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**STANDING COMMITTEE ON
INFORMATION TECHNOLOGY
(2017-18)**

SIXTEENTH LOK SABHA

MINISTRY OF INFORMATION AND BROADCASTING

STATUS OF CABLE TV DIGITISATION AND INTEROPERABILITY OF SET TOP BOXES

FORTY-FOURTH REPORT



**LOK SABHA SECRETARIAT
NEW DELHI**

December, 2017/ Pausha, 1939 (Saka)

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Presented to Lok Sabha on 29.12.2017

Laid in Rajya Sabha on 29.12.2017



LOK SABHA SECRETARIAT

NEW DELHI

DECEMBER, 2017/ PAUSHA, 1939 (Saka)

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COMPOSITION OF THE STANDING COMMITTEE ON INFORMATION TECHNOLOGY

(2017-18)

Shri Anurag Singh Thakur - Chairperson

Lok Sabha

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3. Shri Prasun Banerjee
4. Shri Harishchandra alias Harish Dwivedi
5. Dr. Sunil Baliram Gaikwad
6. Shri Hemant Tukaram Godse
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Rajya Sabha

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| 2. | Shri Y.M. Kandpal | - | Director |
| 3. | Dr. Sagarika Dash | - | Additional Director |
| 4. | Smt. Geeta Parmar | - | Deputy Secretary |
| 5. | Shri Abhishek Sharma | - | Executive Assistant |

Committee constituted w.e.f. 1st September, 2017 *vide* Bulletin Part-II Para No. 5829 dated 26th September, 2017.

ABBREVIATIONS

AGR	Adjusted Gross Revenue
AIDCF	All India Digital Cable Federation
ARPU	Average Revenue Per User
BECIL	Broadcast Engineering Consultants India Limited
BST	Basic Service Tier
CAF	Consumer Application Form
CAM	Conditional Access Module
CAS	Conditional Access System
C-DOT	Centre for Development of Telematics
CI	Common Interface
COFI	Cable Operators Federation of India
CPE	Customer Premises Equipment
CPS	Cost per Subscriber
DAS	Digital Addressable Cable TV Systems
DEA	Department of Economic Affairs
DPOs	Distribution Platform Operators
DTH	Direct to Home
EPG	Electronic Programme Guide
FTA	Free to Air
HD	High Definition
IBF	Indian Broadcasting Foundation
ICRIER	Indian Council for Research and International Economic Relations
LCO	Local Cable Operator
LMO	Last Mile Operator
MIA	Model Interconnection Agreement
MIS	Management Information System
MSO	Multi System Operator
NBA	News Broadcasters Association
RIO	Reference Interconnect Offer
RoW	Right of Way
SIA	Standard Interconnection Agreement
SMS	Subscriber Management System
STBs	Set Top Boxes
TRAI	Telecom Regulatory Authority of India

INTRODUCTION

I, the Chairperson, Standing Committee on Information Technology (2017-18), having been authorized by the Committee to submit the Report on their behalf present this Forty-fourth Report on 'Status of Cable TV Digitisation and Interoperability of Set Top Boxes' relating to the Ministry of Information and Broadcasting.

2. The Standing Committee on Information Technology (2016-17) selected this subject for detailed examination and report to the Parliament. The examination of the subject could not be completed during the term of the Committee (2016-17). In view of the importance of the subject and considering the need for wider consultation, the Standing Committee on Information Technology (2017-18) re-selected the subject for further examination and report.

3. The Committee took evidence of the representatives of various bodies and organizations such as All India Digital Cable Federation (AIDCF) and Cable Operators Federation of India (COFI) on 12 June, 2017. The representatives of Indian Broadcasting Foundation (IBF) and News Broadcasters Association (NBA) appeared before the Committee on 13 July, 2017. The Committee also took evidence of the representatives of the Telecom Regulatory Authority of India (TRAI) on 19 July, 2017 and of Ministry of Information and Broadcasting on 25 July, 2017 and 16 October, 2017.

4. The Committee at their sitting held on 28th December, 2017 considered and adopted the Report. The Committee were immensely benefitted by the suggestions/contributions made by the Members of the Committee for which I express my sincere thanks to them.

5. The Committee wish to express their thanks to the representatives of the Ministry of Information and Broadcasting and TRAI for appearing before the Committee and for furnishing requisite written information on the subject. The Committee also wish to express their sincere thanks to the representatives of various bodies/organizations for appearing before the Committee and furnishing valuable information in connection with examination of the subject.

6. The Committee also place on record their appreciation for the invaluable assistance rendered by the officials of Lok Sabha Secretariat attached to the Committee.

7. For facility of reference and convenience the Observations/Recommendations of the Committee have been printed in bold letters in Part-II of the Report.

New Delhi;
28 December, 2017

07 Pausha, 1939 (Saka)

Anurag Singh Thakur
Chairperson
Standing Committee on
Information Technology

REPORT

PART I

I. Introductory

Cable TV forms the backbone of the broadcasting distribution industry. The cable industry has played a prominent role in the growth of the electronic media sector in the past 20 years. Despite the fast growth of the DTH services, cable services continue to dominate the distribution of TV channels as of today.

2. Cable TV service value chain comprises four main supply side entities *i.e.* Broadcaster, Multi System Operator (MSO), Local Cable Operator (LCO) and the end consumer. Broadcaster generates the content to be televised which is received by the viewer. Broadcasters transmit or “up-link” the content signals to the satellite. MSOs downlink the broadcasters’ signals from the Satellite, decrypt any encrypted channel and provide a bundled feed consisting of multiple channels to the LCO. The MSO business is dependent on the broadcaster for content and on the LCO for last mile connectivity and subscription revenue collection. MSO is required to have head-ends for receiving TV signals. LCOs receive bundled signals from the MSO and retransmit this to subscribers in their area through cables.

3. India is the world’s second largest TV market after China. India has 181 million TV homes, out of which about 54 Million (30 percent) have DTH connections, 93 Million (51 percent) homes have Cable TV, 22 Million (12.5 percent) homes have DD Free Dish and 12 Million (6.5 percent) homes have Terrestrial connections.

II. Drawbacks of analog Cable TV Systems

4. Prior to digitisation, cable networks were on analog mode wherein analog signals received from satellite receivers in a ‘single feed’. Multiple channels were delivered in a bundled feed and the subscribers had to accept whatever feed was delivered to them and they could not exercise their individual choice of channels. As

per the Background Note submitted by TRAI, the analog cable TV was afflicted with the following inherent drawbacks:-

- The analog system was able to carry only 70-80 TV channels. This severely restricted the choice to the subscribers and denied to subscribers a large canvas of channels available in the broadcasting universe.
- The quality of picture received at subscribers' end was relatively poor.
- The analog cable TV systems did not have the technological feature of facilitating a-la-carte (individual) selection of channels. This compelled the customers to go by the bouquet of channels devised by a cable operator, restricting a say of the customer in selection of channels. Thus, the analog regime was not customer friendly.
- Another severe technological limitation of the analog services was lack of transparency as subscriber base was not known accurately. This led to under reporting of subscription revenue and the consequent concealment of tax revenue. This also had an adverse impact on transparent flow of revenue among stakeholders resulting in litigations.
- The limited channel carrying capacities and lack of transparency distorted the business model for the stakeholders.

III. Benefits of digitization of cable TV services

5. Digitisation of cable TV services with addressability ensured the transmission of TV channels in encrypted mode. In this system, TV channel signals can only be received by subscriber, through a Set Top Box after due authorization from the service provider, thus, enabling identification and maintenance of data base for each subscriber. It improves transparency and prevents piracy of TV channels. Implementation of DAS benefited all stakeholders. The key advantages of digitization of cable TV services for various stakeholders are as follows:-

(i) Consumer

- Consumers can exercise their right to choose channels and pay only for those channels which they wish to watch, depending up on their budget.
- The number of channels offered to the consumers goes up from the 70-80 channels in analog to several hundred channels in digital transmission. It also enables subscribers to watch High Definition (HD) TV channels for better viewing experience.
- Like DTH and IPTV subscribers, digital cable TV subscribers also get improved signal quality of channels and have access to various value added and interactive services like Electronic Programme Guide, Movie-on Demand, Video-on-Demand, Personal Video, Gaming, etc.

(ii) MSOs and LCOs

- Digitisation of cable TV services enable the provisioning of Triple Play services *i.e.* voice, video, and data. Bundling broadband with digital channels is a promising proposition and a significant differentiator from DTH. This would enable them to compete effectively with DTH services, increase their Average Revenue Per User (ARPU) and enable convergence of Broadcasting and Telecom services. Broadband penetration in India will also increase through digitisation of cable TV services.

(iii) Broadcasters

- Broadcasters are able to carry on their business transactions on auditable and verifiable subscriber base instead of negotiated base. Taking advantage of digital dividend, broadcaster can offer more number of channels including high definition channels. They get value for their channels, commensurate to their quality. The channels are protected against piracy also.

(iv) Government

- Transparency in subscriber's base drastically brings down the losses that are caused to the Government by way of evasion of taxes.
- There would be enhancement in generation of tax revenue due to provisioning of broadband and other value added services over the same network.
- The digital cable TV network is vital infrastructure for penetration of broadband through which the e-Government services of both Central and State Governments can be accessed.

IV. TRAI Recommendations for Digital Addressable Cable TV Systems (DAS)

6. The exponential growth in the number of TV channels combined with the inherent limitations of the analog cable TV systems posed several challenges in the cable TV sector, mainly due to capacity constraints and non-addressable nature of the analog Cable TV networks. The evolution of technology paved a way for bringing digitization in the Cable TV sector. After studying the subject at length and undertaking a public consultation process, TRAI, on 5th August 2010, gave its recommendations to the Central Government for implementation of Digital Addressable Cable TV Systems (DAS) across the country along with a roadmap to achieve the same. TRAI, in its recommendations had, *inter alia*, recommended that digitalization with addressability be implemented on priority in cable TV services and,

accordingly, recommended a time frame comprising four phases for switch over from analog system to DAS in the cable TV sector.

7. For successful implementation of DAS, the Authority had also made the following recommendations to the Government:-

- Equipments, devices and accessories used by the cable TV service providers be compliant to relevant BIS standards.
- For implementing the sunset date for Analogue Cable TV services, the Cable Television Networks (Regulation) Amendment Act 2002, be suitably amended.
- The basic custom duty on digital head-end equipments and STBs be reduced to zero for the next 3 years to give a boost to conversion of the broadcast distribution network to digital addressable network.
- The taxes/levies on the broadcasting distribution sector be rationalized.
- The MSOs/LCOs be eligible for seeking Right of Way (RoW) on non-exclusive basis for laying optical fibre/cable network.
- A massive education programme be taken up to educate the stakeholders about the benefits of a digital addressable cable TV network.
- All service providers who have set up a digital addressable distribution network before the sunset date be treated similar to telecom service providers and be eligible for income tax holiday for the period from the date of setting up of the network, or 1.04.2011 whichever is later, till 31.03.2019. For this purpose, the date of certification by M/s BECIL or any other agency authorised by TRAI will be reckoned as the date of setting up of the network.”

8. When the Committee desired to know how many of the above recommendations were accepted by the Ministry and what action was initiated on them, the Ministry informed that out of seven recommendations listed above, four have already been implemented and action on the other three was also initiated but these were not accepted. The details are given at **Annexure-I**.

9. When the Committee desired to know what prompted TRAI to come out with recommendations in respect of digitization of cable TV network, Ministry of Information and Broadcasting submitted as under:-

“Conditional Access System (CAS) was introduced in 2006 in four Metro Cities of Chennai, Mumbai, Delhi and Kolkata wherein the Govt. has made it mandatory for the Cable Operators to transmit or re-transmit programmes of every pay channels through an addressable system. Free-to-air (FTA) channels were required to be shown in analog mode also and could be seen by subscribers without any STBs.

CAS did not bring desired results because of dual mode of transmission. Cable Operators often resorted to providing popular pay channels in analog mode also leading to piracy of signals and low penetration of STBs.

Therefore, it was felt that the CAS approach adopted in 2006 needs to be modified. Accordingly, TRAI in 2008¹ recommended the introduction of Digital Addressable System (DAS) wherein all channels (Pay as well as FTA) were required to be transmitted only in digital mode after encryption.”

V. Introduction of Digital Addressable System (DAS)

10. In view of the recommendations of the TRAI, the Union Cabinet, in its meeting held on 13.10.2010, approved the proposal of the Ministry of Information and Broadcasting (MIB) for mandatory introduction of DAS in the Cable TV services, which, *inter-alia*, covered a time frame and road map for implementation of digitalization with addressability on a pan India basis in Cable TV services, leading to a complete switch off of analog TV services by 31.12.2014. Cabinet also approved certain amendments in the Cable TV Networks (Regulation) Act, 1995 through promulgation of an Ordinance, namely, the Cable TV Networks (Regulation) Amendment Ordinance, 2011. The said Ordinance was promulgated on 25.10.2011. Subsequently, the Cable TV Networks (Regulation) Amendment Act, 2011 was brought into force w.e.f. 31.12.2011. Later on 28th April, 2012, the Central Government notified the Cable Television Networks (Amendment) Rules, 2012 paving the way for implementation of Cable TV digitisation.

¹ Vide its recommendation dated 25.07.2008, TRAI recommended restructuring of cable TV services and *vide* its recommendation dated 05.08.2010, TRAI recommended digitisation with addressability and recommended a timeframe comprising four phases for switch over to DAS

11. The Ministry of Information and Broadcasting, in their Notification dated 11th November, 2011, laid down the phase wise schedule for digitization of the Cable TV Networks in India in four phases. The notified cut off dates are as indicated below:-

Phase I	Metro cites of Delhi, Mumbai, Kolkata & Chennai	Originally slated for 30 th June 2012. Modified to 31 st Oct 2012.
Phase II	38 cities (with population more than one million)	31 st March 2013
Phase III	All other urban areas (Municipal Corporations/ Municipalities)	Originally slated for 30 th Sept 2014 Modified to 31 st Dec 2015. (Due to court case, Extension up to 31.01.2017 has been allowed by the Ministry for full implementation of Phase III)
Phase IV	Rest of India	Originally slated for 31 st Dec 2014 Modified to 31 st Dec. 2016. (Further, modified to 31.03.2017)

VI. Initiatives taken by Telecom Regulatory Authority of India (TRAI) for implementation of Cable TV Digitisation

12. TRAI is the regulator for broadcast services. Therefore, TRAI has been empowered to issue regulations to regulate the sector. The Committee were informed that soon after the amendment in the Cable TV Rules on 28th April 2012, TRAI notified a comprehensive regulatory framework for implementation of DAS consisting of Tariff Order, Interconnection Regulations, Quality of Service Regulations and Consumer Grievance redressal Regulations on 30th April, 2012. For the physical implementation of DAS, TRAI devised a three step approach:

- The first step was ensuring channels availability through signing of formal interconnection agreements between the broadcasters and MSOs. This, on the ground, ensured timely availability of adequate channels to the MSOs.
- The second step was the seeding of the set-top-boxes (STBs); collection of consumer details and its integration into the Subscriber Management System (SMS). This was critical to bring in 'addressability' in the system. Data was regularly collected from the service providers to monitor the progress of implementation. Whenever required corrective measures were promptly undertaken.

- The third step was to ensure that the consumer pays according to their choice/subscription. This marked the biggest change from the earlier analog days when the subscribers basically paid a lump-sum amount for whatever was being delivered through the cable, whether they wanted that channel or not.

13. TRAI further informed that for smoother implementation of cable TV digitization, several meetings were held with stakeholders of the value chain and regulatory measures were taken. For the entire digitization process, as far as adoption of technology is concerned, TRAI has followed a technological neutral approach. It has been a conscious decision that technology choices are to be exercised at the level of the service provider – they should adopt the technology which proves to be the best for them. For smoother implementation of DAS, TRAI has launched a service provider portal wherein all the stakeholders of the sector can input their information and get benefitted with the initiative taken by TRAI for orderly growth of the sector.

VII. Progress of Cable TV Digitisation in the country

14. When asked whether the targets set for digitization of Cable TV Networks in India in each of Phase I to Phase IV have been achieved as per the schedule fixed for each one of them, Ministry of I&B informed as under:-

“Digitisation in Delhi, Mumbai and Kolkata in Phase I and 37 cities in Phase II has been achieved. However, it is held up in Chennai (Phase I) and Coimbatore (Phase II) due to court case by Arasu Cable wherein Hon’ble court had ordered not to disturb the analogue signals of Arasu cable till a decision is taken by the Ministry of I&B on their application for MSO registration. As per data in Management Information System (MIS) wherein all registered MSOs, DTH & HITS operators were given passwords to enter STB seeding status, about 75% digitisation has been achieved in Phase III & IV areas (excluding Tamil Nadu).”

15. The Ministry further informed as under:-

“Digitisation in Tamil Nadu could not be achieved due to court order not to disturb the analogue signals of Arasu Cable till a decision is taken by the M/o I&B on their application for MSO registration. TRAI had recommended that Government entities should not be allowed in the broadcasting and distribution sector but Ministry was unable to take a final view on the issue as a provisional registration was granted to Arasu Cable in 2008. However considering the court directive and to complete digitisation in Tamil Nadu, a provisional registration was granted to Arasu cable on 17.4.2017 and time up to 17.7.2017 was given to them to switchover to digital in Tamil Nadu. On request this has been extended to 17.8.2017.

After the issue of registration to Arasu Cable, a few complaints have been received from the registered MSOs and the LCOs in Tamil Nadu that they are being forced by Arasu Cable to take signal only from them. Chief Secretary, Tamil Nadu has been requested to look into these complaints and to ensure that Arasu Cable does not have monopoly and allows the others registered MSOs to continue to provide digital cable TV services as they are already providing the same to meet the cut-off date of 31.03.2017. Some of them have even filed cases in Chennai High Court.”

16. Regarding the hurdles in achieving 100% digitization and steps being taken/proposed to overcome the same, Ministry of I&B as under:-

“The progress of Digitisation in Phase III & Phase IV areas was affected due to the stay/extension granted by some High Courts in a large number of court cases filed in different High Courts. Ministry had to move to Supreme Court with the request to transfer all such cases to Supreme Court or to one High Court. Hon’ble Supreme Court had ordered to transfer all cases to Delhi High Court. After the decision of the Supreme Court, the actual transfer of cases to Delhi High Court took considerable time. Thereafter, the disposal of the cases could finally take place only by 1st week of December, 2016. Hon’ble Court had given time of three weeks to the Petitioners to switch over to Digital. However, to avoid inconvenience to the consumers who had not taken STBs because of Court cases, Ministry had allowed time up to 31.01.2017 for Phase III areas and the cut-off date of Phase IV was modified to 31.03.2017. Ministry had carried out extensive public awareness campaign to appraise all stakeholders about the cut-off date of Phase IV, however, still a number of stakeholders were under the impression that the Ministry may extend the cut-off date of Phase IV again. A number of MSOs who were to provide service in Phase III & IV areas waited till last

moment even to apply for MSO registration. They started applying for registration only after the court cases were over as no further stay/extension was granted by any other court. 337 MSO registrations have been granted after 1st Jan 2017 and about 2 to 3 applications for MSO registrations are being received everyday even now. MSOs are given time for 6 months to operationalize after the issue of registration.

On the cut-off date of 31.3.2017 for Phase IV areas, the progress of digitization was about 70% (excluding Tamil Nadu). The issue was discussed with all the stake holders in the 21st Task Force Meeting held on 14.3.2017 and it was unanimously opined not to extend the cut-off date of Phase IV as it will send wrong signal and it will amount to a great disincentive to the operators who acted well in time and made investment to meet the target. Chairman TRAI was also against any further extension. Therefore, with the approval of Hon'ble Minister of I&B it was decided not to extend the cut-off date of Phase IV.

Considering all these facts, the progress of digitization in Phase IV areas is considered to be very satisfactory.

17. The Ministry informed that cable TV digitisation has been mandated throughout the country from 01.04.2017. The Ministry *vide* Circular dated 30.03.2017 directed all the Broadcasters, MSOs, LCOs to ensure that no analog signals are transmitted over the cable networks after 31.03.2017 failing which action would be taken against the defaulters as per the provisions in the Cable TV Act/Rules.

18. The Committee desired to know whether by issuing directions to all the service providers for ensuring that no analog signals are transmitted over the cable TV networks after 31.03.2017, digitisation of cable TV networks in the country has been achieved. To this, the Ministry in their reply have stated that they have issued the directions for non-carriage of analog signals after reviewing the progress in each of the four phases and carrying out the following activities:-

- A Task Force was constituted, under the chairpersonship of the Additional Secretary (Broadcasting), with members from all stakeholders. Monthly meetings of the Task Force were held.
- Nominations of the State and District level nodal officers for coordination and to review the progress of digitisation at field level. Workshops at the Central as

well as Regional level used to be held with them to familiarize them about their role in the digitisation process. Importance of involvement of the State Governments used to be emphasized in all these meetings. They were advised to:

- (i) Constitute State level Monitoring Committees and to convene regular fortnightly meetings to review the progress of digitisation.
 - (ii) District level Nodal Officers were advised to hold regular review meetings with cable operators (MSOs & LCOs) in their areas to assess the readiness of each of them in terms of (a) STBs - Total number of STBs required, number of STBs already installed and the stock & order positions of STBs, (b) MSO registration – to ensure that the LCOs & MSOs, who are interested to work as MSOs in the digital era, have applied for MSO registration to the Ministry, (c) Impress upon the MSOs and LCOs to carry public awareness campaign on Cable TV digitisation on their local channels. Further, the Ministry has issued a number of letters to nodal officers in this connection.
- Secretary (I&B) has written to the Chief Secretaries a number of times emphasizing the importance of digitisation and requesting them to issue instructions to the State and District level nodal officers to periodically monitor the progress of Cable TV digitisation and hold regular review meetings with cable operators (MSOs & LCOs) in their area to assess the readiness of each of them in terms of (a) MSO registration (b) total number of STBs required (c) STBs already installed (d) STBs Stock position and (e) status of orders of STBs to meet the remaining requirement.
 - Public awareness campaign was launched in electronic and print media.
 - Toll free multi-lingual helpline (1800 180 4343) was launched to answer queries of stakeholders in 8 languages.
 - 12 regional units were established for coordination work.
 - Defended over 60 court cases. In some cases court had given time of 3 weeks to the petitioners to switchover to digital.
 - An exclusive website (www.digitalindiamib.com) was launched for digitisation.
 - Management Information System (MIS) was developed and operationalised for collection of STB seeding status.
 - From the Broadcasters, obtained the lists of operators who had entered into interconnection agreements with them for analogue but had not applied for MSO registration for providing digital Cable TV services. They were advised to apply for registration as MSO. It was clearly mentioned that if they fail to get MSO registration, they would not be able to continue to provide Cable TV services as MSOs. On the advice of the Ministry, broadcasters had also issued similar advisories to the LCOs.
 - After being a part of some of the consumer awareness programmes organized by TRAI with MSOs and LCOs, as a facilitator for timely implementation of the Cable TV digitisation as per the notification, the Ministry had been reviewing the actual progress in the field from time to time and used to issue

directions/orders/advisories to Broadcasters, MSOs and LCOs to implement the digitisation.

19. On being asked as to how much time beyond the scheduled time was required to achieve the set goal in respect of digitisation at ground level, the Ministry informed that they have already mandated that after 1st April 2017 only digital encrypted signals can be carried on the cable networks in every part of the country. Only in Tamil Nadu time up to 17.8.2017 has been given to the Arasu Cable due to court case. Cut-off date of 31st March 2017 for Phase IV areas was mandated by Gazette Notification dated 23rd Dec 2016. Any modification in cut-off date, if required, had to be issued before 31st March 2017. But after reviewing the progress, M/o I&B had decided not to make any extension. Any change in the cut-off date at this stage would thus not be legally tenable. Action is thus required by the Authorised Officers to ensure that the operators carry only digital encrypted signals and meet all the conditions of Cable Act/Rules and TRAI regulations/orders.

