooring				
		RACKS	4	30,000.00	120,000.00	
		Headend		40,000.00	80,000.00	
	Head End	Computer ENCODER HD	2	185,000.00	185,000.00	
3	Equipment	ENCODER SD	3	125,000.00	375,000.00	
		IRD	1	160,000.00	160,000.00	
		QAM	1	170,000.00	170,000.00	
4	Switch	MANAGEMENT	1	20,000.00	20,000.00	
•	Switch	24 port IP DATA	1	50,000.00	50,000.00	
5	CAS	CAS SERVER	1	250,000.00	250,000.00	
	CAS	ENCRYPTOR	1	50,000.00	50,000.00	
6	6 SMS	Server	1	150,000.00	150,000.00	
		Software	1	400,000.00	400,000.00	
7	PSI/SI & EPG	Server	1	70,000.00	70,000.00	
		Software	1	100,000.00	100,000.00	
8	Professional Charges			100,000.00	100,000.00	
		Total			2,753,500.00	

(Source - Broadcast Engineers Consultants India Limited)

Suggested Template for calculating net worth for new entities

Net worth of	(Name of partner	/ Proprietor)

Listed (Quoted) investments in the name of the	
applicant (at market value)	
Margin of 30% on market value of listed (quoted)	
Investments	
Net value of listed Investments (A) – (B)	
Investments in unlisted (unquoted) companies (as per	
Note No. 2)	
Margin of 50% on (D)	
Net value of unlisted Investments (D) – (E)	
Other Investments (at cost) with PPF and NSC at	
with registered NBFCs, Bank FDs	
Total Net Investments (C) + (F) + (G)	
Market Value of Land & Building component of the	
Fixed Assets	
Margin on I at 50%	
Net value of such fixed assets (I – J)	
Debtors not exceeding 3 months + Cash & Bank	
balance	
Current Liabilities	
Long term liabilities	
Net worth $(H + K + L) - (M + N)$	
	applicant (at market value) Margin of 30% on market value of listed (quoted) Investments Net value of listed Investments (A) – (B) Investments in unlisted (unquoted) companies (as per Note No. 2) Margin of 50% on (D) Net value of unlisted Investments (D) – (E) Other Investments (at cost) with PPF and NSC at current value, Statutory deposits with Ace, Deposits with registered NBFCs, Bank FDs Total Net Investments (C) + (F) + (G) Market Value of Land & Building component of the Fixed Assets Margin on I at 50% Net value of such fixed assets (I – J) Debtors not exceeding 3 months + Cash & Bank balance Current Liabilities Long term liabilities

Date:

ANNEXURE-V

List of Abbreviations

Abbreviations	Description
DAS	Digital Addressable Cable System
DTH	Direct to Home
FTA	Free To Air
HITS	Head end In The Sky
LCO	Local Cable Operator
LLP	Limited Liability Partnership
MIB	Ministry of Information and Broadcasting
MSO	Multi System Operator
OTT	Over the Top
STB	Set-Top-Box
	IKAI