

Digitisation of Cable Television in India

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ABSTRACT

Digitisation of cable television in India is an important and necessary step for regulating cable television sector in India and to bring transparency in the system to benefit all stakeholders, including consumers and cable operators.

The Cable Television Networks (Regulation) Amendment Bill, 2011 mandated that all Cable companies should convert their analogue systems to digital in four metros by 31 March 2012 and whole country should go digital by 31 December 2014. The Act also requires the cable operators to submit reports on the total number of subscribers, subscription rates, and the number of subscribers for free-to-air and pay channels.

In analogue systems, it was difficult to ascertain how many households are subscribing to cable services. The actual number was known only to the local cable operators who also worked as bill collection agents. TRAI mandated that revenues gathered by cable operators should be split among broadcasters, Multi Service Operators and Local Cable Operators. But cable operators undervalue the amount collected which was great loss for broadcasters.

With the digitisation of cable television every household accessing signals is counted and cable operators are forced to share their collections with MSOs and broadcasters. Consumers are also able to select and pay only for the channels they wish to see.

This research paper will study the impact of digitisation on broadcasters, MSOs, LCOs and viewers. Its advantages and disadvantages to various stakeholders, changes it will bring into television sector.

Keywords: Digitisation, Digital, Cable TV, DTH, Analogue, TV channels

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Review of Literature

The cover story of *Cable Quest* magazine June 2012 issue “Digitalisation: Are we on the Right Track?” discusses various aspects of digitisation of cable television in India. It stated that Digitisation will provide various benefits like increased choice and quality for viewers, Lower transaction costs, Switching off analogue terrestrial transmissions of Doordarshan will bring better efficiency in spectrum use.

Vanita Kohli-Khandelkar in her article on ‘Cable TV digitisation opens up host of opportunities’ stated that digitisation will provide opportunities to global investors and Indian companies. The opportunities could be in fields as diverse as analytics, research, applications, improving sound systems or managed billing and services for cable companies, among other things.

CMS Medial Lab and ASSOCHAM in their background paper on Digitising Indian Broadcasting has written that most players will benefit from the digitization process (with sole exception of LCOs) though the extent of benefit and the execution challenges faced will vary. LCOs will suffer as a result of complete transparency.

Introduction

The first major structural and technology reform in cable industry since its advent in the early 1990s is the digitization of cable TV. It is a step towards the removal of the shortcomings of the analogue cable TV systems like the non-addressability and the capacity constraints. In the digital addressable systems, service providers can offer more channels and consumers can select the channels of their choice. Also, the digital addressable system opens out additional business opportunities to the service providers in the form of value added and interactive services. It would enable provision of broadband and triple play (voice, video and data) services.

Digitisation means converting analogue signals into digital signals. With the digitisation of cable television, a Digital Set Top Box will be needed to decode encrypted signals. As part of Digitisation, every cable operator will be legally bound to transmit digital signals, which can be received at the subscriber's home only through a Set Top Box, often called a STB.

The Cable Television Networks (Regulation) Amendment Bill, 2011 mandated to digitize the cable sector in India by December 31, 2014.

Number of TV households in India is about 160 million and is expected to reach

200 million by 2017. Subtracting about one-third subscribing to Direct-To-Home services, the rest are going to be touched by cable digitization.

In the first phase four metropolitan cities, Delhi, Mumbai, Chennai, and Kolkata were digitised by 31st October 2012. In the second phase 38 cities including Bangalore, Hyderabad, Surat, Ahmedabad, Coimbatore, Vishakhapatnam, Nagpur, Kanpur, Ludhiana, Thane, Jaipur, Vadodara, Ghaziabad, Lucknow, Patna, Indore, Nashik, Agra, Kalyan - Dombivli, Pimpri-Chinchwad, Aurangabad, Mysore, Bhopal, Jabalpur, Rajkot, Srinagar, Howrah, Pune, Navi Mumbai, Chandigarh, Meerut, Jodhpur, Solapur, Amritsar, Ranchi, Allahabad, Varanasi, Faridabad were digitised 31st March 2013.

The target for complete digitization in urban areas is September 31, 2014 while the entire country is expected to achieve digitization by December 31, 2014.