20. The Ministry of I&B further informed that some complaints of transmission of analog signals were being received from some parts of the country even after 31.03.2017. Accordingly, the Ministry have issued an Advisory on 21.04.2017 to all Authorized Officers of States/UTs, Chief Secretaries of all States/UTs and Nodal Officers of all States/UTs requesting them to ensure that no analog signals are transmitted by any cable operator and in the eventuality of any MSOs/Cable Operators having not complied with these directions/orders, action under Sec. 11 of the Cable TV Networks (Regulation) Act, may be taken against them under intimation to this Ministry. Ministry have prepared a check list for the inspection of MSOs by the Authorised Officers. A copy of this check list has been sent to all the Authorised Officers on 25th April 2017 with the request to plan regular inspections of MSOs and take prompt action against the defaulters.

21. Asked about the number of complaints received for carriage of analog channels, the Ministry have informed that after the issuance of directions not to

carry analog signals in Phase IV areas, Ministry have received 46 complaints, of which 35 pertained to carriage of analog signal by the cable operators, 11 regarding carriage of unpermitted channels. In addition to this, DG, Doordarshan sent a list of 308 operators who were not carrying all the mandatory channels. These complaints were forwarded to the respective Authorized Officers for examination and taking necessary action against the defaulters. 4 of these complaints were found false by the Authorized Officers.

22. To a query as to who are the Authorized Officers, the Ministry informed that considering the nature of cable sector, help of police was considered essential to take action against defaulting cable operators. District Magistrate, Sub-Divisional Magistrate and Commissioner of Police and Additional District Magistrate have been notified as the Authorized Officers within their local limits of jurisdiction. The Authorized Officers have been given powers to seize the equipment used by cable operators in case they violate the following provisions:-

- (i) Operate without registration (Section 3);
- (ii) Carry analog signal after cut off dates of digitisation (Section 4);
- (iii) Violate the Programme Code (Section 5);
- (iv) Violate the Advertisement Code (Section 6);
- (v) Don't carry mandatory channels (Section 8);
- (vi) Don't supply BIS compliant STBs (Section 9) to consumers; and
- (vii) Don't allow Authorized Officers or their representatives to carry out inspection of their networks (Section 10)

23. The Ministry informed that contravention of the provisions of the Act was made punishable offense for which defaulters can be imprisoned up to two years for first offence and up to 5 years for every subsequent offence and/or along with fine. Action against the violators for non-compliance of TRAI Regulations/Orders is within the purview of TRAI. On a complaint filed in written by any Authorized Officer, the courts can take cognizance of non-compliance of the provisions of the Cable TV Act/Rules as well as Regulations/Orders of TRAI. On the recommendations of TRAI, Ministry I&B can initiate action, after issuing Show Cause Notice, to suspend/cancel/MSO registration.

24. Asked as to whether the Ministry are satisfied with the progress in cable TV digitisation, the Ministry of I&B stated that they are satisfied with the progress of cable TV digitisation in the country. Major portion of digitisation have already been achieved and wherever it is pending and whatever deficiency have been observed it will be possible to get them rectified with the active support of the Authorised Officers and stakeholders. Meetings/Orientations workshops are being conducted by the M/o I&B at regional level to familiarize the Authorised Officers/Nodal Officers of their powers as per the CTN Act/Rules. The 12 regional units already functional will continue to coordinate with State Government Agency to attend to these issues. It is also proposed to hire an agency to carry out the monitoring and submit the reports of the violations, if any, so that action can be initiated against the defaulters. MSO registration procedure has already been made online and registration for LCOs will also be issued centrally by the M/o I&B, They would be able to apply online. Open House Meeting is being held on 20th of every month wherein any applicant can come with their grievance/queries.

25. On being asked about the grey areas which need to be addressed and the measures taken, the Ministry of I&B stated that a few operators are not encrypting all the channels. They are not extending the facility of a-la-carte selection of channels, not carrying the mandatory channels, not providing computerized bills to consumers, some of the operators have not set up Toll Free helpline and website for lodging of complaints and also have not notified the names and contact details of nodal officers. The Ministry have been conducting meetings/workshops and issuing Advisories to State Governments/Authorized Officers. The complaints received in the Ministry are being sent to the Authorized Officers to examine and take necessary action.

26. When asked about their views on the progress of cable TV digitization, TRAI informed that they are satisfied with the progress of cable TV digitization in India. However, pending issues such as permission to ARASU as MSO in Tamilnadu and pending cases restricting digitisation due to judicial restraint in some areas need to be addressed on priority basis.

(i) **MSO Registration and Seeding of data in the Management Information System (MIS)**

27. The Committee desired to know as to how many MSOs are entering the Set Top Box seeding status in the Management Information System to which the Ministry informed that as per the latest data they have issued registration to 1471 MSOs out of which 952 are seeding the data in the Management Information System(MIS) developed by the Ministry. Remaining MSOs have not fed their seeding data on MIS as they have not operationalized yet. Therefore, the Ministry had issued Notices to 307 defaulting MSOs in the first round seeking information on their operationalization. 111 have responded. Ministry had issued Show Cause Notice/reminder to remaining 176 MSOs out of which response from 27 MSOs have been received. Ministry have further issued Notices to 149 MSOs in 2nd round. Detailed Status is given at **Annexure-II**.

(ii) **Status of Digitisation in Tamilnadu and Chennai**

28. To a query on the current status of digitisation in Tamilnadu and Chennai, the Ministry in a post evidence note have informed that as per data available on MIS, 33 per cent digitisation has been achieved in the entire Tamilnadu State and in Chennai it is 128² per cent. Ministry had allowed the TACTV (Arasu Cable) to switch over to digital signal upto 17.7.2017 which was further extended upto 17.8.2017 on the request of the State Govt. The State Govt. of TN had made another request to allow the TACTV to continue analog signals upto Dec. 2017. The same was considered in the Ministry but the request was not acceded to. Accordingly, the TACTV as well State Govt. were informed of the same on 25.09.2017. Now, the TACTV had also made a request to allow them to continue the analog signal in Tamil Nadu upto 31.12.2017. The same has also been not acceded to by the Ministry.

² Since the reference year is 2011 and the data pertains to present status of seeding, it is more than 100 per cent.

(iii) Digitisation in Rural and Remote Areas

29. The Ministry had informed that Phase IV of cable TV digitisation covered all rural areas throughout the country and one of the challenges in achieving 100 per cent digitisation is non-availability of digital signal in some remote and inaccessible areas where there are very few cable operators. In these areas there are no digital signals from any registered MSOs as they don't find it cost effective to lay fibre optical cables to extend digital signals in these remote areas. In these areas because of geographical conditions, it has not been found economically viable by cable operators to carry digital signals on landline for a limited number of cable connections. For such areas, the cable operators have been suggested either to set up their own digital head end after taking MSO registration or take signals from HITS operators for further distribution. Nodal officers have been requested time and again to review the progress of digitisation with all the stakeholders and motivate the existing MSOs to extend services in such remote areas. Further, the consumers have choice to go for private DTH or DD Free Dish connection. DD Free Dish is very popular in such areas as subscribers are not required to pay any monthly charge for the service. This issue was also ratified during the meeting held with the Nodal Officers of Uttar Pradesh in Lucknow on 15th June, 2017. Further, there is a sanctioned planned scheme of Doordarshan for distribution of DTH Set Top Boxes in remote, tribal, hilly difficult terrain and border areas. After the expiry of 12th Plan, Prasar Bharati has sent a proposal for continuation of this scheme in their 3 year action plan which is being considered by the Ministry.

VIII. Issues raised by Stakeholders during the Task Force Meetings and Action taken by Ministry of I&B and TRAI to Address these issues

30. The cable TV services value chain comprises four main supply side entities *i.e.* broadcaster, Multi System Operator (MSO), Local Cable Operator (LCO) and the end consumer. Broadcaster generates the content to be televised which is received by the viewer. Broadcaster's transit or "up-link" the content signals to the satellite.

MSOs downlink the broadcasters' signals from the Satellite, decrypt any encrypted channel and provide a bundled feed consisting of multiple channels to the LCO. As per TRAI, there are around 6,000 MSOs operation in India. The MSO business is dependent on the broadcaster for content and on the LCO for last mile connectivity and subscription revenue collection. MSO is required to have head-ends for receiving TV signals. LCOs receive bundled signals from the MSO and retransmit this to subscribers in their area through cables. It is estimated that there are around 60,000 cable operators in the country.

31. The Ministry informed that they had constituted a Task Force which had representatives from various stakeholders such as Broadcasters, MSOs, LCOs, DTH Operators, domestic STB manufactures, State Nodal Officers, Consumer Forums, FICCI, CII, TRAI and other Government organisations such as BIS, MeitY, DoT, Prasar Bharati etc. The Task Force meetings were held to steer the process of implementation of cable TV digitisation in Phase III and Phase IV. The Task Force was meeting regularly on monthly basis to review the progress. In Phase I 20 meetings, in Phase II 6 meetings and in Phase III and IV 21 meetings of the Task Force were held. The last meeting of the Task Force was held on 14.03.2017.

32. The Ministry of I&B informed that the major issues among stakeholders were as follows:-

- No flexibility to broadcasters to fix price of their channels for subscribers.
- No well defined source of revenue for Distribution Platform Operators (DPOs).
- Information deficit to subscribers about price and nature of channels.
- Non-transparent charging of carriage fee creating entry barrier for new broadcasters.
- Non availability of subscriber report in time bound manner to broadcasters resulting in payment disputes.

33. The main concerns of Broadcasters were that carriage fees should be zero and MSOs should supply real time data of the subscribers. To address the above concerns TRAI has regulated the amount of carriage fee in the revised tariff order. MSOs have been mandated to have a Subscriber Management System (SMS) and CAS. Broadcasters enter into inter-connect agreement with the MSOs only after they

are satisfied that the SMS is OK and is pairing with CAS. They should ask for a copy of SMS report from the MSOs and should include this as one of the requirements in the inter-connect agreement.

34. Multi-System Operators (MSOs) had expressed their concern that the rates charged by Broadcasters are high. There is no transparency in the deals being made by Broadcasters with different MSOs. Broadcasters generally favour taking all the channels rather than going for a-la-carte selection of channels. Some Broadcasters are still insisting on lump-sum deals rather than Cost Per Subscriber (CPS) deals. Smaller MSOs complain that the Broadcasters delay in signing Inter-connect Agreement with them and/or charging more rates than charged from major MSOs. The Ministry informed that TRAI had considered all these issues and has issued revised Regulation/Order which will take care of these issues.

35. The Local Cable Operators were not satisfied with the fall back arrangement specified by TRAI for interconnection agreement with MSOs. They didn't want to disclose the data of their subscribers through MSOs. They want to have technical interoperability of Set Top Box so that they could have liberty to switch over to take service from other MSOs. To address the above concerns, the Ministry of I&B stated that MSOs and LCOs have to enter into inter-connect agreement on mutually agreeable terms and conditions. TRAI has already issued a revised regulation along with the model and standard interconnect agreement forms. TRAI has also given a fall back arrangement of 55:45 between MSOs and LCOs. MSOs and LCOs have to work as a family and should have complete faith in each other. Otherwise they cannot deliver quality service. Some of the MSOs have given rights to the LCOs to enter the data of their customers in the SMS. The issue regarding interoperability of Set Top Boxes is already under active consideration of TRAI. However, it may be added that earlier the LCO Association had asked the Ministry not to consider the demand of interoperability of Set Top Boxes for cable network.

36. The Ministry informed that on the basis of complaints received from consumers, the major concerns of the consumers were as follows:-

- Non-issuance of payment receipts/computer bills, mostly by LCOs.
- Abrupt stoppage of services and/or channels by cable operators without any notice,
- No fixed price of STBs- different operators charges different rates,
- Non-filling up of Consumer Application Form (CAF), mostly by LCOs.
- Non-operationalization of toll-free number for redressal of consumer grievances
- Non-creation of web-site for logging of complaints
- Not providing a-la- carte choice of channels
- Nodal officer name not notified.

37. Asked to furnish details regarding various consumer forums represented during the Task Force sittings, the Ministry in a post evidence note informed that during the 15th Task Force meeting, representatives of VOICE, a Consumer Forum had stated that digitisation has not adversely affected anybody and it is a win-win situation for all the stakeholders.

38. On being enquired as to what major issues were raised by the Consumer Forums during Task Force meetings and action taken thereby, the Ministry informed that pricing is the main issue facing the consumer. Consumer should know before he switches over to Digital (6th Meeting). Computerized billing is not helping in Phase I and II areas. Consumer Application Form (CAF) should be filled before installation of STBs. (5th Meeting). Consumers are facing difficulties in redressal of their complaints from the MSOs/LCOs and suggested to add Ministry of Consumer Affairs for redressal of the complaints. Subscription cost on cable TV digitisation should come down (5th Meeting).

39. On the action taken to address the above concerns, the Ministry informed that as per TRAI's regulations, it is mandatory for every MSO/LCO to offer a Basic Service Tier (BST), consisting of at least 100 FTA channels, at a price not exceeding Rs. 100 plus taxes. It is observed that most of the MSOs are offering the BST package.

40. It has been further observed that most of the MSOs are offering at least 3 to 4 more bouquets, in addition to BST. As mentioned above, consumers should have choice of a-la-carte selection of channels so that they can add channels to BST to have full flexibility for subscribing pay channels of their choice. TRAI has mandated that computer bills must be generated by MSOs/LCOs based on the data in the SMS. In the Quality of Service Regulations, TRAI has made it mandatory for every MSO/LCO to have a Toll Free Helpline, a Website and appoint a Nodal Officer in each State of their operation. TRAI has also specified time limits for redressal of various types of complaints.

41. Further, the Ministry are setting up a Central Monitoring System with provision to take return path signal through the same cable from each subscriber without internet connectivity/human interface. The Ministry are also in the process to add a 'Consumer' Section' on the website of the M/o I&B (www.mib.gov.in) as well as on website exclusively on Cable TV Digitisation (www.digitalindiamib.com) for giving details of the provisions of 'Grievance Redressal' available to them.

IX. Viewpoints Expressed/Impediments faced by stakeholders in Cable TV Digitisation

42. During the course of examination of the subject, representatives of a few organisations submitted their views and deposed before the Committee. Some of issues in their submission related to cable TV digitisation whereas some issues concerned the cable and broadcasting industry as a whole.

(i) Cable Operators Federation of India (COFI)

43. The Cable Operators Federation of India (COFI) in their written submission stated that in the last five years of digitisation, the Government has not taken any major step to facilitate the process. The main objectives of Cable TV Act, 2011 was to organize cable TV networks into digital infrastructure and bringing at par with newer technologies like DTH, IPTV and OTT; protecting cable operators in rural areas against fierce competition from DTH operators; giving choice to consumers at

affordable tariff and bringing transparency and accountability in the service leading to higher revenue from subscription and taxes etc. However, none of these have been achieved. The problem areas are:-

1. Choice to consumers: Consumers are still forced with bouquets created by large broadcasters. A-la-carte- choice is not given to the consumers, or where it is offered, it has been made out of reach of a common man.
2. Itemised bills for the service including tax details and content cost are not being given to consumers.
3. There is no uniformity of Tariff as broadcaster's content distribution is highly discriminatory and not in favour of small operators.
4. No STBs are available in the open market as there is no interoperability and indigenous manufacturing of STBs is yet to pick up.
5. Instead of helping small operators to fight competition with DTH, DTH operators are being encouraged to take over subscribers of small operators on the pretext of completing digitization on time.
6. Since emphasis is on making maximum channels reach consumers, major portion of subscription amount goes to Pay Broadcasters, leaving no funds to upgrade the network for broadband.
7. No FDI is coming in for last mile infrastructure neither any financial institution funds them. FDI has been increased to 100% which helps only the large companies who further use it for acquiring small cable TV networks rendering thousands of people jobless.
8. The pre-requisites for digitization, recommended by TRAI in 2010 for the industry to go digital were just ignored by the Ministry leaving stakeholders on their own to implement a technology without any financial, technical and manufacturing support.

44. On the major challenges and hurdles in the Industry, Cable Operators Federation of India (COFI) further submitted as under:-

- a) "70 % population is poor. Pay TV cost and Bandwidth cost is very high. According to the latest data released by rating agency BARC, there are 100 million TV homes in rural India.
- b) Government has neglected wireline networking which can carry high speed broadband. Emphasis laid on wireless which is costly, carries less bandwidth, slow speed, spectrum dependent.
- c) Cable TV Networks infrastructure is yet to be declared as National Broadband Infrastructure. In 1999 the National Telecom Policy mentions use of Cable TV networks for broadband penetration but no practical steps have been taken since then.
- d) Cable TV Infrastructure is registered by Postal Department (under Telecom Ministry) and governed by the Telegraph Act, yet it has been

- placed under I&B Ministry which does not have the expertise of improving this infrastructure.
- e) Ministry of I&B is only interested that maximum TV content passes through Cable TV Networks to help 'Pay' TV broadcasters make more money.
 - f) Due to continuous neglect by successive Governments, no financial institute recognizes cable TV business for funding. FDI also does not flow in as expected as the investors also feel that our policies do not support the last-mile infrastructure essential for providing good quality digital services.
 - g) Due to weak implementation of cross-media holding policy and no check on market domination, large scale monopolies have been created.
 - h) Cable TV networks are the largest distributor of TV content and it is still owned by lakhs of small independent operators.
 - i) Cable Operators employ about 20 lakh people who need constant training to adopt to new technologies but there is not a single institute in India to train them nor any plan of the Ministry to help them.
 - j) In analogue times, before 2004, there was a massive local manufacturing support to the cable TV industry. Unfortunately that industry has died because of bad policies and out of focus implementation."

45. When asked about their views on the submission of COFI, the Ministry *inter alia* submitted as under:-

- Data furnished by COFI does not seem to be correct.
- Regarding cost of bandwidth, it is same for all players.
- Government has been giving importance to the wired broadband connectivity. This was one of the reasons that cable TV networks in the country were mandated to be digitised so that very high speed broadband access is available to the consumers.
- The issue of 8% fee to be paid to Government on total collection including collection from cable TV service is under consideration of DoT
- Ministry of I&B has recently in 2017 moved a proposal to grant infrastructure status to broadcasting industry.
- Ministry have only mandated that infrastructure should be digital. No technology has been specified by the Ministry. It is the responsibility of the industry to improve the technical infrastructure using the best suited state-of-art technology.
- Government has brought out a number of schemes. LCOs can avail Mudra loans from SIDBI.

- The registration process for issue of MSO registration has been simplified and has been made more transparent.
- Ministry of I&B had laid emphasis on the domestically produced STBs. On the demand of indigenous manufacturers, C Form issue was resolved in August, 2014 by declaring STBs as a part of Telecommunication equipment.

46. Cable Operators Federation of India (COFI) through their submission expressed the view that in order to make India digital, the present policies need to be realigned with focus on the following:-

- Focus more on Infrastructure Development
- Policies to be realigned for smaller stakeholders
- National Broadcast Policy must be framed
- Convergence/Broadcasting Bill need to be cleared soon
- Innovative Methods needed to convert existing cable TV networks into Broadband Networks
- State Governments to be fully involved
- Starting of a digital service obligation fund to help small MSOs to upgrade broadband in rural areas
- Training and capacity building should be organised
- Availability of Pay Channel content must be ensured
- Make MSO independent of Broadcasters
- Registration Fee and Licence Fee for cable and broadband services must be reasonable

(ii) **All India Digital Cable Federation (AIDCF)**

47. The All India Digital Cable Federation (AIDCF) submitted that TRAI's new Tariff Regulations is under challenge by broadcasters and hence content deals on new tariff regime have taken a back seat thus derailing the actual benefits of digitisation to the consumers. The up-streaming of revenues from LCOs to MSOs to Broadcasters has not materialized as envisaged. In spite of STB deployment in Phase III & IV, the realizations/subscriber are still based on old analog rates as on ground digital collections have not yet materialized. MSOs are thus getting squeezed in between Broadcasters and LCOs leading to stretched financials and high debt levels. Leakage of tax revenues at LCO level/cash dealings are still there although new IT provisions will help. 8% AGR issue for broadband via cable is a big deterrent and investment for wired broadband is restricted – thus impacting our Prime Minister's

Digital India Dream. The All India Digital Cable Federation (AIDCF) suggested the following:-

- Consumer pre-paid billing should be made compulsory
- Necessary steps should be taken to make TRAI's new Tariff Regulations one time reality
- 8% AGR issue for providing broadband via cable should be solved immediately

(iii) News Broadcasters Association (NBA) and Indian Broadcasting Foundation (IBF)

48. The NBA and IBF in a joint Memorandum submitted to the Committee expressed concerns that the impasse between Arasu (State owned MSO) and Ministry of I&B has delayed implementation of digitisation. Unless Arasu takes proactive steps towards digitisation Tamilnadu will remain a black spot in India's digitisation map. While MSOs are digitizing their head ends, much more needs to be done to achieve hundred per cent addressability. Suitable infrastructure, including IT systems, call centres and back end office operations have to be set up and streamlined in order for customers to avail of the advantages of digitisation. Further, transparency in declaration of subscribers' nos. need to be accelerated so that digitisation with addressability is achieved.

49. NBA further added that apart from certain DAS I and DAS II areas, no packaging has been implemented by the Local Cable Operator (LCO)/Multi System Operator (MSO) and, hence, consumers are forced to see all the channels being offered by the LCO and the MSO. The impact is that the revenue of TV channels and the subscription is not linked to consumer demand and therefore the news broadcasters is unable to stream the revenue into content production and quality, as the return on such investment is not guaranteed. Addressability remains an issue since the Subscriber Management System (SMS) remains implemented only partially. As a result, the news broadcasters are unable to evaluate and analyse customer preferences/choices as to addressability. The MSOs are still not equipped with the system and do not provide the information and/or subscriber reports to the news broadcasters and the upstreaming of revenue from the LCO to the MSO has not yet

materialized as a result whereof the news broadcasters do not get the correct share of their subscription revenue.

50. NBA further submitted that they need the support of the Government on the following issues:-

- Strict vigilance to restrict the monopolistic practices at MSO/DPO (Digital Platform Operator) and LCO level.
- Consumer should be able to exercise choice in subscribing to channels and bouquets and not be forced to subscribe to DPO's bouquet.
- Revenue flow in the value chain should be linked to actual demand and subscription of a TV channel.
- Set Top Box portability.
- Mandatory and timely sharing of SMS reports by the DPOs and audits of the same should be enforced.
- Carriage fees or any other fees by whatever name such as marketing and placement etc. must be regulated. The Government must ensure that the carriage fee charged from the news broadcasters in these cases is reasonable, rational, non-discriminatory, regulated and such carriage fee must only be payable for a limited period so that news broadcasters are not left at the whim and mercy of MSO/DPO's.

X. New Regulatory Framework by TRAI

51. TRAI informed the Committee that with cable TV digitisation, all the TV broadcasting distribution platforms are now digital and addressable. In order to give stimulus to the growth and to protect the interest of customers, there was a need to relook at the existing regulatory framework and prescribe a framework in digital era which is transparent, non-discriminatory, protect consumer interests and increase the growth of the sector. The need for change in present regulatory framework was felt by all the stakeholders. Broadcasters wanted the freedom to price their channels and maximize their revenue both from subscription and advertisements. News broadcasters felt that Free-to-Air channels should be available to the customers without any charges and carriage fee charged by the DPOs should be regulated. DPOs on the other hand were pressing time and again that there should be well defined mechanism to monetize the investments made by them, so that they can upgrade their networks to provide multimedia services and broadband and also enrich the customers' experience by giving better quality of service. Accordingly, after

following the consultation process, TRAI notified a new framework consisting of Tariff Order, Interconnection Regulation and Quality of Service and Consumer Protection Regulations on 3rd March, 2017 where the concerns of the consumers and other stakeholders have been taken care of. The new regulatory framework brings in uniform regulations for all Addressable systems including DAS. With new framework, it is expected that needs of the customers will be fulfilled in time bound manner and it will also provide adequate opportunities to the other stakeholders for business ingenuity and offering their services.

