

Consultation Paper No.: 01/2016



TELECOM REGULATORY AUTHORITY OF INDIA



Consultation Paper

on

Tariff Issues related to TV Services

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Written comments on the Consultation Paper are invited from the stakeholders by 4th March 2016. Counter-comments, if any, may be submitted by 18th March 2016. The comments and counter-comments may be sent, preferably in electronic form to Mr. S.K. Gupta, Pr. Advisor (B&CS), Telecom Regulatory Authority of India, on the e-mail: pradvbcs@traigov.in or umesh@traigov.in. For any clarification/ information, Mr. S.K. Gupta, Pr. Advisor (B&CS) may be contacted at Tel. No.: +91-11-23220018, Fax: +91-11-23220442. Comments and counter-comments will be posted on TRAI's website www.traigov.in.

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Chapter I

Introduction

1.1 Evolution of Television Broadcasting Sector

- 1.1.1 TV broadcasting in India commenced on 29.09.1959 with state-owned Doordarshan (DD) starting free to air terrestrial broadcast of TV service in Delhi. The terrestrial broadcasting saw major expansion and introduction of color television during 1982 Asian Games held in Delhi. Today it is one of the largest terrestrial TV networks in the world.
- 1.1.2 The use of satellite communication for direct broadcasting of television programs was initiated in 1975, when “The Satellite Instructional Television Experiment” (SITE), a joint project was launched by ISRO and NASA for community viewing of TV programs in schools and Panchayat centres in 2,400 villages of six Indian States. Cable television in India came into prominence in 1989 when few entrepreneurs set up small analog Cable TV networks and started distributing local video channels showing movies & music videos after obtaining cable rights from film & music distributors.
- 1.1.3 Cable and satellite television market in India gained widespread popularity with introduction of sports, international news channels and new programming genres created by home grown media companies. Satellite distribution of TV signals enhanced the reach and viewership of TV in far flung areas of the country. Cable TV distribution emerged as a simple delivery mechanism for distribution of multiple satellite channels to the consumers. This led to an exponential growth of Local Cable TV operators (LCOs) who aggregated and distributed broadcast content to the consumers.
- 1.1.4 Cable TV distribution business during its inceptive stages was

unregulated and fragmented, driven by thousands of small scale operators with scattered client bases. This was not a conducive ecosystem for technological development, standardization and infusion of mass capital into the sector. Cable TV operations largely remained analog with poor quality of service and concerns regarding non-transparency in revenue flows amongst stakeholders.

- 1.1.5 Government promulgated the Cable Television Networks (Regulation) Ordinance 1994, on 29.09.1994 to set down rules for registration of Cable TV Operators. Subsequently, this ordinance was converted into the Cable Television Networks (Regulation) Act 1995 (hereinafter called the “Cable Act”) on 25.03.1995 wherein provisions for cable operator registration, their obligations, content code and consumer interests were specified. This paved the way for subsequent regulatory framework in cable TV sector contributing towards consolidation, emergence of Multiple System Operators (MSOs) and modernization of distribution networks.
- 1.1.6 The cable TV sector comprises of large number of MSOs and LCOs serving around 100 million cable TV subscribers. A large number of MSOs are small in scale as almost half the total subscriber base is shared among top ten MSOs.
- 1.1.7 The process for putting in place a regulatory framework for satellite broadcasting was initiated by the Government in 1999 taking into consideration the issues related to Up linking / Down linking of TV Channels which finally culminated into laying down Policy Guidelines.
- 1.1.8 Direct-to-home (DTH) operations commenced in India in 2003. DTH offered distribution of TV services with improved quality and choice to the customer without any intermediary distributor.
- 1.1.9 The Government in 2009 came with the policy guidelines for

Headend-in-the-sky (HITS) to facilitate addressability and digitalization in the far flung areas. At present there are two HITS operators in the country.

1.1.10 Internet Protocol Television (IPTV) services were started in the country by a few IPTV service providers in 2008 when Cable TV Operators and Telecom Service Providers (TSPs) were permitted to provide IPTV services.

1.1.11 A few service providers have initiated efforts towards distribution of TV content using “Over-The-Top” (OTT) services on mobile networks.

1.1.12 TRAI began regulating the broadcasting sector in 2004 when the Central Government, vide a notification dated 09.01.2004, decided to entrust regulatory functions relating to broadcasting and cable TV sector to TRAI. The sector then, was largely unregulated, without operational transparency, experienced erratic price fluctuations and number of litigations amongst the stakeholders. It was a huge challenge to establish regulatory framework in such an environment and therefore TRAI adopted a ‘light touch’ regulatory approach in the sector. The Authority came out with a tariff order dated 15.01.2004 for cable TV sector followed by a tariff order dated 01.10.2004. The regulatory intervention continued thereafter to regulate tariff at whole sale and retail levels to ensure non-exclusive, non-discriminatory access and transparency while protecting both consumer and sector interests.

1.1.13 Analog TV distribution platforms only offered inadequate capacity and limited quality. TRAI initiated efforts towards digitalization of cable TV distribution networks. Major thrust of regulatory provisions shifted towards facilitating sector growth by introducing addressability and improving operational efficiencies by using new technologies. TRAI recommended that the process of digitisation maybe be executed in four phases by creating a conducive regulatory

framework.