DTH and IPTV services in India are already compliant with the new regulations for digitization because they are distributed through encrypted signals that can only be received through a digital addressable box at the consumer end. As the many limitations of the cable model have led consumers to look for alternative television delivery systems, DTH has emerged as a very successful alternative to

cable in many rural and urban areas in India. IPTV, on the other hand, has been a minor success in some of the major metros and cities but is seen as a delivery system with great potential as broadband connections become available in other parts of the country.

Definitions and Terminologies-

1. Pay Channel - In respect of a digital addressable system, pay channel means a channel for which subscription fees are to be paid to the broadcaster by multi-system operator or DTH.
2. FTA – Free to Air channels
3. LCO – Local Cable Operator who is not allowed to download any channel (not even FTA)
4. MSO – Multi-system operators (MSOs) are those with multiple cable television systems. India has 115 multi-system operators, including Den Networks and Hathway Cable.
5. BST - Since the consumer is required to pay for FTA channels, the concept of a Basic Service Tier (BST) has been introduced.
6. CAS - The system used to control the distribution of digital television signals is called a Conditional

Access System or CAS. This ensures that only the signals chosen and paid for by a subscriber are able to be received by that subscriber.

7. TRAI – Telecom Regulatory Authority of India
8. Carriage Fees – The fees which broadcasters pay to MSO for taking their channel to viewers.

Cable Television Networks (Regulation) Amendment Bill 2011

The Cable Television Networks (Regulation) Amendment Bill, 2011 was introduced in the Lok Sabha by Ms. Ambika Soni, Union Minister of Information and Broadcasting.

It mandatory for analog Cable TV networks in India to switch over to a new Digital Addressable System (DAS) by December 2014. It shall be deemed to have come into force on the 25th day of October, 2011.

The Act defines ‘pay channels’ as channels for which ‘addressable systems’ are required to be attached to the set top box. The Bill redefines ‘pay channels’ to mean channels for which the cable operator pays

the broadcaster and the broadcaster’s permission is required for transmission of the channel.

An ‘addressable system’ means an electronic device (which includes hardware and its associated software) or more than one electronic device put in an integrated system through which signals of cable television network can be sent in encrypted form, which can be decoded by the device or devices, having an activated Conditional Access System at the premises of the subscriber within the limits of authorisation made, through the Conditional Access System and the subscriber management system, on the explicit choice and request of such subscriber, by the cable operator to the subscriber.

The Act also requires the cable operators to submit reports on the total number of subscribers, subscription rates, and the number of subscribers for free-to-air and pay channels.

The central government may direct the Telecom Regulatory Authority of India (TRAI) to specify the free-to-air channels to be included in the basic service tier. A ‘basic service tier’ means a package of free-to-air channels to be offered by a cable operator to a subscriber with an option to subscribe, for a single price to

subscribers of the area in which his cable television network is providing service.

The Bill would authorise the central government to inspect cable networks and services. Prior notice may not be given to the cable operator or broadcaster if it would defeat the purpose of the inspection.

Impact of Digitisation

In CAS the FTA channels were downlinked by LCO and distributed whereas in DAS all channels, including FTA channels, are downlinked, encrypted and distributed by the MSO only.

It is primarily the LCO that collects the subscription revenues from the subscribers and the MSO collect the subscription revenues from the LCO based on lump sum/fixed contracts. Invariably MSO ends up losing money, as the subscription money so collected from LCO for distribution of TV channels is far lesser than the amount demanded by the pay broadcasters.

The July 2010 Tariff Order of the TRAI provides that the revenue share between the MSO and LCO shall be based on mutual negotiations. The Authority has now prescribed that in case the mutual negotiations fail, the revenue share shall be in the ratio of 55:45 (MSO: LCO) for BST or FTA channels and in the ratio of 65:35

(MSO: LCO) for Pay channels or bouquet of Pay channels with or without FTA channels.