52. The salient features of the new Regulatory framework are as under:-

Salient features – Tariff Order

- Broadcasters have been given complete flexibility to price their channels on a-la-carte basis.
- Broadcasters to declare nature and MRP of their pay channels.
- Any channel having MRP more than Rs. 19 will not form part of the bouquet.
- Separate bouquets of Pay and FTA channels.
- No charges to be paid by subscribers for FTA channels.
- MRP of a bouquet cannot be less than 85% of the sum of MRP of a-la-carte pay channels forming that bouquet.
- Provision of Network Capacity Fee for DPOs.

Salient features – Interconnection Regulations

- Published Reference Interconnect Offer (RIO) shall encompass necessary and sufficient terms and conditions.
- Interconnection Agreements to be signed on the basis of such published RIO.
- Ceiling on Discounts offered by broadcasters to DPOs on MRP of channels to ensure non-discrimination.
- Cap on the carriage fee charged by a DPO.
- Carriage fee decreases with the increase in subscription level of channels.
- Non-discriminatory access to the network on the basis of transparent RIO framework.

Salient features – Quality of Service Regulations

- Mandatory display of MRP of channels on Electronic Programme Guide (EPG).
- Transparent declaration of information relating to channel choice, price, terms of subscription and provisioning of STBs.
- Standardisation of dissemination of information related to the services through Customer Care channel.

- Publicity of services across DPOs have been standardised by making a provision of consumer corner on the website of the service provider.
- Mandatory offering of all channels and bouquets available on DPOs platform on monthly subscription basis.
- Simplification of Customer Premises Equipment (CPE) schemes and their maintenance.

TRAI informed that some broadcasters have challenged the new Regulatory framework notified by the Authority in High Court of Madras on jurisdictional issue. Further, some DTH operators have challenged the new regulatory framework in High court of Delhi. The matter is sub-judice and presently under judicial scrutiny.

XI. Major Issues Associated with Digitisation

53. Some of the issues associated with the digitization process are dealt in detail in succeeding paragraphs.

(i) Choice of a-la-carte Selection of Channels

54. One of the benefits of digitisation to consumers is that they would be empowered to exercise a-la-carte selection to allow individual channel selection and they will pay only for those channels they wish to watch depending upon their budget.

55. Cable Operators Federation of India (COFI) in their submission had stated that consumers are forced with bouquets created by large broadcasters, a-la-carte choice is not given to the consumers and where it is offered, it has been made out of reach of a common man. NBA had submitted that digitisation has empowered consumers to exercise a-la-carte selection, however DPO packages are pushed to consumers and a-la-carte pricing is made unattractive at retail. Packaging/bouquet formation at DPO/MSO level should be disallowed as the DPO/MSO pushes its bouquets to the consumers. Consumer awareness is the key to ensure that DPOs offer a-la-carte channels in a fair and reasonable manner to the consumers.

56. In this backdrop, the Committee desired to know what steps have been taken to ensure that pay channels comply with requisite guidelines. To this, the Ministry of

I&B informed that consumers must have the choice for a-la-carte selection. It is learnt that generally MSOs are finding it difficult to provide this facility as the rates of bouquets by the Broadcasters are much more attractive than the a-la-carte rates. It has also been observed that a number of LCOs do not provide full details of the channels/ bouquet rates to the consumers and do not get the consumer application forms filled properly. TRAI has come out with a revised regulation to take care of some aberrations observed in the existing regulations. The revised regulations should take care of issues. However, these are under litigation.

57. On the issue of fixing of channel pricing and prerogative of consumers to decide on the bouquet of channels, the Ministry of I&B informed that as per TRAI regulations it is mandatory for every MSO/LCO to offer a Basic Service Tier (BST), consisting of at least 100 FTA channels, at a price not exceeding Rs 100 plus taxes. It is observed that most of the MSOs are offering the BST package. It has been further observed that most of the MSOs are offering at least 3 to 4 more bouquets, in addition to BST. As mentioned above, consumers should have choice of a-la-carte selection of channels so that they can add channels to BST to have full flexibility for subscribing pay channels of their choice.

58. When the Committee desired to know as to whether the consumers have any say in selection of channels in the bouquets offered by Cable operators/DTH etc., the Ministry informed that bouquets are formed by the MSOs/DTH operators, however, it is understood that they make the bouquets keeping in view the popularity of programmes and the choice of consumers. Choice of a-la-carte if extended by MSOs/LCOs, as envisaged by TRAI, should take care of the issue.

59. When the Committee enquired if there is any mechanism for Pay Per Use, the Ministry stated that this is a very good suggestion. Cable operators should consider

coming out with attractive offers as one day recharge offer being given by one DTH operator.

60. Elaborating on the issue of choice of channels to consumers, Chairperson, TRAI, informed during evidence as under:-

“... xxxxthere is a non-transparent behaviour in terms of customer not having the choice. For example ... xxxx ... what happens is that I price my bouquet at Rs. 100 and if you ask what is the price of individual channel, I will say the first channel costs Rs. 120 and the second channel costs Rs. 100 even if you add all the channels, they will probably cost Rs. 10,000. So, in a way, there is a lot of obfuscation and non-transparency with regard to the customers.... xxxx”

61. TRAI further informed that in order to protect the interests of consumers, they have prescribed the following measures in the new regulatory framework:-

- Every Broadcasters shall declare nature (Pay or FTA) of its channels
- Every Broadcasters shall declare MRP of its pay channels
- MRP of channels shall be displayed on Electronic Program Guide
- No charges to be paid by consumers for FTA channels
- Every Broadcaster shall offer all channels on a-la-carte basis to all the distributors
- Every distributor of television channels shall offer all channels available on its network to all subscribers on a-la-carte basis
- Separate bouquets of Pay and FTA channels.
- In order to provide choice to the subscribers and to curb skewed prices of a-la- carte channels as compared to bouquets, the Authority has mandated that a broadcaster can offer a maximum discount of 15% while offering its bouquet of pay channels over the sum of MRPs of all the of pay channels in that bouquet. The restriction of maximum discount of 15% on formation of bouquet is to ensure that a-la-carte channel price is not illusionary and a subscriber is not forced to take a channel which he doesn't want.
- Any channel having MRP more than Rs. 19 will not form part of the bouquet. This is to ensure that specific consent of subscriber is obtained for high price channels and for protection of interest of consumers as TV channel prices in the bouquet deals are oblique to individual channel prices.
- Transparent declaration of information relating to channel choice, price, terms of subscription and provisioning of STBs.

- Standardisation of dissemination of information related to the services through Customer Care channel.

However, the new framework is sub-judice and under judicial scrutiny of Hon'ble High Court of Madras and Delhi.

(ii) Issue of Carriage Fee

62. The Ministry have informed that as per Notification dated 9.1.2004 by the Central Government, Broadcasting Services and Cable Services were notified to be Telecommunication Service and entrusted additional function to TRAI to make recommendations regarding Digital Addressable System, parameters for regulating maximum time for advertisement on channels and also to specify standard norms for and periodicity of revision of rates of pay channels, including interim measures. Accordingly, TRAI has been issuing Inter-connect Regulations, Quality of Service Regulations and the Tariff Orders to be followed for implementation of DAS. The issue of carriage fee has been detailed in the Inter-connection Regulations issued by TRAI.

63. The Committee have been informed that in the analog system, the Broadcasters were paying carriage fee to the MSOs for carriage of channels and were getting subscription charges from MSOs. In the Interconnection Regulation dated 30th April, 2012 issued by TRAI for DAS, in para 3(12), it was mentioned that every MSO shall publish in its RIO, the carriage fee for carrying a channel of a Broadcaster for which no request was made by MSO, provided that the carriage fee shall be uniform for all the Broadcasters and the same shall not be revised upward for the minimum period of 2 years from the date of publication in the RIO. As such, TRAI had allowed MSOs to charge carriage fee from the Broadcasters but the rate of carriage fee to be charged was not specified. However, In the Inter-connection Regulations issued on 3.3.2017, TRAI has specified the following rate for carriage fee to be charged:-

- (i) SD Channel – Not exceeding 20 paisa per subscriber per month.
- (ii) HD Channel – Not exceeding 40 paisa per subscriber per month.

TRAI has further permitted the distributors of Television Channels to offer discount to Broadcasters on the rate of carriage fee which should not exceed 35% of the rate declared in RIO.

64. On the issue of carriage fee, the representative of News Broadcasters Association submitted during evidence as under:-

“.... xxxx It is extremely important to understand that when the digitization process was started, it was at the behest of the news broadcasters that the whole digitization process was pushed by the news channels because we were the sufferers of the so-called carriage fee menace. I am using a term which is a little strong, but it was at that point of time when the analogue system was there. The Government gave licences but we were literally “pushed into blackmailing”. We were blackmailed. The news broadcasters of this country were blackmailed. If your signal is not being distributed, you are not visible. If there is no visibility, how can you run a channel? You will die in any case. So, all the news broadcasters came together under the banner of NBA and started talking to Government that digitization is a process world wide to move ahead in broadcasting. It was started very well. But, our basic problem still remains. The basic problem is that we still have to pay the carriage fee.

Of course it is not the way it was but we still have to pay a huge amount of carriage fee. Therefore, we are dependent on advertising. The consumer does not have the choice. Even if the consumer is paying to the cable operators or to the MSO for the news that he is watching, that money hardly comes back for news gathering. Therefore, almost all news channels in this country are free-to-air channels. We have no other choice but to remain free-to-air. Therefore, you would see a number of advertisements that you see per half hour or per hour.... xxxx” When this whole issue is being discussed and deliberated upon, my humble request to the Committee is kindly look at this aspect....xxxx....and there should be some kind of a platform that gets created in which the consumer pays for it and it comes back, in whatever amounts, to the broadcasters.xxxx....The problem with us is that being free-to-air channels we do not get subscription revenue. So, this is an issue,.....which needs to be seriously looked into by this hon. Committee. How do we get something back for the content that we are producing and giving free to the viewers.”

65. When TRAI was asked to furnish their comments on allegations made by NBA that LCOs/MSOs arm twist the Broadcasters for carriage fee, the Committee were informed that in the past, the term carriage fee has been loosely used by service providers to combine three different charges to carry TV signals on a network. Carriage fee is a charge to carry a TV signal on a network (carriage fee). Additionally, there are other charges such as placement fee to place a channel at desired location of EPG and marketing fee to ensure higher reach of channel through popular bouquet. While broadcasters have taken up with TRAI also regarding high carriage fee but inspite of repeated efforts, they did not provide details of carriage fee paid by them to DPOs. In contrast, DPOs have many times submitted that carriage fee has been drastically reduced in digital networks.

66. TRAI further submitted that it has been seeking information from service providers to provide details of carriage fee to MSOs and LCOs. However, information regarding carriage fee has not been provided by broadcasters so far. Some broadcasters provided information combining three components (Carriage fee, Placement fee, and Marketing fee) which is difficult to use for the purpose of measuring carriage fee as placement and marketing fee are mutually agreed and commercial in nature. The issue of carriage fee has been addressed in the new regulatory framework and a cap of 20 paise per subscriber per channel has been prescribed. This will further reduce as number of subscribers subscribing to the channel increases and will become zero when 20% of the subscribers will be available on platform who choose the channel. However, this framework is under judicial scrutiny in the Hon'ble High Court of Chennai and Delhi.

67. Elaborating further on the issue of carriage fee, representative of Ministry of I&B submitted during evidence as under:-

“xxxx....Earlier the Government was not able to even force to carry ten channels because total capacity was 60 or 70 channels. If I ask them to carry ten channels, they say that they do not have the capacity. You are

forcing them. As a result, they were not carrying. If they were carrying – there are three bands in analogue, VHF-1, VHF-3 and UHF. The quality in VHF-1 band was only good. VHF-2 was not and the quality of UHF was very bad. VHF-1 had the capacity of only seven to eight channels. Now, everybody wanted to be in this seven to eight channels. The Ministry also wanted that my Doordarshan National Channel, my Lok Sabha Channel should be in VHF-1 Band. He says: “I cannot carry.” Okay, we force them to carry three channels in that. Remaining is seven. You raised the question, Sir, about the carriage fee. In these seven channels, there was a race of all broadcasters that you put me in this VHF-1. So, whosoever could give more money, their channel was carried in VHF-1 xxxx... This issue was raised by Ministry of Information and Broadcasting in the Task Force meeting at least 20 times and the broadcasters were asked to provide data regarding carriage fee given by them earlier and also at present time. Till date, no broadcasters have provided any data to the TRAI or the Ministry, they only talk and say that they are giving carriage fee. You may, see a particular channel on T.V. screen when you switch on your T.V. This channel is broadcasted without proper provision. They pay some money for broadcasting their channel on their choice of number, on switching on T.V. You charge whatever amount you want to charge for that. Someone says my channel should be aired on 101 and someone says my channel should be aired on 102. First channel in the zoner should be my channel. That is not a carriage fee. That is a placement fee. I want so many things from the operator. Naturally, operator starts demanding money for all these things. It is a placement fee.... xxxx The number of channels from 60-70 has gone up to 500-600 channels and the carriage fee amount is same. The carriage fee has not gone up. We request you to get data from them, they will not provide. They may provide any information but they will not give you any data. If they will give then, you will find the same carriage fee. . This is the reason that in the revised regulation issued by TRAI, the carriage fee has been fixed.

On this, they are opposing and asking the reason for fixing carriage. On one hand, you are not in favor of fixing this fee and on other hand also, you do not want it to be left open. This is the cause of problem. And I have to take Rs. 100-150 from the consumer. Every one want to get maximum out of the amount, the broadcaster want to get maximum and the MSO and the cable operator ask Rs. 100 out of Rs. 100.

68. The Ministry further informed that the provisions regarding carriage fee in the new Interconnection Regulations have been made by TRAI after consultation with

the stakeholders. This should bring desired transparency if fully implemented as per the provisions made by TRAI.

(iii) Tariff Regulations and Revenue Sharing Model

69. On the mechanism/recommendations of TRAI with regard to revenue sharing arrangements among the Broadcasters, MSOs and LMOs, Ministry of I&B informed that TRAI after consultation with all stakeholders in the Tariff Order had made the provision that the revenue share between MSOs and LCOs must be decided based on negotiations. TRAI had specified that the revenue may be shared in the ratio of 55:45 for FTA channels and 65:35 for pay channels if negotiations fail. Payment to pay broadcasters was to be made by the MSOs as per their Interconnection Agreements.

70. In the year 2016, TRAI came out with Model Interconnection Agreement (MIA) and Standard Interconnection Agreement (SIA) in which different works between the MSO and LCO were identified. In the MIA flexibility has been provided to mutually decide the revenue share by the MSO and LCO based on various responsibilities shared among them. The SIA would prevail in the cases where mutual negotiations fail. The Standard Interconnection Agreement (SIA) prescribes specific works both for MSOs and LCOs and a revenue share percentage of 55% for MSO and 45% for LCO. This framework is very transparent and adequately protects interests of both the stakeholders.

71. The revenue sharing arrangement between broadcasters and MSOs were mostly of three types namely fixed fee basis, charge per subscriber basis and RIO basis. However, this arrangement was not uniform and is not very transparent. Therefore, TRAI in the new regulatory framework *inter-alia* specified:-

- Published RIO shall encompass necessary and sufficient terms and conditions.
- Interconnection agreements to be signed on the basis of such published RIO.
- Ceiling on Discounts offered by broadcasters to DPOs on MRP of channels to ensure non-discrimination.

The new regulatory framework would provide transparency in the system and protect the interests of all stakeholders. However, this new framework is subjudice in the Hon'ble High Courts of Chennai and Delhi and is under judicial scrutiny.

72. Cable Operators Federation of India (COFI) had submitted that revenue have been left to 'mutual agreements' between broadcasters and MSOs and between MSOs and LMOs/LCOs. LMOs can never reach a mutual agreement since MSOs has also been made his competitor permitted to run a last mile network. With the result, discrimination and uncertainty prevails everywhere. Even in the fallback arrangement suggested by TRAI, LMO's business becomes unviable causing unemployment and helping 'Pay' broadcasters and allied MSOs and DTH players to dominate the market through monopolies.

73. Reacting to the submission of COFI, TRAI in a written note stated that there were certain issues resulting in non-level playing field and discriminatory practices in the sector, when major MSO are getting favourable treatment from the broadcasters. However, in the new regulatory framework, these issues have been largely addressed as this framework has the following key features:

- (i) For transparency, Broadcaster is required to declare MRP up to which a DPO can charge from a subscriber.
- (ii) Assured Distribution fee of 20 % of MRP to DPOs
- (iii) Discounts offered should be measurable, transparent and within reasonable limits of 15% (Not exceeding 35% with distribution fee).
- (iv) The distribution fee is to be shared between MSO and LCO

However, this new framework is subjudice in the Hon'ble High courts of Chennai and Delhi and is under judicial scrutiny.

74. According to the Memorandum provided by the Cable Operators Federation of India (COFI), TRAI did not work out a feasible business model for Last Mile Operators (LMOs) who are SSS and BE (small scale service and business enterprises) for operating the business of Cable TV at their existing level. Instead of working out

the needs of an LMO empirically, TRAI only cared to give maximum revenue to MSOs and pay broadcasters based on assumptions and under the influence of 'Pay' Broadcasters who are just 25% of all broadcast channels but enjoy strong media monopolies through their MSOs and DTH operations.

75. On being enquired as to whether the present revenue sharing model was discussed at length among all the stakeholders before arriving at conclusion, the Ministry informed that TRAI follows a very elaborate and transparent method before issue of any Regulation and in the Explanatory Memorandum of every Regulation the issues, comments of stakeholders and justification for the provision in the Regulation is outlined.

76. Asked about their views on the issue of Tariff Regulations and submission made by COFI, the Ministry of I&B informed as under:-

Digitisation has brought full transparency where it is not possible to under report the number of subscribers. As a result, actual taxes have to be paid. The charges from the subscribers must also be nominal. Keeping all these issues in view, TRAI after consultation with all stakeholders in the Tariff Order had made the provision that the revenue share between MSOs and LCOs must be decided based on negotiations. TRAI had specified that the revenue may be shared in the ratio of 55:45 for FTA channels and 65:35 for pay channels if negotiations fail. TRAI has brought out revised regulation also after consultation with all stakeholders. It should take care of the issue.”

(iv) Advertisement Revenue vis-à-vis Subscription Revenue

77. One of the drawbacks of analog cable TV was that the limited carrying capacity and transparency distorted the business model for the Broadcasters and increased their dependence on advertisement revenue and restricted scope for subscription revenue (65:35). Accordingly, for higher Television Rating Points (TRP) channels often sensationalize the content on TV. Post digitisation the increased carrying capacity would enable Broadcasters to offer niche channels and HD TV

channels. Increased subscription revenue would allow Broadcasters to move away from TRP centric content to conduct business on an auditable subscriber basis.

78. In this context, the Committee desired to know the data regarding percentage of channels' revenue coming from advertisements and percentage of channels' revenue coming from subscription fee. To this, the Ministry stated that no such data is available with them.

79. To the same query, TRAI submitted that the percentage of advertisement revenue of the TV industry, as per industry report, during 2011 to 2016 is in the range of 33-35% of the total revenue of TV industry.

80. TV revenue as reported by FICCI-KPMG report after rollout of cable TV digitisation is as under:-

Year	2011	2012	2013	2014	2015	2016
TV revenues (INR billion)	329	370.1	417.2	474.9	542.2	588.3
Advertising revenues (INR billion)	116	124.8	135.9	154.9	181.3	201.2
Percentage of advertisement revenue	35%	34%	33%	33%	33%	34%

Source FICCI KPMG report

81. On being asked as to whether there has been a desired shift from advertising revenue to subscription revenue in the post-digitization era, TRAI informed that available data does not indicate any substantial change in percentage of the subscription revenue post digitization.

82. Asked as to whether there has been any marked increase in the number of advertisement free/paid channels offered by Broadcasters after cable TV digitisation, TRAI informed that as reported by Broadcasters there were 114 pay channels in 2008 which has increased to 295 in 2017. The Ad free pay channels are 5 and after 2012

no more Ad free channels have been reported by Broadcasters. Further, there has been marked increase in HD channels after digitisation. As reported by Broadcasters, there were only 3 HD channels in 2016 which has increased to 83 in 2017.

83. To a query on the present guidelines for advertisements to be followed by Pay Channels, Ministry of I&B stated that as per Rule 7 (11) of the Cable Rules, no programme (Pay or FTA) shall carry advertisement exceeding 12 minutes per hour, which may include up to 10 minutes for commercial advertising and up to 2 minutes for self-promotional programmes. TRAI has brought out detailed regulations on the issue, however, the matter is at present sub-judice in Apex Court.

84. On the mechanism to monitor Programme Code and Advertisement Code during the broadcasting of programmes, the Ministry in a post evidence written note stated that as per existing regulatory framework, programmes and advertisements telecast on private satellite TV channels are regulated in terms of the Programme and Advertising Codes prescribed under the Cable Television Networks (Regulation) Act, 1995 and Cable Television Network Rules, 1994 framed thereunder. The Act does not provide for pre-censorship of the programmes and advertisements telecast on these channels. However, all these channels are required to adhere to the said Programme and Advertising Codes which contain a whole range of parameters to regulate programmes and advertisements on TV channels. The said codes are available on Ministry's website: www.mib.nic.in.

(v) Transparency, Quality of Services and Grievance Redressal System

85. The News Broadcasters Association (NBA) and Indian Broadcasting Foundation (IBF) in their submission had expressed concern that the Telecommunications (Broadcasting and Cable) Services Standards of Quality of Services and Consumer Protection (Addressable Systems) Regulations, 2017 are yet to be executed in letter and spirit with proper visibility to consumers on billing and adequate redressal of complaints. Even broadcasters don't have proper visibility on the actual number of

subscribers for their channels as Distribution Platform Operators (DPOs) continue not to share the subscriber report.

86. When the Committee desired to know the provisions for transparency in billing and consumer grievance redressal mechanism, the Ministry submitted as under:-

“For transparency in the billing, the Cable Rules as well as TRAI Regulations have mandated every MSO to have a Subscriber Management System (SMS) and Conditional Access System (CAS). The channels are encrypted using the CAS and it in every State of their operation enables de-encryption of only those channels which are subscribed by a cable subscriber. The SMS keeps the data about the channels subscribed and the total charges collected from every subscriber. TRAI has mandated that computer bills must be generated by MSOs/LCOs based on the data in the SMS.

Regarding consumer redressal, TRAI has mandated that every MSO/LCO should have a toll free helpline and a website for logging of complaints and should nominate a nodal officer who can be approached by cable subscribers in case their complaints are not resolved in time. TRAI has specified timeframe for redressal of complaints.

However, it is observed that most of the MSOs/LCOs are not providing computerised bills to consumers and have not fully energized the complaint redressal mechanism.”

87. TRAI have informed that the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Service and Consumer Protection (Addressable Systems) Regulations, 2017 have adequate provisions to ensure transparency and user friendly billing and payment mechanism. The above Regulations have been notified on 3rd March 2017. The notification has, however, been challenged by DTH operators in the Hon’ble High Court of Delhi *vide* writ petition no. 4091 of 2017. The matter is sub-judice and no stay has been granted as on date.

88. When asked about the steps which have been taken/proposed to be taken by TRAI to address the concerns of the Broadcasters relating to lack of visibility of actual

number of subscribers, TRAI informed that the problem of visibility of subscriber numbers is twofold (i) Frequent complaints of delay in subscription report from broadcaster (ii) Complaint by DPO regarding frequent change of subscription formats by broadcasters demanding subscription report. Many a time such formats seek reports that are not relevant with subscription report. These issues have been addressed in the new regulatory framework. However, the new Regulatory framework is under judicial scrutiny in the Hon'ble High Court of Chennai and Delhi.

89. When the Committee desired to know if there is a nodal agency for consumer grievance redressal for issues relating to Cable TV digitization in India and what steps have been taken by Ministry of I&B to spread awareness about consumer grievance redressal mechanism in cable TV sector, the Ministry informed that there is no nodal agency. However, following steps have been taken by the Ministry to spread awareness about consumer grievance redressal mechanism in cable TV sector:-

- (i) A Toll Free helpline was operationalised to answer the queries of the stakeholders including consumer. Queries could be raised in eight Indian languages.
- (ii) The MSOs and LCOs were asked to carry out a public awareness campaign on price of channels, quality of service and grievance redressal as mandated in Rule 13 of the Cable Rules.
- (iii) A 'Consumer' Section' is being added on the website of the M/o I&B (www.mib.gov.in) as well as on website exclusively on Cable TV Digitisation (www.digitalindiamib.com) for giving details of the provisions of 'Grievance Redressal' available to them. DD & AIR would be requested to carry out programmes on the 'Grievance Redressal'. MSOs would again be asked to carry public awareness campaign on their local channels and with other means as envisaged in Rule 12 of the Cable Rules.

90. Asked about the avenues available to the consumer for voicing their grievances relating to Cable/DTH/IPTV services etc., the Ministry of I&B informed that a cable TV subscriber can either lodge his complaint on the website or use Toll-Free Helpline number of the concerned MSO who is providing the service to him. He can also approach the nominated Nodal Officer of the MSO in case the

grievance/complaint is not addressed in time. He can also approach the Consumer Court. The Ministry have further informed that a centralized monitoring system is proposed to be set up to ensure that all the provisions of the Cable Act/Rules and TRAI's regulations/Orders are fully implemented. The proposed monitoring system will also have access to the Grievance Redressal System of the MSOs and would take action against the defaulter in case the complaints are not attended in time. It is, therefore, felt that the consumers should continue to lodge their complaints in the grievance redressal system of their MSOs.

91. Elaborating further on the need for a Centralized Monitoring System, the Ministry submitted that though there is a provision for grievance redressal mechanism, yet in order to make it more effective, the Ministry are considering to set up a Central Monitoring System with provision to take return path signal through the same cable from each subscriber without internet connectivity/human interface. It is felt that transparency in the system is very essential for which technology based system appears to be the only solution. It is understood that no such system is readily available. Central Monitoring System should provide information on the following:-

- (i) Number of subscribers of each MSO/LCO
- (ii) Channels being carried by each MSO/LCO
- (iii) Channels being subscribed by each consumer.
- (iv) Subscription charges and taxes (GST) paid by each subscriber
- (v) Whether all the channels are encrypted?
- (vi) Whether consumer is getting satisfactory service?
- (vii) Time taken to resolve the complaints

In this regard C-DAC and C-DOT have been requested to suggest a low cost solution for setting up of a Central Monitoring System to monitor the services actually being provided by the cable operators. Up till now one meeting with each of the entity has been held and they presented their views. Further, they have stated that they will work on the issue as suggested by Ministry.

92. On this issue, the Ministry further informed in the post evidence reply that possibility of linking subscription charges with the grievance redressal system, with provision to impose penalty for delayed resolution of complaint, need also to be explored. One possibility is that the subscription payment from the consumers goes to a central account from where it may be released to the cable operator automatically, subject to there being no complaint or any complaint/dispute having been resolved. But there may be opposition to the proposed system by some operators as they may feel that it is an attack on their privacy, the data may be misused, their payments may be delayed and it would also involve some extra expenditure by them. However, it is assured that the data from the proposed system, if workable, would be utilized only for dispute resolution and to bring transparency. Changes would be required in the Cable Rules to install such a centralized monitoring system.

93. On the issue of redressal of complaints of the consumers, Secretary, Ministry of I&B deposited as under:-

" Sir, we did focus on the issue as to who is the net gainer in all this exercise. We have to put the general public at the centre of the entire exercise, and there we came to know from the deliberations that the grievances are not getting redressed either at the LCO level or at the MSO level or at the higher levels of broadcasters. We did deliberate on how we tackle this problem because these grievances not only come to us but some in the form of legal matters also go to the TRAI. So we had 2-3 meetings with all the stakeholders on the Government side, that is, the Department of Space, DIT, TRAI, etc. We came to one conclusion. Now there is the question on return path. This is the first step towards the solution. We felt if there is a return path and the subscriber pays the subscription not directly to the LCO but since the LCO is also recognized at the post office level, suppose in the post office, in an escrow account, the computer will tell us that this subscriber should have paid Rs.200 which, in any way, he has deposited and that gets released to the LCO.xxxx"

(vi) Vertical Monopolies and Cross Media Holding

94. The Committee in their Thirty-second Report on Demands for Grants (2012-13), Fortieth Action Taken Report on Demands for Grants (2012-13) and Forty-seventh Report on 'Issues related to Paid News' had expressed an urgency to frame rules for cross media ownership to regulate both the vertical and horizontal integration so as to prevent monopolistic practice.

95. Asked as to how vertical monopoly is affecting cable TV digitisation, the News Broadcasters Association stated that monopoly or vertical integration of DPOs and broadcasters is not healthy for either the cable fraternity or for the broadcasters. In fact the recent trend shows that many TV distribution platforms and broadcasting companies are venturing into vertical integration, for example: broadcasting companies owning cable, DTH, HITS and IPTV etc. and distribution platforms venturing into broadcasting sector. However, this makes room for bias and also removes the concept of level playing field. In certain circumstances, vertical mergers may enable enterprises to create entry barriers for the new players, foreclose competitors and in turn, affect consumer choice. It may also deter investment and innovations on the part of the vertically merged enterprises. Therefore, it is necessary to weigh the welfare effects of vertical integration with the various anti-competitive effects in the entertainment and media industry in India.

96. NBA further submitted that cross media ownership is not healthy trend in the media industry and has the potential of creating serious conflict of interest situations which can stifle both the content side and the business side of media companies. This will have serious consequences of restricting dissemination of information which is critical in a democracy. The growing corporatization of the Indian media is manifest in the manner in which large industrial conglomerates are acquiring direct and indirect interest in media groups. There is also a growing convergence between creators/producers of media content and those who distribute/disseminate the content which may not be healthy for the industry.

97. When the Committee drew the attention of TRAI to the issue of Cross Media Holding due to existence of few players in the market and whether a more comprehensive framework is required to curb this problem, TRAI informed that it is aware of these developments. Accordingly, in order to address these concerns TRAI has sent its recommendations on “Issues relating to Media Ownership” to Ministry of I&B on 12th August 2014 which provide following measures:-

- Cross media ownership rules for dominant operators in news segment of television and print category.
- Internal plurality i.e. freedom to editors to express views/news
- Rules to be applicable to mergers & acquisitions

However, these recommendations are pending with the Ministry of I&B. It will be desirable to implement these recommendations on priority basis.

98. In addition, TRAI has also sent its recommendations on ‘Monopoly/Market dominance in cable TV services’ to Ministry of I&B on 26th November 2013, which provide for (i) Merger & Acquisition rules for cable TV sector; and (ii) Restrictions to be imposed on MSOs to prevent monopolies/accumulation of interest in a relevant market through Merger & Acquisition. However, these recommendations are also pending with the Ministry of I&B.

99. When asked about their views on Vertical Monopolies and Cross Media Holding and its impact and whether TRAI had given any recommendation to check the emergence of Vertical Monopolies, Ministry of I&B submitted that as per TRAI, vertical integration means a common entity, which can be a Broadcaster itself or a stakeholder having control over the Broadcaster, controls a DPO in the same relevant market and vice versa. Similarly, horizontal integration means that a common entity, which can be a DPO itself or a stakeholder having control over the DPO, controls multiple categories of DPOs in the same market. As per TRAI, the entity that controls a broadcaster or the broadcaster itself, shall be permitted to control only one DPO

(of any category *i.e.* either an MSO/HITS operator or DTH operator) in a relevant market and vice-versa. The entity that controls a vertically integrated DPO or the vertically integrated DPO itself, shall not be allowed to control any other DPO of other category. If a vertically integrated DPO, while growing organically or inorganically, acquires a market share of more than 33% in a relevant market, then the vertically integrated entities will have to restructure in such a manner that the DPO and the broadcaster no longer remain vertically integrated.

100. Asked as to how vertical monopoly is affecting the cable TV digitisation, the Ministry of I&B stated that there are a few entities who are Broadcasters, providing DTH service and working as MSOs. There were a few complaints of advantages to these entities in getting content at lower rates but TRAI has taken care of these issues in the revised regulations. With the implementation of fresh Regulations, there would be complete transparency in signing of Interconnect Agreements. Ministry of I&B are not in favour of too much control to restrict the areas of operation of the entities. The Regulations should not permit exploitation by any entity and rest the market forces should take care.

101. Asked as to whether weak implementation of cross-media holding policy and lack of check on market domination has led to creation of large scale monopolies, Ministry of I&B apprised that out of 1437 MSO registrations issued till 20th July 2017, 823 have been issued to individuals (proprietorships), 223 to partnership firms, 2 to Societies and only 389 to Companies. MSOs have been authorised to provide service in part of the country without any additional registration. The registration process for issue of MSO registration has been further simplified and made more transparent. From MIS, it is observed that a number of MSOs are operating in every state, and there is no monopoly of any single MSO.

102. When asked about how vertical monopoly is affecting cable TV digitisation and the role of major media houses in digitisation, TRAI informed that digitisation of

cable TV networks was recommended by TRAI in 2010. Its progress has been closely monitored by TRAI. As such, it does not appear that digitisation has resulted in monopoly either vertically or horizontally. TRAI has also prescribed a new regulatory framework, which ensures transparency, non-discrimination and protects interests of consumers.

(vii) Provision of High Speed Broadband through Cable TV Network and Grant of Infrastructure Status to Broadcasting Industry

103. The Cable Operators Federation of India (COFI) had submitted that Government has neglected wireline networking which can carry high speed broadband. Emphasis is laid on wireless which is costly, carries less bandwidth, slow in speed and spectrum dependent.

104. When the Committee desired to know the views of Ministry of I&B, the Ministry stated that for providing broadband internet service, cable operators (MSOs/LCOs) have to take an ISP license from DoT and as per the rules are required to pay 8% on the total collection including subscription charges for the Cable TV service i.e. Adjusted Gross Revenue (AGR), as fee to the Government. To avoid the payment of 8% of fee, most of the operators have created separate entities for providing internet services and are providing separate cables for the internet service for which a separate internet modem is also provided.

105. Ministry of I&B further added that if issue of 8% of AGR as fee is resolved, more & more operators would go to provide internet service on the same cable which is used for TV service. This would provide a great opportunity to cable operators to enhance their business. The speed to about 100 mbps which are possible on the cables can't be achieved on the wireless networks. TRAI has recommended that collection of fee from TV subscription charges may be waived off for a period of 4 years. As informed, Indian Council for Research and International Economic Relations(ICRIER) in its report to TRAI has estimated that fiscal benefits to

the Government after adjusted projected license fee waiver to internet service providers for Cable TV services would be more than Rs 3000 crore.

106. On the present status of the proposal, the Ministry further informed as under:-

“A number of operators are already providing this facility. For providing broadband internet service they have to take an ISP license from DoT and as per DoT rules, they are required to pay 8% on the total collection, including that from Cable TV Service, as fee to the Government. The operators had represented against the charge of 8% fee from the cable TV subscription charge. The Ministry and TRAI have already raised this issue. Cabinet Sectt. had constituted a Committee under the chairmanship of the Secy. (DoT) with Secy. (I&B) & Secy (MeitY) as members to examine this issue and come out with recommendations. The Committee had constituted a Sub-committee under the chairmanship of Joint Secy. (DoT) with members from TRAI, M/o I&B and MeitY to examine the issue. The sub-committee submitted a Report to the main Committee. However, the main Committee could not come to final view as DoT informed that the case is sub-judice in the Apex Court. On this Report, Principal Secy. to Hon’ble PM had a meeting with the officers from DoT, TRAI and M/o I&B and had directed DoT to re-examine the issue. The issue is under consideration of DoT.”

107. COFI had expressed concern that though the National Telecom Policy of 1999 mentions use of Cable TV networks for broadband penetration, no practical steps have been taken since then. When asked as to why cable TV Networks infrastructure has not yet been declared as National Broadband Infrastructure, the Ministry stated that recently (in 2017) they have moved a proposal to grant infrastructure status to the broadcasting industry.

108. Earlier the Ministry had made a proposal to grant fiscal incentives/duty concessions to the broadcasting industry to facilitate time-bound transition of analogue cable TV services to Digital. The proposal included grant of infrastructure status to the broadcasting industry. The proposal was discussed in the meeting of the Committee of Secretaries held on 10.2.2012 but was not agreed. Considering the requirements, the Ministry have again moved a proposal to grant infrastructure status to the broadcasting industry to Department of Economic Affairs, Ministry of

Finance. The proposal was discussed in the 12th meeting of the Institutional Mechanism on the Harmonized Master List of Infrastructure, held on 20th Feb, 2017, under the chairmanship of Secretary (DEA) and it has been recommended that “inclusion of broadcasting industry in Harmonized Master List of Infrastructure sub-sectors cannot be considered as presented. Ministry of I&B may submit a revised proposal identifying specific items that qualify for inclusion as Infrastructure”. The Ministry are, therefore, revising the proposal.

109. On the issue of providing broadband services through cable networks and infrastructure status to cable TV digitisation TRAI informed that existing Cable TV networks after certain technical upgradations can be used to provide broadband services. Further, these cable TV operators can lay overhead optical fibre access network much faster and economically to provide broadband services. Many MSOs are presently providing broadband over their cable TV network. TRAI has recommended provision of Right of Way (RoW) and infrastructure status to MSOs and LCOs so that they can effectively lay their network and get financial assistance from banks for up gradation of their network. Additionally, TRAI has also recommended that LCOs may be permitted to act as franchisees of Telecom service providers to provide broadband.

(viii) Sharing of Infrastructure

110. On the main features of TRAI recommendations on infrastructure sharing by cable operators, Ministry of I&B informed as under:-

“TRAI has recommended that sharing of Head-end used for Cable TV services and transport streams transmitting signals of TV channels, among MSOs, should be permitted on voluntary basis. TRAI has also recommended sharing of CAS & SMS by the distributors of TV channels including Cable Operators.”

111. When asked about the reservations, if any, expressed by stakeholders on TRAI’s recommendations on infrastructure sharing and how the same are proposed

to be dealt with, Ministry of I&B submitted that as indicated in para 2.14, 2.15, 2.63, 2.64 and 2.65 of the TRAI's recommendations dated 29.3.2017 on 'Sharing of Infrastructure' the Stakeholders had made the following comments:

- Most of the stakeholders supported the idea of infrastructure sharing, on voluntary basis, in the Cable TV sector. They acknowledged the fact that sharing of infrastructure will reduce the transmission and other costs of MSOs. Some MSOs also opined that decrease in capital cost due to sharing of infrastructure will help them to invest in better technologies. As per them, increased competition due to lowering of entry barriers will result in better services and more choice to the subscribers and it will help in standardization of the networks thus reducing conflicts between service providers.
- On sharing of head-end & transmission networks in Cable TV services, a broadcaster was in agreement that infrastructure sharing among MSOs will improve quality of service as they would get choice of opting better technology and equipment rather than investing in low quality equipment to save its cost. Another broadcaster opined that due to operational, commercial, regulatory and technical issues, infrastructure sharing should not be recommended. While another broadcaster supported the idea of infrastructure sharing as it would reduce CAPEX and OPEX and also encourage effective competition in the market but meanwhile it shall be ensured that no specific stakeholder is able to misuse the same to its advantage.
- The possibility of sharing of CAS and SMS was discussed in the CP. On this issue, most of the stakeholders expressed that sharing of infrastructure should also include CAS, SMS, Call Centre etc. which are expensive and costly to maintain. Some stakeholders argued that since the CAS and SMS are able to identify each MSO individually through the use of an identifier for each STB/ Smart card, sharing of CAS and SMS should be permitted. Some DPOs opined that shared CAS & SMS will help in standardization of processes, allow more transparency and enable even small MSOs to avail benefits of high end CAS & SMS. As per comments of stakeholders, such shared SMS & CAS platforms would also significantly reduce the work for broadcasters for auditing these platforms. Some DPOs also opined that shared CAS would permit interoperability of STBs.
- A broadcaster opined that it has to be decided how separate CAS & SMS report shall be generated for each operator. If common CAS and SMS reports are generated for both, then how the amount would be shared between the operators (equally or in a ratio). Another broadcaster commented that allowing DPOs to utilize single CAS & SMS would be in violation of the current licensing requirements of MIB for HITS platform as well as for MSOs.
- In the Ministry of I&B reference, it was emphasized that Authorized Officers of the State Governments and their representatives should be able to access the systems of MSOs/ LCOs to ensure that there are no violations of the provisions of relevant rules/ guidelines and also to cross-check the reported number of subscribers/ total collection from subscribers for the purposes of

entertainment taxes etc. It was also said that in shared infrastructure the accountability of service providers will have to be ensured with reference to the SMS, their respective subscribers and to the respective State Governments and local administration as well as to the Central Government on all relevant aspects. These issues were also consulted in the Consultation Process (CP).

112. The All India Digital Cable Federation submitted that infrastructure sharing has already been recommended by TRAI. This will ensure that digitisation happens quickly. MSOs can effectively reach far flung areas for digital cable and the service of hi-speed broadband via cable will gain a larger traction.

(ix) Training and Capacity Building

113. On the issue of training and capacity building, TRAI submitted that in its recommendation dated 5th August, 2010 on Implementation of Digital Addressable Cable TV Systems in India, TRAI had recommended that a massive education programme be taken up to educate the stakeholders about the benefits of a digital addressable cable TV network. It has been organising various meetings with LCOs at different parts of the country. Further, TRAI has published Frequently Asked Questions and Dos and Don'ts which are available on TRAI website. Further, pamphlets of the same have been distributed in various workshops/consumer outreach programs. However, it is true that no formal training has been provided to Cable operators.

114. COFI had informed the Committee that Cable Operators employ about 20 lakh people who need constant training to adopt to new technologies but there is not a single institute in India to train them nor any plan of the Ministry to help them.

115. When asked about the steps taken for impart of training to Local Cable Operators in the use of new technologies, the Ministry of I&B informed that training to Local Cable Operators is considered to be of paramount importance for providing quality of service to the cable subscribers. At the time of introduction of DAS, in

2012 Ministry had planned to impart training to MSOs as well as LCOs through its Public Sector unit – BECIL. BECIL had designed the courses and had set up a Lab to impart practical training. A training schedule was also prepared. There were very few takers for the training. MSOs had informed that they have their own arrangement for imparting training to their LCOs and their Staff. Accordingly, BECIL had to discontinue the training program after conduction of a few courses.

116. When asked about the details of training programmes worked out by BECIL *i.e.* duration of such trainings, locations where training was to be provided, fee, if any etc., the Ministry informed that BECIL in partnership with SCTE, UK had planned Cable TV training and certification on (i) Installation Technicians; (ii) Service Technicians; and (iii) Network Technicians. Training courses were planned to be conducted in all the 4 metros for MSOs and LCOs. Training calendar was drawn to meet training requirements. 680 courses were planned to be conducted from March 2012 to May 2012 in 4 metros. Initially, the training programme was designed for five days to cover all aspects of the digital broadcasting. This was reduced to three days subsequently.

117. On being asked about the number of LCOs who received training by BECIL, the Committee were informed that between December 2011 and March 2013, 12 training courses were conducted. Out of these, 7 were conducted in Delhi/Noida and 5 in Bangalore. Out of 12, five courses were meant for LCOs. 277 persons got training in these courses.

118. Asked as to why the COFI was not aware about the training programmes conducted by BECIL, the Ministry in a post evidence reply stated that COFI was a member of the Task Force for implementation of Phase I of digitisation and the representatives of COFI were present in almost all the meetings. COFI had not raised the issue of training of LCOs in any of the meetings.

119. On the reasons for poor response of cable operators in this regard, the Ministry informed that it was observed that majority of the Distributed Platform

Operators (DTH/MSO/HITS/IPTV) had their own in-house training for skill development in the requisite area. The issue of poor response to the planned training courses was discussed in Task Force Meeting.

120. The Ministry further informed that considering the importance of training, the Ministry have taken following two initiatives:-

1. A reference was sent to Ministry of Skill Development & Entrepreneurship to mount training programmes in the areas of (i) Installation of digital Head-end consisting of satellite receive equipment, encryption using Conditional Access System, Subscriber Management System, Analog to Digital Converters, Digital Mixers and Digital distributors etc.; (ii) Laying of coaxial and fiber optic cables, joining of cables, fixing connectors on cables and testing of signal flow on cables; (iii) Manufacture, repair and maintenance of STBs including power supplies; and (iv) Operation of computers for generation of bills, energization and de-energization of channels as per the demand of cable subscribers. Filling of Consumer Application Forms (CAF), activation and deactivation of STBs, generation of SMS reports etc.
2. App based training modules have been proposed to be developed so that LCOs and their staff can download these Apps and get training at their work place as and when they find free time.

121. The Ministry also informed that Electronics Sector Skills Council of India is conducting courses for the DTH and Cable Operators as a part of PMKVY training programme. In this connection, they have already scheduled 3 courses between July and Sept 2017. It is suggested that cable operators may get the details of these courses. It is also suggested that President of COFI in consultation with cable operators may prepare a proposal for the training requirements so that Ministry can get the training schedule developed as per the demand.

(x) Awareness Generation

122. When asked about the steps taken for Public Awareness Campaign for Cable TV Digitization in the electronic and print media, Ministry of I&B informed that Public Awareness Campaign was launched in each phase of digitization via electronic as well

as print media for providing information to the people and also making them aware of the transition from analog to digital TV and to address their concerns and queries. During the implementation of Phase III & IV, a TV spot/Ad on the advantages of digital cable and mandatory digitization in all areas had been developed through DAVP and the same had been provided to Doordarshan, IBF, NBA and ARTBI with the request to transmit the spot at regular intervals on their networks. Further, the Ministry had set up a Sub-Committee on Public Awareness Campaign on 1st January, 2015 to carry out, oversee and monitor the public Awareness Campaign. Audio visual campaign on TV was regularly transmitted over many channels and seen by many viewers. Stickers/Scrolls were run by TV channels voluntarily enforcing people to install STBs. Because of this intensive campaign launched by the Ministry a large number of people across the country moved from analog to digital TV. The Broadcast industry also carried its own campaign for digitization.

123. On the steps taken to spread awareness about digitisation and consumer grievance redressal mechanism in cable TV sector, specifically post digitisation the Ministry informed that they have taken the following steps:-

- (i) A Toll Free helpline was operationalised to answer the queries of the stakeholders including consumer. Queries could be raised in eight Indian languages.
- (ii) The MSOs and LCOs were asked to carry out a public awareness campaign on price of channels, quality of service and grievance redressal as mandated in Rule 13 of the Cable Rules.
- (iii) TRAI conducted a number of consumer awareness programmes throughout the country where MSOs and LCOs were invited to attend. M/o I&B also participated in some of these programmes.

However, It is proposed to add a new 'Consumer' Section' on the website of the M/o I&B (www.mib.gov.in) as well as on website exclusively on Cable TV Digitisation (www.digitalindiamib.com) for giving details of the provisions of 'Grievance Redressal' available to them. DD & AIR would be requested to carry out programmes on the 'Grievance Redressal'. MSOs would again be asked to carry

public awareness campaign on their local channels and with other means as envisaged in Rule 12 of the Cable Rules.

XII. Issues related to Set Top Boxes (STBs)

(i) Interoperability of Set Top Boxes (STBs)

124. The Ministry have informed that over a period of time, the technology in respect of compression and transmission standards has evolved at a very fast pace. Since different operators entered the sector at different stages of evolution of compression and modulation technologies, a variety of technologies co-exist. Since variegated technologies co-exist in the television delivery, this has led to a situation where Set Top Boxes (STBs) deployed by one operator cannot be used with the network of another operator, hampering the easy migration of the customer from one operator to another, in case he wishes to do so. The Bureau of Indian Standards (BIS) has notified the standards for STBs. Although the STBs offered by an operator may be compliant with the BIS standards, this does not ensure technical compatibility and effective interoperability across networks of all operators, thereby hampering easy migration of the subscriber from one operator to another without re-investing in a new STB. The Operators are concerned about the piracy of signals of TV channels. The Operators, due to the concerns of piracy, make the STB tightly coupled by integrating the algorithms of security into the chip, making the STBs non-interoperable.