Carriage fee, which broadcasters pay to MSOs and Local Cable Operators (LCOs) for taking their channels to the viewers, has been a bone of contention and has pitted broadcasters against MSOs and LCOs. In October 2012 broadcasters had entered into an agreement with MSOs that the carriage fee would range from 50 paisa to Re 1 per set top box subscriber per channel per year. The agreement was for an initial period of one year and included marketing fees and packaging fees.

The TRAI suggested that a carriage fee of Rs 3-5 be set per set top box (STB) per annum.

Digitisation will increase the broadband penetration in India, and will do so at a much lower cost. Analysts suggest a 10 per cent increase in broadband penetration will increase the GDP by 1.5 per cent.

Impact on Consumers:

1. Better picture and sound quality - Consumers are now able to enjoy better picture and sound quality, enhanced services such as high definition and video on demand

content facility. High definition video and other value added services are available to viewers.

2. Pay for what you see – Consumers are able to select channels of their choice from the array of channels available and pay only for those channels rather than having to pick from packages with fixed prices.
3. Radio – With digital sets more than 20 radio channels will be available
4. No disparity - LCOs used to fix price of cable connection as per the locality and consumer base with digitisation monthly tariffs has been fixed. Now with digitisation this disparity has been removed and fixed tariff plans have been adopted.

Impact on Broadcasters:

1. Broadcasters will now be relieved from paying huge sums as carriage fee, thereby increasing profitability and enabling them to focus on better content creation.
2. Subscription revenue will increase for the broadcaster and make them less dependent on advertising and drive higher value creation.
3. LCOs used to under report the subscribers numbers for revenue sharing purpose by digitisation will

shift the balance of power away from LCOs to cable service providers and TV broadcasters who will now be able to monitor their subscriber base and control the flow of revenues.

Impact on Multi System Operators (MSOs)

1. MSOs will reap the greatest benefits. They will get share of revenue from subscribers.
2. MSOs will get direct access to the customers end paving the way for better quality service and transparency in subscriber base. The direct access to customers effectively shifts the bargaining power from LCOs to MSOs.
3. MSOs also benefit from the consolidation eventually to a greater bargaining power with broadcasters.

Impact on Industry

1. Transparency in the entire system will ensure accurate reporting of subscriber numbers and revenue, thus creating higher value for the exchequer and preventing the fuelling of the black economy.

2. There would be an overall change in the revenue sharing among the stakeholders due to transparency achieved. Currently, broadcasters claim cable operators and distributors gain disproportionate revenues through under-declaration of subscribers.
3. There would be a drastic change in the viewership measurement and the ratings of the channels. The rating would be more reliable and authentic as there would be transparency in sampling and thus error margin will be low
4. Regulatory issues to do with advertising, content, tariff, quality parameters redressal mechanism will become increasingly critical. Government and Self-Regulatory bodies will need to play a more proactive role.
5. Digitisation will also help in increasing the FDI of the entertainment industry. As the content and quality will be as per global standards, this will attract more foreign investors. These investments will help generate revenue and thus will build better infrastructure for future.
6. DTH service provider will likely to gain as cable ARPUs rise and DTH becomes more of an equal player. Prices for films rights are also likely to

increase due to this. New media will also grow as cable companies begin selling broadband.

Conclusion

The process of Digitization will definitely benefit the television viewers in India. Digitization will lead TV viewers to more qualitative viewing with access to digital picture and High Definition Digital (HDD) Sound Quality.

Cable digitization will revolutionize the TV viewing experience; it has the potential to make TV viewing more personal, interactive and social. Also, a rise in the number of pay channels is expected, with substantial improvisation in the content. The industry will witness many mergers and consolidations because LCOs will tie up with triple play service providers or MSOs, to upgrade their infrastructure. Since the entire set up is to be changed for the new plan to be implemented, a standardized technological frame work is to be set up. An adequate supply of well-priced and upgraded technology is required for the success of such a futuristic project. A regulatory body needs to be set up to answer and rectify the grievances of both the consumer and the service providers.

It is believed that challenges will be faced in implementation in phase 2, 3 and 4 as

these cities have lower concentration of large MSOs. In these phases tier 2 and 3 cities will be covered and these cities are unorganised in their cable sector.

Digitisation does not only mean installing set-top boxes but it also means altering longstanding consumer habits.

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