125. When asked about their views on interoperability of STBs and any suggestions for achieving interoperability which would improve the service quality, foster growth of the sector and ultimately benefit the consumers, TRAI informed the Committee as under:-

“Presently an STB is tied to a specific operator due to various technical, commercial and market driven reasons. As such the same STB cannot be used interchangeably across the different service providers.

STB interoperability would empower the consumers to change their Cable TV (or DTH) service providers whenever required, without changing their STBs. This would shift the focus of the sector towards providing a better quality of services to the consumers at competitive prices as consumers will have an option to switch their service providers due to unsatisfactory services. Implementation of STB inter-operability, will also make them available in the open market, and will drastically reduce the challenge of e-waste resulting due to discarded set-top boxes. Availability of set-top-box in open market will reduce capital requirement of service providers and improve the cash flow position of the industry. The objective of achieving technical interoperability is to facilitate greater consumer convenience and consumer choice, while spurring innovation and healthy competition in the industry, as well as its orderly growth.”

126. In this regard, the Ministry of I&B submitted as under:-

“TRAI in its regulations has already made the provision for the financial interoperability of STBs. There is a provision to return a part of payment to the subscribers if he wants to return the STBs to the cable operator.

Technical Inter-operability was not recommended by TRAI as Technical Interoperable STBs are generally not available and are learnt to be quite expensive.

Technical interoperability is a welcome step provided the increase in cost is marginal. LCOs have been demanding this provision so that they have full flexibility to switch over to other MSO in case of any disputes/disagreement as in the case of analog system.”

127. On the current status of interoperability of set top boxes in India and the steps taken by TRAI to ensure interoperability of set top boxes, TRAI have informed as under:-

“Interoperability can be achieved either through technical interoperability or commercial interoperability.

Technical interoperability as provided for in the existing BIS specifications/DTH Guidelines, is expected to be achieved by means of a combination of Common Interface (CI) slot in the STB and pluggable Conditional Access Module (CAM). In this arrangement, it is envisaged that services of any particular operator can be availed by simply plugging in the CAM of that operator into the CI slot of the STB of any another operator. However, technical interoperability, as envisaged in the

existing DTH Guidelines, has, so far, not proved to be effective as cost of the Conditional access Module is almost similar to the cost of the new Set top box due to very low volume.

Commercial interoperability basically refers to availability of such scheme(s) wherein consumers can obtain STB from a service provider, at such terms and conditions that they can exit the services of the service provider at any point of time and gets adequately compensated on return of the STB. Commercial interoperability has the advantage that it does not involve any technological issues. It also has the advantage that a consumer has a wider choice in terms of operators; consumers can migrate to operators across the platforms. In this backdrop, to ensure commercial interoperability TRAI has notified tariff orders for cable TV service provided through Digital Addressable systems and DTH service which provides an easy exit option to subscribers, ensures availability of consumer-premises-equipment (CPE - that primarily consists of STB and Dish antenna) at reasonable prices, easy to understand terms and conditions and, at the same time, protects the interests of the service providers. These Tariff Orders prescribe standard tariff packages for making available a CPE/STB to the consumers. These packages are in addition to and not to the exclusion of other rental schemes, hire purchase schemes or outright purchase schemes offered by the DTH operator/MSO. In essence, these tariff orders provides for commercial interoperability. However, the tariff order, applicable for DTH services, has been challenged by a couple of DTH operators in the TDSAT and the matter is subjudice before Hon'ble TDSAT. Nevertheless, TRAI has already started deliberating on the issue of technical interoperability.

128. When asked whether it is a fact that a few big media houses have vested interests in discouraging interoperability of STBs and to what extent TRAI needs support of Government to ensure interoperability for the benefit of the consumer, TRAI submitted as under:-

“The STB provided by a service provider is tightly coupled with conditional access system (CAS) deployed by the service provider. Most of the CAS systems are provided by foreign entities as Indian CAS has been developed very recently and its installation is picking up. The interoperability of STBs is a complex issue and has not been achieved anywhere in world. It primarily needs to accommodate contradicting requirements such as technical neutrality, innovation, flexibility to service providers to bring ingenuity, customer delight, and low cost of STB etc. DVB standards used to provide TV broadcasting services has provided

various options to services providers such as selection of appropriate compression technique, Coding technique, encryption system, Middleware and operating system. These technical options make it unique and further complicate technical interoperability. Further, the nature of broadcasting networks being unidirectional, they are prone to piracy of signals of TV channels as point of piracy is relatively more difficult to identify. Piracy adversely impacts broadcasters' revenue and stakes are high. Nevertheless, stakeholders are co-operating and discussing for interoperability of STBs. However, they have many concerns. TRAI is working on this with CDOT and IIT, Mumbai to work out an acceptable solution."

129. On the progress in the matter of interoperability of Set Top Boxes, the Committee were informed as under:-

"A pre-consultation paper was issued on 4th May 2016 to solicit the views of related stakeholders to identify various issues related to interoperability of STBs, challenges and concerns of the industry. The comments received from stakeholders have been analysed. Stakeholders are very much concerned to ensure that system is foolproof to prevent piracy, provide flexibility to choose compression and coding techniques, cost of STB should be low, permit customisation to meet specific subscriber requirements etc. Cable TV networks being one way networks creates serious challenges in ensuring security of the content and identification of piracy points. However, TRAI is working with intent to drive the focus of broadcasting industry towards the suitable solutions for STB interoperability, which can be worked out. Further, TRAI is working on this with CDOT and IIT, Mumbai to work out solution in this regard."

130. On the progress in the matter with regard to inter operability of STBs, the Ministry have stated that the report from Department of Electrical Engineering of Indian Institute of Technology, Bombay (IIT-B) and the Centre for Development of Telematics (C-DOT) is awaited by TRAI.

(ii) Pricing of Set Top Boxes

131. When asked about the average price of a STB, the Ministry informed that the MSOs are charging about Rs. 1000 to Rs. 1200 for a vanilla STB. The price varies depending upon whether it has provision for receiving HD channels and/or recording facility.

132. To a query as to whether the consumer has the choice to buy STB of his/her choice from open market and if there is any control over the price at which STBs are sold to the consumer, the Ministry informed as under:-

“xxxxx..As per para 17(5) of the Standards of Quality Service Regulations issued by TRAI on 14.5.2012, every subscriber is free to buy STB of approved quality from the open market, if available, which is technically compatible with the system of MSO and the MSO/LCO should not force any subscriber to buy or take on rent or on hire purchase the STB from him alone.”

133. Asked as to how MSOs are deciding the cost for purchase, rental and installation of STBs when TRAI has not fixed any price for STB, the Ministry informed as under:-

“TRAI in its regulation has specified that the MSO/LCO should have at least three schemes for supply of STBs – (i) outright purchase, (ii) rental and (iii) installments.

Rates for rental and installment have been specified by TRAI. However, no rates have been specified for outright purchase.

It is observed that most of the MSOs charge activation fee for supply of STBs wherein the STBs remain the property of the MSO/LCO. The amount of activation charge depends on a number of factors such as features in the STBs, competition status, type of package selected by the consumer and the duration for which the subscription charges are paid.”

134. When asked about the average price of a STB, the basis of the cost for purchase, rental and installation of STBs, the depreciation value of a STBs in case the same is returned by a consumer, TRAI informed as under:-

“There is large variety of Set top boxes available in the market. Price of STB depends on its capabilities & features it offers to the subscribers. An average cable TV STB having plain vanilla features would cost about Rs 1200/- plus taxes. When digitisation started, the STBs were introduced in the market with basic features. At that time the priority was for seeding of STBs. The prices have been kept unregulated but TRAI has mandated provision of rental scheme, so that subscribers are not burdened with STB cost. Four different options having varying rates of security deposit and rental have been specified so that customer can take as per his /her requirement. This was done keeping in view the market forces and competition which will ensure rational pricing of STBs and not to hinder technical innovations in the features offered by STBs. This ensured that STBs are made available at affordable and competitive prices. Since market is still competitive prices have come down drastically. Therefore, no intervention has been made to regulate the price of STB. However, TRAI noticed that very high installation and activation fees for STBs is being charged from consumers after it is supplied to them. Accordingly to protect the interests of consumers TRAI has prescribed a ceiling tariff of Rs 350 for installation and Rs.100 for activation of STBs through the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Services and Consumer Protection (Addressable Systems) Regulations, 2017 Regarding the depreciated value of STB, it is mentioned that TRAI prescribed the method of calculating the depreciated values for the STBs in the Telecommunication (Broadcasting and Cable) services (seventh) (the direct to home services) tariff order, 2015. As per the said order, on return of the customer premises equipment by the subscriber, DTH operator shall refund the depreciated value of the said equipment, by calculating using straight line method at the rate not exceeding 1.7 percent for every completed calendar month or part thereof. However, this is under judicial scrutiny of Hon’ble TDSAT.”

135. Asked as to whether TRAI should have fixed the coverage cost of STB, Ministry of I&B stated that TRAI has not fixed the rates for the supply of STBs however has mandated for the MSOs/LCOs to announce the rates being charged by them. Cost of Set Top Boxes depends on their features, quantum of purchase and after sale

service/repairs schemes etc. Ministry are not in favour of too much control and are of the view that the price has rightly been left to be decided by the operators.

136. When asked whether any scheme has been put in place for replacement of old STBs with new STBs, the Ministry stated that different MSOs have different schemes for supply and replacement of STBs. Ministry do not have details of the same.

(iii) Domestic Demand and Indigenous Manufacturing of Set Top Boxes

137. When the Committee desired to know the status of demand for STBs and how much of it is imported and how much can be met through domestic manufacturing, MoI&B stated that about 11 crore STBs have already been installed throughout the country. It is learnt that only about 20% of these have been procured from the domestic STB manufacturers, though the domestic manufacturers claim that they have installed capacity to meet the full demand.

138. On this issue TRAI submitted as under:-

“Each subscriber in digital network requires a set top box to view TV channel. In order to project the requirement of Set top box, it is imperative to get the correct number of digital subscribers. As subscriber figures are not clearly known in analog network, it is difficult to project future demand of STBs. However, industry projections indicate a demand of 10-15 million STBs in near future. This figure is only an estimated figure, and is not based on any supporting data.

As far as percentage of indigenous STBs is concerned, though TRAI does not collect the information, but as per the industry estimate about 30% of STBs are procured through domestic manufacturers.”

139. On the measures taken/proposed for promotion of Indian Hardware Industry and indigenous production of Set Top Boxes, MoI&B informed as under:-

“Ministry have always been encouraging the use of indigenous manufactured STBs.

Import duty on STBs was increased from 5% to 10% and most of the components used for the manufacturing of STBs were put in 0% import duty bracket by MeitY.

A representative of domestic STBs manufactures and MeitY have been the part of all the Task Forces constituted by the Ministry for the implementation of Cable TV Digitisation. They were present in almost all the meetings of Task Force held by the Ministry. Ministry had several separate meetings with the domestic STBs manufactures and the senior Officers of MeitY. Domestic STBs manufacturers have informed that there are about 15 domestic STBs manufacturers in the county and they have installed capacity to meet the full demand of STBs for digitisation. However they mentioned that the MSOs generally prefer to import to STBs rather than buying from domestic manufacturers. One of the reasons mentioned by them is that the MSOs get the facility of long term financing on import whereas this facility is not available in the case of procurement from domestic manufacturers. They also mentioned that the import duty has become zero for import of STBs from ASEAN countries. The issue has been highlighted by the Ministry and as decided by the Cabinet Secretariat, MeitY has been entrusted to look into the issue.

Ministry of I&B had suggested to MeitY to consider making it mandatory to the MSOs to buy a certain percentage of STBs from the domestic STBs manufacturers. However, MeitY had mentioned that this cannot be done as it is violation of FTA.

Conditional Access System is one of the part in any STBs. It was felt that the domestic manufacturing of STBs will be encouraged if there is an Indian CAS. Accordingly, MeitY has got an i-CAS developed from a Bangalore based company. As per the terms of contract, the design of i-CAS cannot be given to any foreign company for three years. About 80 MSOs have already adopted Indian CAS and it is learnt that over 3 Lakh i-CAS STBs have already been deployed. Doordarshan has also selected i-CAS STBs for the DD Free Dish service which is planned to be encrypted.”

140. On the steps which have been taken for promoting domestic manufacturing of Set Top Boxes, TRAI stated that manufacturing of STBs is tightly coupled with CAS system with digital addressable network. Since India initially did not have its own CAS system, most of them are imported while introducing the digitisation in Indian cable system. Recently, with the initiation of IT Ministry an indigenous CAS namely iCAS has been developed which has also given fillip for use of domestically manufactured STBs. It is understood that talks are on with free dish platform to promote use of Indian STBs.

141. When asked about the impact of Government initiatives in checking import of Set Top Boxes and also promoting domestic production of Set Top Boxes, the Ministry stated that it is learnt that the supply of domestically produced STBs had increased after the enhancement of Import duty to 10%. However, the import of STBs at Zero duty from ASEAN countries is reported to have adversely affected the position.

(iv) Quality of Set Top Boxes

142. In terms of technology, it is alleged that most of the STBs are of old technology which cannot provide internet, video-on-demand and value added features. When asked about their views on the issue, the Ministry of I&B stated as under:-

“MPEG 2 compression technique was in use earlier. MPEG 4 technique now used enables carriage of more channels due to more compression. Cable TV networks have sufficient bandwidth to carry a large number of TV channels even with MPEG 2. Some of the DTH operators are still using MPEG 2. Just because MPEG 4 is available, it should not be adopted as long as my network enables me to carry required number of channels even with MPEG 2.

Majority of the STBs supplied by MSOs are vanilla type basically to receive digital encrypted cable TV signals. The vanilla Boxes have provision to received Video on Demand and other basic value added services such as EPG.

For internet service, the setup of the LCOs should be bi-directional whereas it is mainly uni-directional at present. It requires the investment in the part of LCOs. For providing internet service, the MSOs/LCOs have to pay 8% of AGR as fee to DoT even on the subscription charges for the cable TV service. To avoid the payment of 8% of fee, most of the operators have created separate entities for providing internet services and are providing separate cables for the internet service for which a separate internet modem is also provided. If the 8% of AGR as fee issues is resolved, we feel that more & more operators would go for making their system bi-directional to provide internet service on the same cable which is used for TV service. M/o I&B has already taken up this issue and it is under consideration of DoT.

143. On this issue, TRAI submitted that TRAI has been emphasising the use of high quality BIS compliant STBs for cable TV networks. TRAI has taken up with different MSOs from time to time where compliances are taken from MSO, certifying the use of BIS compliant STBs only. TRAI has mandated in the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Services and Consumer Protection (Addressable Systems) Regulations, 2017 that every distributor of television channels or local cable operator as the case may be shall provide set top box confirming to relevant Indian Standard set by the Bureau of Indian Standards. Additionally, MSOs have been mandated to maintain STBs for 3 years without levying any maintenance charge on subscriber, including no visiting fees to be levied for STB complaint related visit to subscriber premises and a malfunctioning STB is to be repaired within 24 hrs. Such stringent conditions will force MSOs to use good quality STBs failing which the expenditure for maintenance of STBs will be much higher than any advantage due to procuring inferior quality of STBs.”

144. The Committee drew the attention of the Ministry to Media Reports on import of Chinese made cheap STBs with old technology (MPEG 2) having no BIS standards, no BEE rating, no interoperability, no quality certification and no electrical protection and asked the steps being taken to ensure installation of quality STBs by the MSOs. To this, the Ministry informed as under:-

“Section 9 of the Cable Act has made it obligatory for every cable operator to use only BIS compliant STBs. MeitY has mandated that all the Set Top Boxes should meet the safety standards and has outlined procedure for Testing/Certification of the STBs. As such, BIS compliant STBs meeting notified safety standards only can be supplied/installed.

Authorised Officers have powers under Section 11 of the Act to seize the Equipment of the Operators if Non-BIS compliant STBs are supplied by them. As mentioned earlier the Authorised Officers are being familiarized with their powers and are being advised time to time to take action against the defaulters.”

XIII. Role of TRAI in Broadcasting Sector

145. TRAI is the regulator for Broadcast services also besides the telecom services. Therefore, TRAI has been empowered to issue Regulations for (i) Interconnection Agreements to be signed between Broadcasters and MSOs and between MSOs and LCOs (ii) Quality of Service and (iii) Tariff Orders. Action against the violators for non-compliance of TRAI Regulations/Orders is within the purview of TRAI. Powers of TRAI to take action against the violations of their regulations/orders are also limited. TRAI has to file a case in the CMM Court against the defaulters which takes time in disposal. Alternatively TRAI can recommend to the Ministry to cancel the registration of the MSO. It is learnt that TRAI has sent a proposal for enhancement of their powers but it is awaiting approval.

146. When asked about the primary responsibilities of TRAI with regard to broadcasting sector, TRAI informed as under:-

“As per TRAI Act, TRAI has been made responsible to lay down the regulatory framework; encompassing tariff, interconnection and quality of services aspects; both for the telecommunication and the broadcasting sector’. In addition to this, TRAI also gives recommendations to the Government. It is also entrusted with the responsibility to ensure the compliance of terms and conditions of licenses. However it is vested with very limited powers to ensure compliance of license terms and conditions and compliance of the regulations framed by it.”

147. Asked about the reasons for which TRAI, a statutory body set up for regulating telecom service, has also been entrusted with the task of regulating the broadcasting sector, TRAI informed as under:-

“In the year 2000, the Government amended the clause (k) of sub-section 1 of section 2 of the TRAI Act, through which powers have been given to the Central Government to notify other services including broadcasting services to be telecommunication services. In exercise of powers as available in TRAI Act, the Government, vide S.O. 44 (E) and S.O 45(E) published gazette notification dated 9th January, 2004, and have entrusted TRAI the additional responsibilities for regulation of broadcasting services and cable services. While TRAI has no detailed information as to why regulation of broadcasting services and cable services was entrusted to TRAI, apparently it seems that since telecommunication services as defined in clause 2(1)(k) of TRAI Act, encompasses broadcasting as well, therefore, it would have been imperative to entrust regulation of broadcasting services also to TRAI.”

148. During evidence, the representative of TRAI informed the Committee that there are certain cases where TRAI Regulations have been violated. As per the provisions of the Act, TRAI can file the case in the Hon'ble Court of the Chief Judicial Magistrate in Delhi. TRAI have filed a number of cases in this. In some cases, penalty has been imposed by the hon. Court and some cases have been pending for a very long time.

149. Asked as to how many cases against defaulters have so far been filed by TRAI, the representative of TRAI submitted as under:-

“I do not know the exact number. But, it is more than 100 cases roughly. The oldest case which is pending is of 2005 and the charge sheet has not been filed on that. There is a problem in that. As Chairman Sir has pointed out that TRAI is telling that they are toothless and they cannot do the work. We cannot impose penalty as per the Act. But, what we are now trying to do is that we have brought in a new concept of imposing financial disincentive meaning thereby that if some people are not obeying our rules and regulations that have been prescribed, we have proposed that some sort of financial disincentive will be imposed on them. We have made this provision in the regulations. Of course, that could not be implemented because of the Chennai High Court. But, we

are trying to go so that some sort of indirect method of control can be brought down against this.”

150. Asked about the exact number of Court cases referred above by TRAI and those pending in various Courts, the Ministry informed that there are a total of 103 cases pending before various High Courts in the country. The details are as under:-

S.N.	Courts	Number of Cases	Remarks
1.	Hon’ble Supreme Court	10	
2.	Hon’ble High Court	26	
3.	Hon’ble TDSAT	07	
4.	Hon’ble Chief Metropolitan Magistrate	21	
5.	Number of cases where TRAI has been made proforma party	39	In these cases the petitioner has made TRAI as one respondent among dispute between two service providers.
Total number of cases as on 7.11.2017		103	

151. On being asked as to why TRAI preferred to file them in Courts instead of taking a different route to recommend the same to the Ministry of I & B, the Ministry informed that as per the provisions of TRAI Act, in case of violation of any regulation/order/direction of TRAI, a complaint case is to be filed before the Chief Metropolitan Magistrate for imposition of penalty as per sections 29,30 and 34 of the TRAI Act. While there is a provision under section 11(1) (b) of TRAI Act to ensure the terms and conditions of license of the service provider and section 11(1) (a) (iii) authorize the Authority to revoke licence for non-compliance of terms and conditions of licence, however revocation of license is a major penalty which involve adverse impact on consumers, hence such penalty need to be imposed with restraint and due care.

152. When the Committee desired to know whether empowering TRAI would require certain amendment in the Cable TV Act 1995, the Ministry informed that there is already provision made in CTN Rules under Rule 10 that every broadcaster, multi system operators and cable operators shall comply with the regulations,

guidelines and orders as may be made or issued by the authority *i.e.* TRAI. Therefore, there appears no need to make amendment in CTN Rules/Act.

153. On the proposal of TRAI to enhance their powers and action taken, the Ministry informed that the TRAI Act is administered by Department of Telecommunication (DoT), Ministry of Communication. The Authority during the course of its functioning felt a need for comprehensive amendment in TRAI Act and has been pursuing the matter with Central Government Since 2006. The proposal to amend TRAI Act 1997 is still under consideration of DoT.

154. When asked whether there should be a separate regulatory body for broadcasting sector or TRAI should get more teeth to regulate broadcasting sector and to the extent it should be empowered, TRAI submitted as under:-

“Whether there is a need or not for a separate regulatory body for the broadcasting sector is a policy decision for the Government to reply. However, for the present, TRAI has been entrusted the responsibility to regulate broadcasting services on 9th January 2004 and since then TRAI has been discharging its functions as per provisions of TRAI Act. The growth of broadcasting sector has been commendable during this period which has seen enormous growth in the number of satellite TV channels, introduction of DTH services, digitisation of cable TV networks, setting up of independent TV rating agency and introduction of FM radio services across the country. Since 2004 TRAI has brought out several regulations to address various issues in broadcasting sector which has enabled transparency and non-discrimination in the value chain, reduction of disputes amongst the stakeholders, improvement in quality of service to consumers and overall growth of the sector. The recommendations of TRAI have also been the basis of several key policy decisions of the Govt. for broadcasting sector. However, the specific issue of setting up of a separate regulatory body for broadcasting sector can only be decided by the Government.”

PART II

Observations/Recommendations

Introductory

1. The Committee note that cable TV forms the backbone of the broadcasting distribution industry and has played a prominent role in the growth of the electronic media sector in the past 20 years. Despite the fast growth of the DTH services, cable services continue to dominate the distribution of TV channels as of today. Out of 181 million TV homes, 93 million (51.1%) homes have cable TV. However, the analog cable TV had been afflicted with certain inherent drawbacks as it can carry only 70-80 channels, it does not have technical feature of facilitating a-la-carte (individual) selection of channels, lacks transparency due to inaccurate subscriber base resulting in underreporting of subscription revenue and concealment of tax revenues, have poor picture quality besides severe competition from Direct to Home (DTH) and Internet Protocol TV (IPTV) services etc. Recognizing the inherent drawbacks in the analog cable TV system, TRAI on 5th August, 2010 gave its recommendations to the Central Government for implementation of Digital Addressable Cable TV Systems (DAS) across the country along with a roadmap to achieve the same. The Telecom Regulatory Authority of India (TRAI) had also recommended a timeframe comprising four phases for switch over from analog systems to DAS in the cable TV sector. The Union Cabinet on 13th October, 2010 approved the proposal of the Ministry of I&B for mandatory introduction of DAS in the cable TV services which *inter alia* covered a timeframe and roadmap for implementation of digitisation with addressability on a pan India basis in cable TV services leading to a complete switch off of analog TV services by 31st December, 2014. The Cabinet also approved certain amendments in the Cable TV Network Regulation Act, 1995 which came into force with effect from 31st December, 2011. On 28th April, 2012, the Government notified the Cable Television Network (Amendment) Rules, 2012 paving the way for cable TV digitisation. The Ministry of I&B in their Notification

dated 11th November, 2011 laid down a four phase schedule for digitisation of cable TV networks in India. In the opinion of the Committee this was a necessary policy initiative on the part of the Government which would go a long way benefitting all the stakeholders in the cable TV industry with its successful implementation. In the succeeding paras, the Committee review the progress of implementation of DAS in the cable TV system along with challenges which need to be addressed by the administrative Ministry and the sector regulator.

Progress of Implementation of Cable TV Digitisation

2. As per Notification dated 11th November, 2011 the digitisation process was to be implemented in four phases with the objective of complete switch off of analog TV services by 31.12.2014. Phase I digitisation covering Metro Cities of Delhi, Mumbai, Kolkata and Chennai was originally slated for 30th June, 2012 which was subsequently modified to 31st October, 2012. Phase II digitisation covering 38 cities (with population more than one million) was planned to be completed by 31st March, 2013. Phase III covering all other urban areas (Municipal Corporations/Municipalities) was originally slated for 30th September, 2014 which was subsequently extended up to 31st January, 2017. Phase IV digitisation covering rest of India was originally slated for 31st December, 2014 which was subsequently extended up to 31st March, 2017. Digitisation of cable TV in all the cities in Phase I & Phase II areas is complete except for Chennai in Phase I and Coimbatore in Phase II. As regards Phase III and IV, about 75% digitisation has been achieved excluding Tamilnadu. Digitisation in Tamilnadu could not be achieved due to court order not to disturb the analog signals of Arasu cable till a decision was taken by the Ministry on their application for MSO registration. The Committee observe that apart from the difficulties in the State of Tamilnadu (which is discussed in the subsequent paragraph), the process of digitisation has witnessed significant delays particularly during the last two phases of its implementation *i.e.* Phase III and Phase IV. According to the Ministry, the progress of digitisation in these two phases was affected due to the

stay/extension granted by some High Courts in a large number of court cases filed in different High Courts. The Committee have been informed that after the Ministry moved to the Supreme Court all these cases were transferred to Delhi High Court which disposed off the cases by first week of December 2016 after a lapse of considerable time. The court had given time of three weeks to the petitioners to switch over to digital. However, to avoid inconvenience to the consumers who had not taken STBs because of court cases, the Ministry had allowed time upto 31st January, 2017 for Phase III areas and the cut off date of Phase IV was modified to 31st March, 2017. The Committee are given to understand that a number of MSOs delayed the registration with the impression of getting further extension from the Ministry after 31st March, 2017 which also delayed the digitisation process. In the 21st Task Force meeting held on 14th March, 2017, it was unanimously decided not to extend the cut off date of Phase IV as it will send wrong signals and it will amount to a great disincentive to the operators who acted well in time and made investments to meet the target. Chairman, TRAI was also against any further extension. Therefore, with the approval of Minister of I&B, it was decided not to extend the cut off date of Phase IV. On the cut off date of 31st March, 2017, the progress of digitisation was 70% (excluding Tamilnadu). The Committee have been informed that cable TV digitisation has been mandated throughout the country from 1st April, 2017. The Ministry on 30th March, 2017 issued a Circular directing all the Broadcasters, MSOs, LCOs to ensure that no analog signals are transmitted over the cable networks after 31st March, 2017 failing which action would be taken against the defaulters as per the provision in the cable TV Act/Rules.

From the foregoing it is evident that digitisation has not only been delayed but would take longer time for complete switch off of analog TV services in the country. About the steps taken for achieving 100% digitisation after the cut off dates, the Ministry have stated that they have issued an Advisory to all the Authorized Officers of States/UTs, Chief Secretaries of States/UTs and Nodal Officers of States/UTs to ensure that no analog signals are transmitted by cable

operators. Authorized Officers are now responsible to ensure that the operators carry only digital encrypted signals and meet all the conditions of cable Act/Rules and TRAI Regulations/Orders. From the above submission of the Ministry which was also reiterated in evidence, it appears as if with the legal deadline for digitisation getting over, the Ministry now do not have any role to play in digitisation and it is now the Authorized Officers and TRAI who are responsible for the unfinished task. However, from the complaints received after the issue of Directions, it is evident that Authorized Officers have failed in discharge of their duties to take forward the process of digitisation and check illegal practices by MSOs/operators. The Committee are of the considered view that the Ministry can not absolve themselves from the responsibility since it is the Ministry of I&B which being the administrative Ministry have to oversee the overall implementation. The Committee, therefore, recommend that an accountable monitoring mechanism be put in place at the central level at once to co-ordinate with the Authorized Officers for tracking the violations by the operators and also to hold periodic meetings with the concerned to ensure that the mandated digitisation in the Cable TV services is enforced.

MSO Registration and Seeding of data in the Management Information System (MIS)

3. The Committee note that the Ministry of I&B have developed a Management Information System (MIS) for each of the registered MSOs, DTH & HITS operators to enter STB seeding status. For this, every registered MSO has been provided user ID and Password. As on 09.11.2017, out of 1471 registered MSOs, 952 MSOs have started entering data in MIS. Out of the remaining 519 MSOs, Show-cause Notices have been issued to 307 MSOs in the first round who are registered licensee for more than one year. In the second round upto March, 2017, Notices have been issued to 149 MSOs. It is a matter of grave concern that while MIS has been activated and operationalized to gather information on MSOs seeding status, many MSOs are not seeding the data to the MIS database as per requirement. Unless the MSOs seed the data regarding subscriber information and other prescribed information, there will be no transparency and accountability of the

stakeholders. Therefore, the Committee recommend the Ministry to persuade the MSOs to complete seeding of data in the MIS at the earliest and to ensure proper agreements between MSOs and Broadcasters in this regard. The Committee may be apprised about the action taken against the defaulting MSOs including cancellation of their registration, etc. for not seeding the data in MIS.

Status of Digitisation in Chennai

4. The Committee are disturbed to note that only 33% digitisation has been achieved in the State of Tamilnadu. According to the Ministry, digitisation in Tamilnadu could not be achieved due to court order not to disturb the analog signals of Arasu cable till a decision is taken by the Ministry of I&B on their application for MSO registration. The Committee find that in view of the TRAI recommendation not to allow Government entities to operate in the broadcasting and distribution sector, the Ministry were unable to take a final view on the issue as a provisional registration was granted to Arasu cable earlier in the year 2008. However, considering the court directive and to complete digitisation in Tamilnadu a provisional registration was granted to Arasu cable on 17th April, 2017 against the TRAI recommendation. What is disquieting to note is the fact that the Ministry also granted extension of time to the Arasu cable, first upto 17th July, 2017 and thereafter upto 17th August, 2017. After the issue of registration to Arasu cable, the Ministry have also received complaints from the registered MSOs and their LCOs in Tamilnadu that they are being forced by Arasu cable to take signals only from them. The Ministry have requested the Chief Secretary of the State to look into the matter and to ensure that Arasu cable does not have monopoly. Some of the complainants have also moved to Chennai High Court in this regard. It is a matter of deep concern to the Committee that undue indulgence has been shown to Arasu cable which has badly affected the progress of digitisation in the State of Tamilnadu. The Committee recommend that the Ministry should take a concrete decision in conformity to the recommendations of TRAI in a definite time-frame in this matter to speed up the process and achieve the objectives of digitization of Cable TV in Tamilnadu. The Committee also

expect the Ministry to address effectively the issues raised in the complaints filed by some MSOs and LCOs in Tamilnadu. The Committee would like to be apprised of the decision taken in the matter within a period of three months.

Digitisation in Rural and Remote Areas

5. The Ministry have informed the Committee that Phase IV of cable TV digitisation covers all rural areas throughout the country. One of the challenges in achieving 100 per cent digitisation is the non-availability of digital signal in some remote and inaccessible areas where there are very few cable operators. In these areas there are no digital signals from registered MSOs as they don't find it cost effective to lay fibre optical cables to extend digital signals in these remote areas. The Committee note that for such areas, the cable operators have been suggested either to set up their own digital Head End after taking MSO registration or take signals from HITS operators for further distribution. Nodal Officers have been requested time and again to review the progress of digitisation with all the stakeholders and motivate the existing MSOs to extend services in such remote areas. Further, the consumer have choice to go for private DTH or DD Free Dish connection. DD Free Dish is very popular in such areas as subscribers are not required to pay any monthly charge for the service. In view of the above submission, the Committee are of the view that options such as allowing infrastructure sharing for Cable distributor or providing necessary resources or subsidy to MSOs for making investment in rural areas for developing necessary infrastructure may be considered as developing infrastructure individually may be a costly proposition for Cable operators. The Committee recommend that the planned scheme of Doordarshan for distribution of DTH Set Top Boxes in remote, tribal, hilly and border areas may be continued and effort may be made to popularize DD Free Dish in the rural areas by improving its content and rationalizing the costs in a better way.

Concerns of stakeholders in the Broadcasting Industry

6. The Committee note that the cable TV services value chain comprises four main supply side entities *i.e.* broadcaster, Multi System Operator (MSO), Local

Cable Operator (LCO) and the end consumer. The Ministry had constituted a Task Force with representatives from various stakeholders such as Broadcasters, MSOs, LCOs, DTH Operators, domestic STB manufacturers, State Nodal Officers, Consumer Forums, FICCI, CII, TRAI and other Government organisations such as BIS, MeitY, DoT, Prasar Bharati etc. The meetings of the Task Force were held to steer the process of implementation of cable TV digitisation in Phase III and Phase IV. The Task Force used to meet regularly on monthly basis to review the progress. In Phase I 20 meetings, in Phase II 6 and in Phase III and IV 21 meetings were held. Though the Ministry and the regulator have stated that the issues/concerns raised by various stakeholders were invariably discussed in these Task Force meetings and efforts were made to accommodate their demands and address the concerns, the Committee find that there are many issues lingering post digitisation which need to be resolved. The Broadcasters have highlighted issues concerning payment of Carriage fee to DPOs, non-availability of subscriber data and lack of addressability, subscription fee and freedom for pricing of channels etc. The MSOs have issues relating to Inter-connect agreements, non-transparent pricing of channels, tendency of broadcasters to offer bouquets rather than individual channels, discrimination between MSOs for providing content and high pricing of channels by the Broadcasters etc. The local cable operators are not satisfied by the fall back arrangement specified by TRAI for interconnection agreement with MSOs and are unwilling to share subscriber data with MSOs. The consumers are still being forced with channels in Bouquets instead of choice of a-la-carte channels and itemised bills for the service including tax details and content cost are not being provided by LCOs. Their problems range from abrupt stoppage of services and/or channels by cable operators without any notice, no fixed price of STBs- different operators continue to charge different rates, non-filling up of Consumer Application Form (CAF) by LCOs, complete lack of consumer grievances redressal mechanism such as toll-free number, web-site etc. for logging of complaints and their resolution. The Committee are given to understand that once new regulatory framework

consisting of Tariff Order, Interconnection Regulation and Quality of Service and Consumer Protection regulations comes into force, it will address the concerns of the stakeholders. The Committee further note that besides the above issues relating to Cable TV Digitisation, stakeholders have also raised certain issues which relate to the broadcasting industry as a whole viz. industry status to broadcasting sector, 8% AGR for providing broadband via cable, level playing field for small players, lack of access to formal/institutional credit interoperability of Set Top Boxes, etc. Some of these issues are already under consideration of Government. The Committee recommend the Ministry/TRAI to take note of the submission of the stakeholders and take steps on actionable points suggested without compromising with the legitimate rights of consumers. This will not only raise the confidence of the stakeholders but also provide a conducive eco-system for intended digitisation of the Cable industry and the benefit of the broadcasting sector as a whole.

New Regulatory Framework by TRAI

7. The Committee note that TRAI being the regulator for the broadcast services had notified a comprehensive regulatory framework for implementation of DAS consisting of Tariff Order, Interconnection Regulations, Quality of Services Regulations and Consumer Grievance Redressal Regulations on 28th April, 2012. As digitisation progressed, a need was felt to have a relook at the existing regulatory framework in order to meet the expectation of various stakeholders. Accordingly, TRAI has notified a new Regulatory Framework on 3rd March, 2017 consisting of Tariff Order, Interconnection Regulation, Quality of Service and Consumer Protection Regulations to address the concerns of the consumers and other stakeholders. The new regulatory framework aims at bringing uniform regulations for all addressable systems including DAS. Emphasizing the importance of these new Regulations, the Chairman, TRAI had stated during evidence that TRAI's Regulations, Notifications, Guidelines and Orders are guided by four over arching principles i.e. non-discrimination, level playing field among players, customer protection and growth of the sector as a whole. The latest

Regulation is also guided by these principles. Some of the salient features of the revised Regulations are flexibility to Broadcasters to price the channel on a-la-carte basis, network capacity fee for DPOs, Interconnection Agreements to be on the basis of RIO, cap on carriage fee charged by DPO, mandatory display of MRP of channels, transparent declaration of information on choice of channels, price, terms of subscriptions, provisioning of STBs, mandatory offering of all channels on monthly subscription basis etc. With the introduction of the new framework, it is expected that the needs of the consumer will be fulfilled and it will provide adequate opportunity to all stakeholders for business ingenuity and offering their services. The Committee are, however, concerned to note that some Broadcasters have challenged the new Regulatory Framework in High Court of Madras on jurisdictional issue and some DTH operators have challenged it in the High Court of Delhi. The matter is sub judice and at presently under judicial scrutiny. Looking at the new features inbuilt in the new regulatory framework, the Committee are hopeful that it is definitely going to address the concerns of consumers and stakeholders to a great extent. The Committee, therefore, recommend that efforts be made for persuading the Court for early hearing of these cases so that the uncertainty relating to the regulations are not allowed to continue for long and concerns of the stakeholders and consumers at large are addressed in a fair and transparent manner.

Choice of a-la-carte Selection of Channels by Consumers

8. The Committee note that one of the major benefits of digitisation was stated to be empowering consumers to exercise a-la-carte for individual selection of channels so that they will pay only for what they decide to watch but the ground reality is entirely different. The Cable operators Federation of India (COFI) raised serious concern on the issue stating that a-la-carte choice is not given to consumers and wherever it is offered, it is made out of reach of the customers. The NBA expressed similar concern stating that DPO packages are pushed to consumers and a-la-carte pricing is made unattractive at retail. Also, there is no transparency with regard to pricing of individual channels as a number of LCOs

do not provide full details of the channels/rates to the consumers and do not get the consumer application forms filled properly. Stating the reasons, the Ministry have informed that MSOs often find it difficult to provide this facility as the rates of bouquet by Broadcasters are much more attractive than the a-la-carte rates. The Committee are concerned to note the absurdity in the pricing of the bouquets of channels that a channel within the bouquet when chosen separately may cost more than the cost of the entire bouquet. The Committee observe that it a deliberate attempt by MSOs/DTH operators to discourage selection of individual channels by pushing their tailor made packages for their vested interests. This practice coupled with reluctance on the part of Broadcasters to disclose MRP of individual channels strongly impinges on the freedom of consumers to choose channels of their choice. The Ministry have admitted that some operators are not extending choice of a-la-carte as they are getting bouquets of channels from Broadcasters rather than a-la-carte at individual price. Whatever may be the reason for operators not extending a-la-carte choice of channels, it is the consumer who is at the receiving end and whose interests are at stake in the whole process. The Committee further learn that as per TRAI Regulations, it is mandatory for every MSO/LCO to offer a Basic Service Tier (BST) consisting of at least 100 FTA channels at a price not exceeding Rs.100 plus taxes. In view of this, consumers should have choice of a-la-carte selection of channels so that they can add channels to BST to have full flexibility for subscribing pay channels of their choice. However, this is not being followed. Most of the MSOs offer at least 3 to 4 bouquets in addition to BST. TRAI has, therefore, come out with a revised Regulations which will take care of the issue. The new Regulations include measures such as Broadcasters to declare nature of its channels (Pay or FTA); no charges on FTA channels; Broadcasters to declare MRP of its channels; offering all channels on a-la-carte basis to distributors, MRP to be displayed on electronic programme guide; transparent declaration of information relating to channels choice; price etc. The Committee observe that ideally there should also be a mechanism to have consultation with LCOs by MSOs in finalizing the channels in

the basic package of FTA channels to take into account the interests of the consumers. Taking note of the fact that the issue is sub-judice, the Committee desire that the Ministry should make concerted efforts for early hearing and disposal of the cases so that the consumer is able to avail the benefits of choice of channels. The Committee also recommend that the option of Pay Per Use as is already available in the DTH platform should be explored which will give the consumer more flexible option.

Issue of Carriage Fee

9. The Committee are given to understand that in the analog system, the Broadcasters were paying carriage fee to the MSOs for carriage of channels. As per the Interconnection Regulation issued by TRAI on 30th April, 2012, MSOs were allowed to carry carriage fee from Broadcasters but the rate of the carriage fee to be charged was not specified. In the analog era, when the carrying capacity was limited, there were three bands, VHF-1, VHF-3 and UHF. VHF-1 band offered the best signal quality followed by VHF-3 band which offered slightly inferior quality and the UHF band which was inferior to VHF-3 band. VHF-1 had the capacity of only seven to eight channels and every Broadcaster wanted to be placed in this band. The Ministry also wanted to put the mandatory channels such as Doordarshan National Channel and Lok Sabha Channel in the VHF-1 Band. Out of the remaining slots, there was a race between all the broadcasters to be in the VHF-1 band. Whosoever paid the higher price, their channel was carried in the VHF-1 band. The fee paid by Broadcasters to MSOs/LCOs for carrying the channel in a particular band came to be known as Carriage fee. There are two other concepts of Placement fee and Marketing fee. Broadcasters often want to place their Channel next to popular channels or at the beginning of a particular genre of channels. This is called placement of a channel and often huge premium is paid by Broadcasters for such a placement. Marketing fee refers to insertion of a channel in a popular bundle/bouquet of channels so as to increase its viewership. After digitization of transmission, the carrying capacity has increased manifold

and there is no differentiation in quality of signals. As a result, the erstwhile race amongst the Broadcasters to put their channel in the prime VHF 1 band no longer holds any relevance. However, placement and marketing of channels still continues. The News Broadcasters Association (NBA) while deposing before the Committee expressed concern that even after digitization, they have to pay huge amount of carriage fee. Even if the consumer pays to cable operator or MSOs for the news that he is watching that money hardly comes back for news gathering. Therefore, all the news channels are Free-to-Air channels. The Ministry of I&B have informed that the issue of carriage fee was raised in the Task Force meetings and when the Ministry and the sector regulator TRAI asked the Broadcasters to disclose the Carriage fee paid to the DPOs, none of the Broadcasters shared the information. Some Broadcasters provided the combined information on Carriage fee, Placement fee, and Marketing fee which makes it difficult to measure the carriage fee separately, as placement and marketing fee are mutually agreed upon and commercial in nature. The Committee find it perplexing that Broadcasters often complain that the DPOs charge exorbitant amounts in the name of carriage fee and that it should be regulated, however, when asked to share the details of the same, there has been extreme reluctance on the part of the Broadcasters to share the details of Carriage Fee with the Ministry and TRAI. The Committee appreciate the efforts of TRAI which despite extreme reluctance on the part of Broadcasters to share the details of the Carriage fee, has now addressed the issue of carriage fee in its new regulatory framework wherein a cap of 20 paise per subscriber per channel has been prescribed which will further reduce as number of subscribers subscribing to the channel increases and will become zero when 20% of the subscribers will be available on platform who choose the channel. However, this framework is under judicial scrutiny in the Hon'ble High court of Chennai and Delhi. The Committee hope that efforts of TRAI would go a long way in addressing the issue of Carriage fee to the satisfaction of all the stakeholders.

Tariff Regulations and Revenue Sharing Arrangements

10. The Committee note that the revenue sharing arrangement between MSOs and LCOs are mostly on mutually agreed amount basis or revenue sharing percentage basis. The Committee note that TRAI, in the year 2016 after consultation with all the stakeholders in the Tariff Order came out with Model Interconnection Agreement (MIA) and Standard Interconnection Agreement (SIA) in which different works between the MSOs and LCOs were identified. MIA provides for revenue share between MSOs and LCOs based on negotiations. The SIA would prevail in cases where mutual negotiations fail. The revenue may be shared in the ratio of 55:45 for FTA channels and 65:35 for pay channels. According to TRAI, this framework is very transparent and adequately protects the interest of both the stakeholders. The Cable Operators Federation of India (COFI) were, however, critical of the framework stating that the revenue had been left to mutual agreements between Broadcaster's and MSOs and between MSOs and LMOs/LCOs. LMOs could never reach a mutual agreement since MSOs were also made their competitors and permitted to run a last mile network. It led to discrimination and uncertainty. Even in the fallback arrangement suggested by TRAI, LMOs business become unviable causing unemployment and helping 'Pay' Broadcasters and allied MSOs and DTH players to dominate the market through monopolies. When the Committee desired to know if consensus was not achieved before finalising the revenue sharing arrangement, TRAI have stated that the draft Regulation was issued asking for comments before issue of final Regulation. In the Explanatory Memorandum of the Regulation, the issues, comments of stakeholders and justification for the provision in the Regulation has been outlined. TRAI further admitted that there were certain issues resulting in non-level playing field and discriminatory practices in the sector, when major MSOs are getting favourable treatment from the broadcasters. These issues have largely been addressed by TRAI in the new regulatory framework, as the new framework has the key features, viz. for transparency, broadcaster is required to declare MRP up to which a DPO can charge from a subscriber, assured Distribution fee of 20 %

of MRP to DPOs, discounts offered should be measurable, transparent and within reasonable limits of 15% (Not exceeding 35% with distribution fee), and distribution fee is to be shared between MSOs and LCOs. However, the new framework is sub-judice in the Hon'ble High courts of Chennai and Delhi and is under judicial scrutiny. The Committee hope the court case will be finalized at the earliest to bring certainty to all the stakeholders.

Advertisement Revenue vs. Subscription Revenue and Regulation of Advertisement

11. The Committee note that one of the drawbacks of analog cable TV was its limited carrying capacity and transparency which distorted the business model for Broadcasters and increased their dependence on advertisement revenue. It was expected that post digitisation the increased carrying capacity would enable Broadcasters to offer niche channels and HD channels. The Committee further note that while TV subscription revenue has increased from Rs.329 billion in 2011 to Rs.588.3 billion in 2016, advertising revenue has also increased from Rs.116 billion in 2011 to Rs.201.2 billion in 2016 and therefore the percentage of advertisement revenue of the TV industry as per Industry Report has remained static in the range of 33-35% of the total revenue of TV industry. As such, there is no noticeable shift from advertising revenue to subscription revenue in the post digitisation era. Further, no more Ad free channels have been reported by Broadcasters after 2012. On the Guidelines for advertisement to be followed by pay channels, the Committee note that as per Rule 7 of the Cable Rules, no programme telecast in Pay Channel or Free to Air Channel(FTA) shall carry advertisement exceeding 12 minutes per hour which may include up to 10 minutes for commercial advertising and up to 2 minutes for self-promotional programmes. TRAI has brought out detailed Regulations on the issue but the matter is reported to be sub judice at present. The Committee are however surprised to find that though the detailed Advertising Regulations brought out by TRAI stand challenged in the court, both the FTA as well as the pay channels are having a free run subjecting consumers to frequent long dose of advertisements during a

programme. The Committee recommend that steps must be taken to regulate the permissible duration and frequency of advertisements during a programme to ensure that in order to maximize their advertisement revenue, Broadcasters do not force the viewers to bear repetitive slots of advertisement in quick succession without any check whatsoever. At the same time, it must be ensured that advertisements being run in scroll/ticker do not cover more than 10% of the TV screen space and also do not spoil the aesthetic sense of the programmes being telecast. It may also be ensured that there should not be any vertical display (running or static) of advertisement on TV screen by any TV channel. The Committee hope that the Ministry will initiate necessary steps in this direction and apprise the Committee of the action taken in this regard.

Transparency, Quality of Service and Consumer Grievance Redressal System

12. The Committee note that at present there is no effective grievance redressal mechanism to address the grievances of consumers on issues related to cable TV digitisation. TRAI has mandated that every MSO/LCO should have a Toll Free helpline and a website for logging of complaints and should nominate a Nodal Officer who can be approached by subscribers in case their complaints are not resolved in time. TRAI has also specified a timeframe for redressal of the complaints. However, most of the MSOs/LCOs have not set up Toll Free Helpline and website for lodging of complaints and have not notified the names and contact numbers of the Nodal Officers. It has also been observed that they are not providing computerized bills to consumers and have also not activated the complaint redressal mechanism. As such, the consumers are left in lurch with no other option but to approach Consumer Courts. This option is also rarely resorted to not only because of the amount involved being very negligible but also because of the hesitation of the consumers to get involved in the procedural hassles of the legal system. Absence of an effective grievance redressal mechanism leaves the consumer helpless and sometimes vulnerable to exploitation by DPOs at will. The Committee are pained to find that though several grievance redressal avenues are

stated to be available to the cable TV consumers, yet most of these are either non-operational or quite ineffective in providing the desired relief. Admittedly, the consumer grievances are not getting redressed effectively either at LCO level or at the MSO level or at the higher level of Broadcasters. A need is therefore felt to explore the possibility of linking cable network through internet to a Centralized Monitoring Mechanism. The Committee are given to understand that a Centralized Monitoring System is now proposed to be set up which will also have access to the Grievance Redressal System of MSOs. Such a system which will have information on no. of subscribers, channels being carried by MSO/LCO, subscription charge and GST paid by subscribers, etc. would take action against the defaulters in case complaints are not attended to on time. The C-DAC and the C-DoT organizations have been asked to suggest low cost solutions for such a centralized monitoring system to monitor the services provided by the cable operators. The Committee recommend that this Centralized Monitoring Mechanism be rolled out and put in place in a time bound manner. Regarding Ministry's suggestion on linking subscription charges to a central account and releasing the same to cable operator subject to their resolution of complaints, the Committee recommend that the Ministry should work out on this methodology, in consultation with stake holders, and also consider bringing in the necessary amendments in the Cable Rules to make it effectively operational. The Committee may be apprised of the action taken by the Ministry for setting up of Centralized Monitoring Mechanism and also on other issues.

Vertical Monopolies and Cross Media Holding

13. The Committee note that in order to address the issues relating to Media ownership, TRAI had sent its recommendations on "Monopoly/Market dominance in cable TV services" to Ministry of I&B on 26th November 2013, which dealt with Merger & Acquisition rules for cable TV sector and restrictions to be imposed on MSOs to prevent monopolies/accumulation of interest in a relevant market through Merger & Acquisition. On 12th August 2014, TRAI had also sent its recommendations on "Issues relating to Media Ownership" to Ministry of I&B

which dealt with Cross media ownership rules for dominant operators in news segment of television and print category, Internal plurality *i.e.* freedom to editors to express views/news and Rules to be applicable to mergers & acquisitions. However, TRAI recommendations on both the issues are since pending with Ministry of I&B. While TRAI is of the view that it would be desirable to implement these recommendations on priority basis, Ministry of I&B, on the other hand, are not in favour of too much control to restrict the areas of operation of the entities and feel that the regulations should aim at preventing exploitation by any entity and rest should be left to the market forces. However, NBA have strongly pleaded that vertical monopoly or vertical integration of DPOs and Broadcasters is not healthy for either the cable fraternity or the Broadcasters because it makes room for bias and more importantly removes the concept of level playing field. NBA apprehends that vertical mergers also foreclose competitors and in turn affects consumer's choice. NBA has further submitted that cross media ownership is not a healthy trend in media industry and has the potential of creating serious conflict of interest situation which can stifle both the content side and business side of media companies. The Ministry of I&B also received complaints of existence of such entities in the market/industry. The Committee can hardly ignore the concerns expressed by the industry and are of the considered view that issues related to Vertical Monopolies and Cross Media Holdings have serious implications for the print and electronic media in India and cannot be simply left to the market forces and they need suitable intervention of Government from time to time. The Committee may be apprised of the status of action taken by the government on both the recommendations made by TRAI, existing provisions in force to address the issues of Vertical Monopolies and Cross Media Holdings in the cable sector and to what extent the recommendations would help in curbing the menace of cross media holding.

Provision of High Speed Broadband through Cable TV Network

14. The Committee note that the existing Cable TV networks, after certain technical upgradation, can be used for providing broadband services at high speed. The cable TV operators can lay overhead optical fibre access network much faster and economically in order to provide broadband services. Many MSOs are already providing broadband services over their cable TV network. TRAI has recommended provision of Right of Way (RoW) and infrastructure status to MSOs and LCOs so that they can effectively lay their network and get financial assistance from banks for up gradation of their network. However, the Committee note that many MSOs/LCOs are not very keen on providing this facility. The consumers are kept devoid of this facility as the cable operators are not ready to pay the 8% Adjusted Gross Revenue (AGR) as fee to DoT as required to be paid to the Government on the total collection, including collection from the cable TV service. To avoid the payment of 8% of fee, most of the operators have created separate entities for providing internet services and are providing separate cables for the internet service for which a separate internet modem is also provided. For internet service, the setup of the LCOs should be bi-directional whereas it is mainly uni-directional at present. If the issue of 8% of AGR fee is resolved, more & more operators would go for making their system bi-directional to provide internet service on the same cable which is used for TV service. To give incentive to the cable operators, TRAI had issued a recommendation to DoT for waiving off the revenue from cable TV services from the AGR for a period of four years. The Ministry of I&B and TRAI had raised this issue and Cabinet Secretariat had constituted a Committee to examine the issue and come out with recommendations. However, a final view could not be taken on this and now the issue is again under consideration of DoT. The Committee feel that there is an urgent need to have a relook at the issue of payment of 8% of AGR as fee which has held up the utilization of the existing vast Cable TV network across the country for providing high speed and reliable broadband connectivity in India. This step will not only tap the already existing Cable TV network for providing

high speed broadband but will also reduce the burden on NOFN while also providing numerous employment opportunities in the sector. The Committee recommend the Ministry to impress upon DoT for an early decision in the matter.

Infrastructure Status to Broadcasting Industry

15. The Committee are constrained to note that though the National Telecom Policy way back in 1999 had mentioned use of Cable TV networks for broadband penetration and subsequently TRAI also had recommended for the same, no practical steps were apparently taken in this regard. Though the Ministry of I&B had made a proposal in this regard which was discussed in the meeting of the Committee of Secretaries held on 10.2.2012, the same was not agreed to. There was no follow up in the matter and it did not reached to its logical end. The proposal aimed at grant of fiscal incentives/duty concessions to the broadcasting industry to facilitate time-bound transition of analog Cable TV services to Digital, which also included grant of infrastructure status to the broadcasting industry, reduction of basic custom duty on digital Head-ends and STBs and rationalization of Taxes on the Broadcasting & distribution Sector. Ministry of I&B, very recently in 2017, have again moved a proposal to grant infrastructure status to the broadcasting industry to Department of Economic Affairs (DEA), MoF, which was discussed on 20 Feb, 2017, in the 12th meeting of the Institutional Mechanism on the Harmonized Master List of Infrastructure. Ministry of I&B have been asked to submit a revised proposal. The Committee are unable to find the reason as to why the Ministry took five long years to place a fresh proposal in 2017 on such a pressing issue of grant of infrastructure status to the Broadcasting Industry particularly when TRAI had already recommended for mandatory introduction of DAS in the Cable TV services in the year 2010 itself and the Ministry had also notified the schedule for digitisation in the year 2011. If the issue of granting of infrastructure status had been taken earnestly at that time itself, it would have facilitated digitisation in a big way. Nonetheless, considering the urgency in the matter, the Committee recommend the Ministry of I&B to submit the revised

proposal expeditiously to the Department of Economic Affairs in the interest of the industry and to make concerted effort for granting infrastructure status to the broadcasting industry. The Committee would like to be apprised of the steps taken by the Ministry in this regard.

Sharing of Infrastructure

16. The Committee note that TRAI has recommended sharing of Head-end used for Cable TV services and transport streams transmitting signals of TV channels among MSOs on voluntary basis. TRAI has also recommended sharing of Conditional Access System (CAS) & Subscriber Management System (SMS) by the distributors of TV channels including Cable Operators. During consultations, most of the stakeholders have supported the idea of infrastructure sharing, on voluntary basis, in the Cable TV sector and acknowledged the fact that sharing of infrastructure will reduce the transmission and other costs of MSOs. Some MSOs have also opined that decrease in capital cost due to sharing of infrastructure will help them to invest in better technologies, increased competition due to lowering of entry barriers will result in better services and more choice to the subscribers and it will help in standardization of the networks thus reducing conflicts between service providers. Ministry of I&B have also emphasized that Authorized Officers of the State Governments and their representatives should be able to access the systems of MSOs/ LCOs to ensure that there are no violations of the provisions of relevant rules/guidelines and also to cross-check the reported number of subscribers/ total collection from subscribers for the purposes of entertainment taxes etc. It was also said that, in shared infrastructure, the accountability of service providers will have to be ensured with reference to the SMS, their respective subscribers and to the respective State Government and local Administration as well as to the Central Government on all the relevant aspects. While appreciating the efforts of TRAI to come out with the guidelines to implement sharing of infrastructure by different stakeholders, the Committee hope that the TRAI recommendations would encourage shared use of distribution

network and services for delivery of broadcasting services to the subscribers and prevent duplication of efforts by the stakeholders.

Training and Capacity Building

17. The Committee note that considering the tasks involved in training and capacity building of local cable operators to facilitate the digital switch over with least inconvenience to the consumers, the Ministry of I&B had engaged Broadcast Engineering Consultants India Limited (BECIL) to launch training programmes in batches to impart training to cable operators. Initially, the training programme was designed for five days to cover all aspects of the digital broadcasting. This was reduced to three days subsequently. In all, between December 2011 and March 2013, 12 training courses were conducted. Out of these, 7 were conducted in Delhi/Noida and 5 in Bangalore. Out of 12, five courses were meant for LCOs. 277 persons got training in these courses. However, subsequently BECIL had to discontinue the training course because of lack of response from the cable operators. The Committee's analysis reflect that while there was an urgent need to provide training facilities to a sector employing 20 lakh people, the Ministry surprisingly cited poor response and lack of participation by cable operators as the reason for discontinuation of the training programme. The Committee feel that a sector with such a potential for employment generation cannot be left to meet its training requirement on its own. For facilitating digital switch over, a huge workforce engaged with the cable operators need to be trained to adapt themselves to new technologies as it is they who have to play a significant role and supplement the efforts of the Government in digitisation. The Ministry need to arrange adequate training facilities to Local Cable Operators(LCOs) to upgrade their skills. The Committee are given to understand that the Ministry have made a reference to the Ministry of Skill Development and Entrepreneurship to mount training programme in this regard. The Committee hope that the proposed App based training modules for LCOs and their staff to get them trained at their work place itself at their convenience, will bring desired result. The Committee also emphasized that adequate funds should also be allocated to meet the training

requirements on this count. The Committee may be apprised of the steps taken in the direction of training and capacity building, along with the status of the above two initiatives.

Awareness Generation

18. The Committee note that for providing information to the people and for generating awareness on cable TV digitisation, Public Awareness Campaigns were launched in each phase via electronic and print media. During implementation of Phase III & IV, a TV spot/Ad on the advantages of digital cable and mandatory digitisation in all areas had been developed through DAVP and the same had been provided to Doordarshan, IBF, NBA and ARTBI with request to transmit the spot at regular intervals on their networks. Audio visual campaign on TV was regularly transmitted over many channels. The Scrolls/Tickers were run by TV channels voluntarily enforcing people to install STBs. Because of this intensive campaign launched by the Ministry, a large number of people across the country moved from analog to digital TV. With regard to steps for spreading awareness about consumer grievance redressal mechanism post digitisation, the Ministry have informed that MSOs and LCOs have been asked to carry out public awareness campaign on price of channels, quality of service and grievance redressal as mandated in Rule 13 of the Cable Rules. The service providers in the Broadcasting sector had played an effective role in initiating and carrying out a sustained campaign for switchover from analog to digital transmission of signals over the cable TV networks across India but the Committee are disturbed to observe that the same stakeholders have not shown much interest or enthusiasm in carrying out the awareness campaign about grievance redressal mechanism in the post digitisation phase. The Committee, in this regard, do not see a single advertisement/scroll in any of the electronic media. Awareness of consumer is an essential prerequisite for a healthy and responsive cable TV eco-system. Therefore, the Committee recommend the Ministry to increase their awareness drives/campaigns in the post digitisation phase also so that there is greater

awareness among the consumers about the Grievance Redressal Mechanism available for dealing with the grievances of the customers.

Interoperability of STBs

19. The Committee note that presently an STB is tied to a specific operator due to various technical, commercial and market driven reasons. As such, the same STB cannot be used interchangeably across different service providers. The Committee observe that the STB interoperability would empower the consumers to change their Cable TV (or DTH) service providers whenever required, without changing their STBs. This would shift the focus of the sector towards providing better quality of services to the consumers at competitive prices as consumers will have an option to switch their service providers in case of unsatisfactory services. Implementation of STB inter-operability, will also make them available in the open market, and will drastically reduce the challenge of e-waste resulting due to discarded set-top boxes. Availability of set-top-box in open market will reduce capital requirement of service providers and improve the cash flow position of the industry. The objective of achieving technical interoperability is to facilitate greater consumer convenience and consumer choice, while spurring innovation and healthy competition in the industry, as well as its orderly growth. Interoperability can be achieved either through technical interoperability or commercial interoperability. Technical interoperability as provided for in the existing BIS specifications/DTH Guidelines, is expected to be achieved by means of a combination of Common Interface (CI) slot in the STB and pluggable Conditional Access Module (CAM). In this arrangement, it is envisaged that services of any particular operator can be availed by simply plugging in the CAM of that operator into the CI slot of the STB of any another operator. However, technical interoperability, as envisaged in the existing DTH Guidelines, has, so far, not proved to be effective as cost of the Conditional access Module is almost similar to the cost of the new Set top box due to very low volume. Commercial interoperability basically refers to availability of such scheme(s) wherein consumers can obtain STB from a service provider, at such terms and conditions

that they can exit the services of the service provider at any point of time and gets adequately compensated on return of the STB. Commercial interoperability has the advantage that it does not involve any technological issues. It also has the advantage that a consumer has a wider choice in terms of operators; consumers can migrate to operators across the platforms. Further, the nature of broadcasting networks being unidirectional, they are prone to piracy of signals of TV channels as point of piracy is relatively more difficult to identify. Piracy adversely impacts broadcasters' revenue and stakes are high. Nevertheless, stakeholders are co-operating and discussing for interoperability of STBs. However, they have many concerns. The Committee are given to understand that TRAI is working on interoperability of STBs with CDOT and IIT, Mumbai to work out an acceptable solution. In this backdrop, to ensure commercial interoperability, TRAI has notified tariff orders for cable TV service provided through Digital Addressable systems and DTH service which provides an easy exit option to subscribers, ensures availability of consumer-premises-equipment (CPE - that primarily consists of STB and Dish antenna) at reasonable prices, easy to understand terms and conditions and, at the same time, protects the interests of the service providers. These Tariff Orders prescribe standard tariff packages for making available a CPE/STB to the consumers. These packages are in addition to and not to the exclusion of other rental schemes, hire purchase schemes or outright purchase schemes offered by the DTH operator/MSO. In essence, these tariff orders provides for commercial interoperability. However, the tariff order, applicable for DTH services, has been challenged by a couple of DTH operators in the TDSAT and the matter is subjudice before Hon'ble TDSAT. While taking note of the fact that interoperability of STBs is a complex issue and has not been achieved anywhere in world, the Committee appreciate the efforts of the Ministry and TRAI in achieving interoperability of STBs in the interest of the Consumers and recommend that all steps may be taken to achieve interoperability of the Set Top Boxes in a definite time-frame as it will benefit all the stakeholders.

Pricing of Set Top Boxes

20. The Committee note that a large variety of Set Top Boxes (STBs) are available in the market and the price of an STB depends upon its features & capabilities. MSOs are charging about Rs. 1000 to Rs. 1200 for a basic STB. The price varies depending upon whether it has provision for receiving HD channels and/or recording facility. As per para 17(5) of the Standards of Quality Service Regulations issued by TRAI on 14.5.2012, every subscriber is free to buy STB of approved quality from the open market, if available, which is technically compatible with the system of MSO and the MSO/LCO should not force any subscriber to buy or take on rent or on hire purchase the STB from him alone. TRAI in its regulation has specified that the MSO/LCO should have at least three schemes for supply of STBs (i) outright purchase, (ii) rental and (iii) installments. Rates for rental and installment have been specified by TRAI. However, no rates have been specified for outright purchase. It is observed that most of the MSOs charge activation fee for supply of STBs wherein the STBs remain the property of the MSO/LCO. The amount of activation charge depends on a number of factors such as features in the STBs, competition status, type of package selected by the consumer and the duration for which the subscription charges are paid. When digitisation started, the STBs were introduced in the market with basic features. At that time, the priority was for seeding of STBs. The prices have been kept unregulated but TRAI has mandated provision of rental scheme, so that subscribers are not burdened with STB cost. Four different options having varying rates of security deposit and rental have been specified so that customer can take as per his /her requirement. This was done keeping in view the market forces and competition which will ensure rational pricing of STBs and not to hinder technical innovations in the features offered by STBs. This ensured that STBs are made available at affordable and competitive prices. Since market is still competitive, prices have come down drastically. Therefore, no intervention has been made to regulate the price of STB. However, TRAI noticed that very high installation and activation fees for STBs were being charged from consumers after it is supplied to

them. Accordingly, to protect the interests of consumers, TRAI has prescribed a ceiling tariff of Rs 350 for installation and Rs.100 for activation of STBs through the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Services and Consumer Protection (Addressable Systems) Regulations, 2017. Regarding the depreciated value of STB, TRAI prescribed the method of calculating the depreciated values for the STBs in the Telecommunication (Broadcasting and Cable) services (seventh) (the direct to home services) tariff order, 2015. As per the said order, on return of the customer premises equipment by the subscriber, DTH operator shall refund the depreciated value of the said equipment, by calculating using straight line method at the rate not exceeding 1.7 percent for every completed calendar month or part thereof. However, this is under judicial scrutiny of Hon'ble TDSAT. The Committee find that owing to the technical nature of work in installation of STB and its interconnection with Cable wire/Dish Antenna and the allied software, which the consumers are unable to do themselves and for which they have to invariably depend on the Cable/DTH Operator and the bundling of hardware and services by the Cable/DTH operators, they are unable to buy technically compatible STB of their choice from the open market and get it installed. There is a need to unbundle the product and service components and foster competition to enable the customer to choose hardware/services of their choice. The lack of technical expertise on part of the customer is exploited by Cable/DTH providers who force the customers to use the hardware provided by them and bundle it with their installation, service and maintenance thereby restricting consumer choice. This amounts to unfair exploitation of the customer. While lauding the efforts of TRAI in this regard, the Committee strongly recommend for unbundling of hardware and associated services and making provision for itemized billing for hardware as well as associated services such as installation, activation and maintenance and providing more option to the customer to procure similar compatible hardware from the open market.

Domestic manufacturing of Set Top Boxes

21. The Committee note that each subscriber in a digital network requires a set top box to view TV channels. In order to project the requirement of Set top box, it is imperative to know the correct number of digital subscribers. As subscriber figures were not clearly available in the analog network, it was difficult to project future demand of STBs. However, industry projections indicate a demand of 10-15 million STBs in near future. As per industry estimates, about 11 crore STBs have already been installed throughout the Country out of which only about 20% to 30% have been procured from the domestic STB manufacturers although the domestic manufacturers claim that they have installed capacity to meet the full demand. While the Ministry has been encouraging the use of indigenous manufactured STBs and taken several steps such as increasing import duty on STBs from 5% to 10% and putting most of the components used for the manufacturing of STBs in the 0% import duty bracket, the percentage of domestic STBs already installed presents a different picture. The Committee also note that Conditional Access System is one of the part in any STBs and it was felt that the domestic manufacturing of STBs will pick up if there is an Indian CAS. Accordingly, MeitY has got an iCAS developed from a Bangalore based company. As per the terms of contract, the design of i-CAS cannot be given to any foreign company for three years. About 80 MSOs has already adopted Indian CAS and it is learnt that over 3 Lakh iCAS STBs has already been deployed. Doordarshan has also selected i-CAS STBs for the DD Free Dish service which is planned to be encrypted. Manufacturing of STBs is tightly coupled with CAS system with digital addressable network. Since India initially did not have its own CAS system, most of them were imported while introducing digitization in the Indian cable TV system. With the initiative taken by the Ministry of Electronics & Information Technology(Meity), an indigenous CAS i.e. iCAS has been developed which is likely to give fillip to the use of domestically manufactured STBs. While appreciating the efforts of Meity in development of an indigenous CAS(iCAS), the Committee strongly recommend that sincere efforts need to be made to promote

the usage of domestically manufactured STBs and hope that with the development of iCAS, adoption of domestically manufactured STBs would pick up at a faster rate thereby reducing the dependence on imported STBs.

Quality of Set Top Boxes

22. The Committee note that TRAI has been emphasizing the use of high quality BIS compliant STBs for cable TV networks and TRAI has taken up the issue with different MSOs from time to time where compliances are taken from MSO, certifying the use of Bureau of Indian Standards (BIS) compliant STBs only. In the Telecommunication (Broadcasting and Cable) Services Standards of Quality of Services and Consumer Protection (Addressable Systems) Regulations, 2017, TRAI has mandated that every distributor of television channels or local cable operator, as the case may be, shall provide set top box confirming to relevant Indian Standard set by the Bureau of Indian Standards. The Committee further note that as per Section 9 of the The Cable Television Networks (Regulation) Act, it is obligatory for every cable operator to use only BIS compliant STBs. Under Section 11 of The Cable Television Networks (Regulation) Act, Authorised officers have powers to seize the equipment of the operators if supply of non-BIS compliant STBs are detected and for this, anyone having such information may make complaint to the Authorised Officer for necessary action. Ministry of Electronics and Information Technology (MeitY) is the nodal Ministry for all issues relating to electronic equipment including Set Top Boxes. MeitY had mandated that all the Set Top Boxes should meet the safety standards and had also outlined a procedure for Testing/Certification of the STBs before import. As such only STBs meeting these notified safety standards can be imported into the country. The Committee find that as per the prevalent practice, use of good quality Set Top Boxes is ensured through self-certification by MSOs stating the use of BIS compliant STBs only and feel that this mechanism of self-certification by MSOs may not be very effective in curbing the use of poor quality Set Top Boxes. The Committee observe that active involvement and participation of the customers are required in this regard but the constraints could be that the customers in general

may not be aware of the quality standard of their set top boxes and the whereabouts of the Authorized officers whom to report in case of non-compliance of STBs provided by their Cable operator. The Committee therefore recommend that in order to ensure supply of good quality set top boxes and to effectively detect the non-BIS compliant STBs, there is a need to adequately inform and educate the customers about how to check the BIS-compliance of the STBs provided by their MSO/LCO/DTH operator along with the details of the Authorized officer whom they can report in case the STB is found to be non-compliant to BIS standards as prescribed under Section 9 of the Cable Act. Steps should also taken to make provision for some independent laboratories/facilities where the customers can themselves get their STBs tested for quality compliance at a nominal fee and thereafter report any lack of compliance to the Authorized officers. Such a mechanism will not only empower the customers but also instill a sense of fear amongst the operators who provide poor quality non-BIS compliant STBs to their customers in violation of Section 9 of The Cable Television Networks (Regulation) Act and. The Committee would like to be apprised of the steps taken by the Ministry in this regard.

Role of TRAI in Broadcasting Sector

23. The Committee note that TRAI was entrusted with the responsibility to regulate broadcasting services on 9th January 2004 and since then it has been discharging its functions as per the provisions of TRAI Act. During this period, the broadcasting sector has seen enormous growth in the number of satellite TV channels, introduction of DTH services, digitization of cable TV networks, setting up of independent TV rating agency and introduction of FM radio services across the country etc. TRAI has brought out several regulations to address various issues in broadcasting sector which has enabled transparency and non-discrimination in the value chain, reduction of disputes amongst the stakeholders, improvement in quality of service to consumers and overall growth of the sector. The recommendations of TRAI have also been the basis of several key policy decisions of the Government for broadcasting sector. The Committee are,

however, constrained to note that TRAI at present has got very limited powers due to which enforcement of its regulations, directions and tariff orders becomes difficult. TRAI has noticed several violations of its regulations by service providers and cases have been filed in the court under provision of TRAI Act against such service providers. The Committee do not find this as a very effective mechanism to ensure compliance of the provisions of the Act. It is learnt that TRAI has suggested some modifications in the TRAI Act, which are under consideration of the Government. In view of the tremendous growth in the broadcasting sector and ever increasing number of satellite TV channels, the Government may undertake evaluation of the need to have a separate regulator for the broadcasting sector. Till the time the Government decide to have a separate regulator for broadcasting sector, steps may be taken to empower TRAI through modifications in the TRAI Act for effective enforcement of its regulations by the Authority.

Impact Assessment

24. The Committee note that the Ministry have not carried out any formal impact assessment of cable TV digitisation so far. The Committee recommend the Ministry to carry out an Impact Assessment Study of cable TV digitisation including all its aspects so that a clear picture emerges as to how far digitisation has actually been able to achieve its intended objectives. This will also enable the Government to intervene from time to time and take suitable corrective measures if need be. The Committee may be apprised of the action taken in this direction.

New Delhi;
28 December, 2017

07 Pausha, 1939 (Saka)

Anurag Singh Thakur
Chairperson
Standing Committee on
Information Technology

Status of implementation of TRAI Recommendations

Sl. No.	Recommendations	Status
1	Equipments, devices and accessories used by the cable TV service providers be compliant to relevant BIS standards.	Provision for the same was made in Section 9 of the Cable Act
2	For implementing the sunset date for Analogue Cable TV services, the Cable Television Networks (Regulation) Amendment Act 2002, be suitably amended.	The Act was amended on 25.10.2011
3	The MSOs/LCOs be eligible for seeking Right of Way (RoW) on non-exclusive basis for laying optical fibre/cable network.	As per Section 4B(5) of the Cable Act “the Central Govt. may lay down appropriate guidelines to enable the State Govts. to put in place an appropriate mechanism for speed clearance of requests for Right of Way”. Guidelines for preparing mechanism for granting RoW to cable operators were prepared and issued to all the Chief Secretaries on 16th June 2017 to enable them to put in place mechanism for granting RoW.
4	A massive education programme be taken up to educate the stakeholders about the benefits of a digital addressable cable TV network.	Public Aware Campaign was launched in the electronic as well as print media by the Ministry in association with the broadcasters including Doordarshan and All India Radio. For this purpose Ministry had also developed a few spots with the help of DAVP.
5	The basic custom duty on digital head-end equipments and STBs be reduced to zero for the next 3 years to give a boost to conversion of the broadcast distribution network to digital addressable network.	M/o I&B has recently (in 2017) moved a proposal to grant infrastructure status to the broadcasting industry. Earlier also M/o I&B had made a proposal to grant fiscal incentives/duty concessions to the broadcasting industry to facilitate time-bound transition of analogue cable TV services to Digital. The proposal included grant of infrastructure status to the broadcasting industry, reduction of basic custom duty on digital Head- ends and STBs and rationalization of Taxes on the Broadcasting & distribution Sector. The proposal was discussed in the meeting of the Committee of Secretaries held on 10.2.2012 but was not agreed.
6	The taxes/levies on the broadcasting distribution sector be rationalized.	
7	All service providers who have set up a digital addressable distribution network before the sunset date be treated similar to telecom service providers and	

Seeding of data in the Management Information System (MIS) by MSOs

The status of zero seeding MSOs as on 9.11.2017 is as follows:

S.No.	Details of zero seeded MSOs	Total Number
1	Total No. of registered MSOs	1471
2	No. of MSOs seeded data in MIS	952
3	Total No. of un-seeded MSOs in MIS till date	519
4	1st round Notice/Show-cause notice issued to MSOs who are registered license more than one year	307
	Report Received	111
	Letter Returned (26-1=25, as we have received operation details of one MSO)	25
	MSOs who have started seeding in MIS Portal but still not send operation details	22
	MSOs who has not yet responded and even not started seeding in MIS after the show-cause notice send on 31.08.2017 (111+25+22+149=307)	149
	Show cause notice/ reminder issued	176
	Response received (176-27=149)	27
5	2nd round notice issued to MSOs before March, 2017	149
	Report Received	19
	Letter Returned	4
6	Remaining MSOs not yet started seeding data includes those MSOs who have got their provisional registration within six month (519-456)	63
7	Grievance Redressal Mechanism total reports received	277

**STANDING COMMITTEE ON INFORMATION TECHNOLOGY
(2016-17)**

MINUTES OF THE EIGHTEENTH SITTING OF THE COMMITTEE

The Committee sat on Monday, the 12th June, 2017 from 1500 hours to 1630 hours in Committee Room 'C', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Anurag Singh Thakur – Chairperson

MEMBERS

Lok Sabha

2. Shri Prasun Banerjee
3. Shri Harish Dwivedi
4. Dr. Sunil Baliram Gaikwad
5. Shri Hemant Tukaram Godse
6. Dr. Anupam Hazra
7. Shri Virender Kashyap
8. Shri Harinder Singh Khalsa
9. Dr. Bharati Dhirubhai Shiyal
10. Shri Ramdas C.Tadas
11. Smt. R.Vanaroja

Rajya Sabha

12. Shri P. Bhattacharya
13. Shri Santiuse Kujur
14. Shri Derek O' Brien
15. Smt. Kahkashan Perween
16. Dr. K.V.P. Ramachandra Rao

SECRETARIAT

1. Shri R.S. Kambo - Additional Secretary
2. Dr. Preeti Srivastava - Joint Secretary
3. Shri Y.M. Kandpal - Director

Witnesses

All India Digital Cable Federation

	Name	Designation
1.	Shri Saharsh Damani	Secretary General, AIDCF
2.	Shri Manish Dawar	Group CFO-DEN Networks
3.	Shri Sanjay Jain	CTO-DEN Networks
4.	Shri Subhashish Mazumdar	VP-IndusInd Media Communications Ltd.

Cable Operators Federation of India

	Name	Designation
1.	Smt. Roop Shama	President, COFI, Delhi
2.	Shri Ravi Gupta	Vice President, COFI

2. At the outset, the Chairperson welcomed the Members to the sitting of the Committee convened to hear the views of the representatives of All India Digital Cable Federation (AIDCF) and the Cable Operators Federation of India (COFI) in connection with examination of the subject 'Status of Cable TV Digitization and interoperability of Set Top Boxes'.

3. The representatives of each of the above organizations were heard by the Committee separately and in each case their attention was drawn to the provision of Directions 55 (1) of the Directions by the Speaker regarding confidentiality of the proceedings.

4. The Committee first heard the views of the representatives of All India Digital Cable Federation (AIDCF) on the subject. The representatives of AIDCF through a Power Point Presentation highlighted various issues relating to Cable TV Digitization viz. challenges plaguing realization of digitization benefits, interoperability of STBs, techno-commercial reasons for non-interoperability of STBs, possible solutions for inter operability of STBs and their impact on sector growth, etc. The Committee sought clarifications on few aspects which were replied to by the witnesses.

(The witnesses then withdrew)

5. The Committee, thereafter, heard the views/suggestions of Cable Operators Federation of India (COFI). The representatives of COFI through Power Point Presentation explained to the Committee various issues related to the subject. The issues, inter alia, included problems faced by Consumers and Cable Operators after digitization, need for interoperability of STBs, issues relating to pricing, subsidy and quality of indigenous STBs in comparison to Chinese STBs, issues relating to vertical monopolies, lack of choice of a-la-carte channels for consumers, need for National Broadcast Policy and speedy clearing of convergence/Broadcasting Bill, financial help to small MSOs, training and capacity building, etc. The Committee sought clarifications on few aspects which were replied to by the witnesses.

(The witnesses then withdrew)

6. The Chairperson at the end of each discussion thanked the representatives of each organisation for appearing before the Committee and furnishing valuable information in connection with examination of the subject. The Chairperson also directed the representatives of the two organisations to furnish replies on which the information was not readily available.

The Committee, then, adjourned.

Verbatim Proceedings of the sitting has been kept on record.

**MINUTES OF THE TWENTIETH SITTING OF THE STANDING COMMITTEE ON
INFORMATION TECHNOLOGY (2016-17)**

The Committee sat on Thursday, the 13th July, 2017 from 1500 hours to 1645 hours in Committee Room 'B', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Anurag Singh Thakur - Chairperson

MEMBERS

Lok Sabha

2. Shri L.K. Advani
3. Shri Prasun Banerjee
4. Shri Harish Dwivedi
5. Dr. Sunil Baliram Gaikwad
6. Dr. Anupam Hazra
7. Dr. J. Jayavardhan
8. Shri P. Karunakaran
9. Shri Abhishek Singh
10. Smt. R. Vanaroja

Rajya Sabha

11. Shri P. Bhattacharya
12. Shri Suresh Gopi
13. Shri Santiuse Kujur
14. Dr. K.V.P. Ramachandra Rao
15. Dr. Vinay P. Sahasrabuddhe

SECRETARIAT

1. Shri R.S. Kambo - Additional Secretary
2. Dr. Preeti Srivastava - Joint Secretary
3. Shri Y.M. Kandpal - Director
4. Dr. Sagarika Dash - Additional Director
5. Smt. Geeta Parmar - Deputy Secretary

News Broadcasters Association (NBA)

	Name	Designation
1.	Smt. Anuradha Prasad	Board Member, NBA
2.	Smt. Annie Joseph	Secretary General, NBA

Indian Broadcasting Foundation (IBF)

	Name	Designation
1.	Shri Girish Srivastava	Secretary General, IBF

2. At the outset, the Chairperson welcomed the representatives of News Broadcasters Association (NBA) and Indian Broadcasting Foundation (IBF) to the sitting of the Committee. The representatives of NBA and IBF then briefed the Committee on the subject 'Status of Cable TV Digitization and interoperability of Set Top Boxes'. The discussion, *inter-alia*, covered broadcasters' views on digitization of Cable TV Networks in India, like benefits of digitization, its impact on shift from advertisement based revenue to subscriber based revenue, the extent of increase in HD content and addressability etc. and also on interoperability of Set Up Boxes(STBs).

3. The representatives of NBA and IBF also highlighted on the issues lingering between Broadcasters and DPOs/MSOs/LCOs like exorbitant carriage fee paid by Broadcasters to DPOs/MSOs/LCOs, lack of access of Broadcasters to subscription based revenue, lack of addressability and transparency in revenue model forcing broadcasters to rely solely on advertisement based revenue and keeping their channels free to air (FTA) etc.

4. Thereafter, the Members sought clarifications on the various issues on the subject such as lack of choice of a-la-carte channels to consumers, higher monthly subscription fee, effect of Cable TV digitization on livelihood of small cable operators, emergence of vertical monopolies and cross media holdings, flawed

revenue sharing model in cable TV sector, poor quality, high cost and non-interoperability of Set Top Boxes (STBs), lack of availability of Indian STBs and security aspects related to imported STBs etc. The representatives of NBA and IBF responded to some of these queries. The Chairperson also requested the representatives to furnish written replies to the points raised during the sitting, which remained unanswered.

5. The Chairperson, then, thanked the representatives of NBA and IBF for briefing the Committee on the subject.

A copy of verbatim record of the proceedings of the sitting was kept on record.

The witnesses then withdrew.

The Committee, then, adjourned.

**MINUTES OF THE TWENTY FIRST SITTING OF THE STANDING COMMITTEE ON
INFORMATION TECHNOLOGY**

The Committee sat on Wednesday, the 19th July, 2017 from 1500 hours to 1645 hours in Committee Room 'C', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Anurag Singh Thakur – Chairperson

MEMBERS

Lok Sabha

2. Shri K.C. Patel
3. Dr. Sunil Baliram Gaikwad
4. Shri Hemant Tukaram Godse
5. Shri Virender Kashyap
6. Shri Harinder Singh Khalsa
7. Dr. Bharati Dhirubhai Shiyal
8. Shri Abhishek Singh
9. Shri Raosaheb Danve Patil
10. Shri D.K. Suresh

Rajya Sabha

11. Shri P. Bhattacharya
12. Smt. Kahkashan Perween

SECRETARIAT

- | | | | |
|----|-----------------------|---|----------------------|
| 1. | Shri R.S. Kambo | - | Additional Secretary |
| 2. | Dr. Preeti Srivastava | - | Joint Secretary |
| 3. | Shri Y.M. Kandpal | - | Director |
| 4. | Dr. Sagarika Dash | - | Additional Director |
| 5. | Shri Shangreiso Zimik | - | Under Secretary |

Witnesses

Telecom Regulatory Authority of India

	Name	Designation
1.	Shri Ram Sewak Sharma	Chairman, TRAI
2.	Shri Anil Kaushal	Member, TRAI
3.	Shri Sudhir Gupta	Secretary , TRAI
4.	Shri Sunil Kumar Gupta	Pr. Advisor (B&CS)
5.	Shri G.S. Kesarwani	Dy. Advisor (B&CS)

2. At the outset, the Chairperson welcomed the Members to the sitting of the Committee convened to hear the views of the Telecom Regulatory Authority of India (TRAI) in connection with examination of the subject 'Status of Cable TV Digitization and interoperability of Set Top Boxes'. The representatives of TRAI then made a power point presentation to brief the Committee on the subject. The presentation , inter-alia, dealt with issues relating to the status of Cable TV digitization, such as, Cable TV system in the country, drawbacks of analog cable TV systems, benefits of digitization of cable TV services, TRAI's recommendations on digitization of cable TV services, TRAI's initiatives for implementation of DAS, problems faced by stakeholders after implementation of DAS, issue of concerns after implementation of DAS, new regulatory framework by TRAI which included the salient features of Tariff Order, Interconnection Regulations and Quality of Service Regulations.

3. The representatives of TRAI also highlighted on the issues of interoperability of Set Top Boxes such as types and technical standards of STBs, reasons for non-interoperability of STBs, international scenario of the framework for interoperability, objectives and advantages of technical interoperability, initiatives taken by TRAI for interoperability of STBs, concerns of stakeholders, interaction with Academia and industry, etc.

4. Thereafter, the Members sought clarifications on various issues like the cost and maintenance of STBs, digitization in rural areas, pricing of channels, indigenous production of STBs, BIS compliance of STBs, consumer complaint redressal system, carriage fee, etc. which were responded to by the representatives of TRAI.

5. The Chairperson at the end of the discussion thanked the representatives of TRAI for appearing before the Committee and furnishing valuable information in connection with examination of the subject. The Chairperson also directed the representatives to furnish replies on the points raised during the sitting on which the information was not readily available with them.

A copy of the verbatim record of the Proceedings was kept on record.

The witnesses then withdrew.

The Committee, then, adjourned.

**MINUTES OF THE TWENTY SECOND SITTING OF THE STANDING COMMITTEE
ON INFORMATION TECHNOLOGY**

The Committee sat on Tuesday, the 25th July, 2017 from 1500 hours to 1645 hours in Committee Room 'D', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Anurag Singh Thakur – Chairperson

MEMBERS

Lok Sabha

2. Shri K.C. Patel
3. Dr. Sunil Baliram Gaikwad
4. Shri Paresh Rawal
5. Shri Virender Kashyap
6. Dr. Bharati Dhirubhai Shiyal
7. Shri Abhishek Singh
8. Shri Raosaheb Danve Patil
9. Shri D.K. Suresh

Rajya Sabha

10. Shri Derek O'Brien
11. Smt. Kahkashan Perween
12. Dr. Vinay P. Sahasrabuddhe

SECRETARIAT

- | | | | |
|----|-----------------------|---|----------------------|
| 1. | Shri R.S. Kambo | - | Additional Secretary |
| 2. | Dr. Preeti Srivastava | - | Joint Secretary |
| 3. | Shri Y.M. Kandpal | - | Director |
| 4. | Dr. Sagarika Dash | - | Additional Director |
| 5. | Smt. Geeta Parmar | - | Deputy Secretary |
| 6. | Shri Shangreiso Zimik | - | Under Secretary |

Witnesses

Ministry of Information and Broadcasting

	Name	Designation
1.	Shri N.K . Sinha	Secretary
2.	Ms. Jayashree Mukherjee	Additional Secretary
3.	Shri Manoj Kumar Pingua	Joint Secretary (B-1)
4.	Shri Yogendra Pal	Advisor (DAS)
5.	Shri Shanker Lal	Deputy Secretary (DAS)

2. At the outset, the Chairperson welcomed the representatives of the Ministry of Information and Broadcasting to the sitting of the Committee convened to take their oral evidence in connection with examination of the subject 'Status of Cable TV Digitization and interoperability of Set Top Boxes'.

3. The representatives of the Ministry made a power point presentation to brief the Committee on the subject. The presentation , inter-alia, dealt with issues such as nature of delivery system for Television network in the Country, need for Cable TV digitisation, framework for Cable TV digitization, estimated requirement and seeding status of STBs under different phases, present status of Cable TV digitization, effort made for implementation of Cable TV digitization, benefits to consumers and Governments, various issues arising out of Cable TV digitization and measures being taken to address them, etc.

4. Thereafter, the Members sought clarifications on various issues related to the subject under examination such as carriage fee, public awareness campaign of digitization, Management Information System (MIS) for MSOs, field formation and mechanism to check MSO data etc. Members also raised queries on the role and responsibilities of the Ministry of Information & Broadcasting *vis-à-vis* TRAI in implementation of Cable TV regulations, BIS compliance of STBs, data security, grievance redressal mechanism for consumers, expenditure incurred on numerous court cases relating to digitization etc.

5. However, as replies to many core issues related to the subject were not to the satisfaction of the Committee, the Chairperson directed the representatives to furnish written replies on those points as well as on which the information was not readily

available with the representatives of the Ministry. The Chairperson, thereafter, thanked the representatives of the Ministry for appearing before the Committee.

A copy of the verbatim record of the Proceedings was kept on record.

The witnesses then withdrew.

The Committee, then, adjourned.

**STANDING COMMITTEE ON INFORMATION TECHNOLOGY
(2017-18)**

MINUTES OF THE SECOND SITTING OF THE COMMITTEE

The Committee sat on Monday, the 16th October, 2017 from 1500 hours to 1635 hours in Committee Room 'B', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Anurag Singh Thakur- Chairperson

MEMBERS

Lok Sabha

2. Shri L.K. Advani
3. Shri Prasun Banerjee
4. Dr. Sunil Baliram Gaikwad
5. Shri Hemant Tukaram Godse
6. Dr. Anupam Hazra
7. Shri P. Karunakaran
8. Shri Virender Kashyap
9. Shri Harinder Singh Khalsa
10. Smt. R. Vanaroja
11. Shri Ramdas C. Tadas

Rajya Sabha

12. Shri Suresh Gopi
13. Shri K. G. Kenye
14. Shri Santiuse Kujur
15. Smt. Kahkashan Perween
16. Dr. Vinay P. Sahasrabuddhe

SECRETARIAT

- | | | | |
|----|-----------------------|---|---------------------|
| 1. | Shri R. C. Tiwari | - | Joint Secretary |
| 2. | Dr. Sagarika Dash | - | Additional Director |
| 3. | Smt. Geeta Parmar | - | Deputy Secretary |
| 4. | Shri Shangreiso Zimik | - | Under Secretary |

WITNESSES

Representatives of Ministry of Information & Broadcasting

Sl.No.	Name of Officer	Designation
1.	Shri N.K. Sinha	Secretary
2.	Ms. Jayashree Mukherjee	Addl. Secretary
3.	Shri Manoj Kumar Pingua	Joint Secretary
4.	Ms. Anju Nigam	Joint Secretary

Representatives of Telecom Regulatory Authority of India (TRAI)

Sl. No.	Name of Officers	Designation
1.	Shri Sunil K. Gupta	Secretary
2.	Shri Sunil Kr. Singhal	Advisor

Representatives of C-DAC

Sl. No.	Name of Officers	Designation
1.	Smt. Savita Kashyap	Joint Director
2.	Dr. Mahesh Chandra	Consultant
3.	Shri Rajesh Kushwaha	Joint Director

Representatives of C-DOT

Sl. No.	Name of Officers	Designation
1.	Shri Vipin Tyagi	Executive Director
2.	Shri Pallab Dutta	Team Leader
3.	Dr. YVS Lakshmi	Group Leader
4.	Shri Tanay Krishna	Head Marketing

2. xxxx.....xxxx.....xxxx.....xxxx.....xxxx.....xxxx

(The witnesses were called in)

3. The Chairperson then welcomed the representatives of the Ministry of Information and Broadcasting, TRAI, C-DoT and C-DAC to the sitting of the Committee.

4. The representatives of the Ministry of Information and Broadcasting, TRAI and C-DoT, then briefed the Committee the recent development in Cable TV digitization highlighting issues such as addressability, steps taken for facilitating a-la-carte selection of channels to the Consumers, setting up of Centralized Monitoring Mechanism for MSOs/LCOs, effective mechanism for redressal of consumer grievances, linking of subscription charges with grievance redressal system, cost

effective options for interoperability of Set Top Boxes, strengthening of DD Free Dish DTH platform, empowering TRAI to prevent unnecessary litigation, etc.

5. Members then sought clarification on various issues related to the subject under examination to which the representatives of the Ministry of Information and Broadcasting, TRAI and C-DOT responded. The Chairperson desired that the written replies to those points which remained unanswered and on which the information was not readily available with the representatives of the Ministry may be furnished at the earliest.

6. The Chairperson, thereafter, thanked the representatives of the Ministry of Information and Broadcasting, TRAI, C-DoT and C-DAC for appearing before the Committee.

The witnesses then withdrew

Verbatim Proceedings of the sitting has been kept on record.

7. The Committee decided to hold the next sitting in the last week of October, 2017 where the representatives of the Ministry of Information and Broadcasting may be called to brief the Committee on the subject 'Review of the functioning of Song and Drama Division'. Hon'ble Chairperson also informed that he may not be able to attend the next sitting and desired that Dr. Vinay Sahasrabuddhe, M.P. may Chair the sitting in his absence.

The Committee, then, adjourned.

....xxxx.....Matters not related to Report

**STANDING COMMITTEE ON INFORMATION TECHNOLOGY
(2017-18)**

MINUTES OF THE SIXTH SITTING OF THE COMMITTEE

The Committee sat on Thursday, the 28th December, 2017 from 1500 hours to 1530 hours in Committee Room 'C', Ground Floor, Parliament House Annexe, New Delhi.

PRESENT

Shri Anurag Singh Thakur– Chairperson

MEMBERS

Lok Sabha

2. Shri Harish Dwivedi
3. Smt. Hema Malini
4. Dr. Jayakumar Jayavardhan
5. Dr. Sunil Baliram Gaikwad
6. Dr. K.C. Patel
7. Dr. Bharati Dhirubhai Shyal
8. Shri Virender Kashyap
9. Shri D.K. Suresh

Rajya Sabha

10. Dr. K. V. P. Ramachandra Rao

Secretariat

1. Shri R. C. Tiwari - Joint Secretary
2. Dr. Sagarika Dash - Additional Director
3. Smt. Geeta Parmar Deputy Secretary

2. At the outset, the Chairperson welcomed the Members to the sitting of the Committee convened to consider and adopt Draft Report on the subject 'Status of Cable TV Digitisation and Interoperability of Set Top Boxes' of the Ministry of Information and Broadcasting. Thereafter, the Chairperson gave a broad overview of the important Observations/Recommendations contained in the Report.

3. The Committee, then, took up for consideration the draft Report and adoption the same without any modification.

4. The Committee authorized the Chairperson to finalize the Report in light of the factual verification received from the Ministry of Information and Broadcasting and present the same to the House during the current session of Parliament.

5. The Committee also proposed to undertake a study tour to the States of Rajasthan and Maharashtra, in the month of January, 2018, in connection with the examination of various subjects selected for examination during the year.

The Committee, then, adjourned