- 1.1.14 Evolution of broadcast industry in India has been driven largely by satellite TV distribution business and unorganized growth of cable TV. During the early days, broadcasters were directly dealing with the cable operators who aggregated and carried broadcast TV services to end users. This distribution model was heavily skewed towards advertisement driven revenues due to difficulties in maintaining transparency in the flow of subscription revenues across the analog value chain.
- 1.1.15 This approach has encouraged bundling of broadcast TV services for distribution at broadcasters and DPOs level and continues to be followed even in the present digital domain. Small number of popular broadcast TV channels commanding a major pull from subscribers were used to piggyback less popular TV channels to consumers. The DPOs being aggregators of content also resorted to bundling of broadcast TV channels in such a way to maximize reach to their certain bouquets to the subscriber base. TRAI has mandated a-la-carte availability of broadcast TV channels across the value chain including to the subscribers. However the a-la-carte tariff is presently structured in such a manner so as to make it unaffordable and devoid of value proposition vis-à-vis the bundled offerings. The consumer is the ultimate sufferer who ends up receiving hundreds of TV channels against his subscription many of which remain confined to his STB and never viewed. The piggy-back marketing approach appears to impede growth and innovation in content quality and may also not offer much value either to the subscribers or advertisers.
- 1.1.16 TV has become a basic social need today and it has transcended across different social strata of society. The information and entertainment needs of all levels of the society are now important. In

this context it is worthwhile to examine the tariff structure so that the distribution models provide all consumers with the freedom to choose from an array of attractive and affordable a-la-carte and bundled broadcast TV services as per their preferences and paying capacity. This may need encouragement for development of new content genres catering to education, science and health etc., fulfilling social obligations.

1.1.17 The growth of multiple digital addressable platforms will inevitably lead to a sunset of analog cable TV system in the country. This sheer number and diversity of platforms delivering digital TV signals in an increasingly converged scenario requires an overhaul of the tariff regulatory framework. In order to cater to innovative growth while protecting the interests of the stakeholders across the value chain, there is a need to institute a consolidated technology neutral regulatory framework for digital addressable systems. This consultation is an attempt to create an enabling environment for growth of the sector in the light of various developments related to technology, emergence of multiple distribution platforms, evolving business models, and enhanced addressability across platforms. The consultation process also looks at futuristic issues and emerging challenges.

1.2 Objectives of current consultation

1.2.1 In the light of emerging trends in the TV broadcasting sector and changing consumption patterns of the consumers, there is a need to examine the tariff dispensation in a holistic manner. The objectives of current consultation are:-

- i. To carry out a review of existing Tariff arrangements and developing a Comprehensive Tariff Structure for Addressable TV Distribution of “TV Broadcasting Services” across Digital Broadcasting Delivery Platforms (DTH/ Cable TV/ HITS/ IPTV) at wholesale and retail level.

- ii. To ensure that the tariff structure is simplified and rationalized so as to ensure transparency and equity across the value chain.
- iii. To reduce the incidence of disputes amongst stakeholders across the value chain encouraging healthy growth in the sector.
- iv. To ensure that subscribers have adequate choice in the broadcast TV services while they are also protected against irrational tariff structures and price hikes.
- v. To encourage the investment in the TV sector
- vi. To encourage production of good quality content across different genres.

1.3 Brief structure of Consultation Paper

1.3.1 This paper is divided into six chapters. Second chapter deals with the present broadcasting and distribution sector scenario including the business and revenues models used therein. Third chapter provides an overview of the evolution of tariff in the broadcasting sector. Chapter four deals with different possible tariff models, with an aim to seek comments of the stakeholders, with regard to future tariff framework. Chapter five deals with miscellaneous issues relating to Tariff Structure. Chapter six summarises all the issues for consultation.

Chapter 2

Industry Scenario

2.1 Sector Landscape

- 2.1.1 The convergence between entertainment, information, and telecommunication is increasingly impacting India's broadcasting sector. Introduction of multiple distribution platforms like DTH, HITS and IPTV, and cable TV digitalization has led to a more diverse, rapidly evolving multiplatform market. New and innovative method of content delivery like Over-the-top (OTT) services is becoming popular. Uptake of digital services has an upward trend.
- 2.1.2 Television sector is witnessing a positive growth over the last few years and represents nearly 46%¹ of the total size media and entertainment industry. As per the industry report, this sector is poised to grow at Compound Annual Growth Rate (CAGR) of 15.5% to reach Rs.975 billion by 2019. India is the world 2nd largest TV market. As per the Census 2011, there are 247 million households in India. Television media has tremendous potential to grow as the TV penetration is nearly 61%. The impact of potential digital content consumption is going to be enormous due to country's high penetration of mobile phone which is at present more than 1000 millions². As Indian consumers become frequent users of digital platforms, such as smart phones, Television business are undergoing seismic shifts, changing the traditional dynamics of the Indian television industry.
- 2.1.3 The broadcasting business in India is primarily driven by two sources of revenue– advertising and subscription. While Free to Air (FTA) broadcasters rely mainly on advertising revenue as their source of revenue, the revenue of Pay TV broadcaster's flows from

¹ FICCI-KPMG Indian Media Entertainment Report 2015

² The Indian Telecom Services Performance Indicators April - June, 2015, TRAI

advertising, as well as subscription from subscribers. The revenue size of the Indian television industry was estimated at Rs. 47500 crore in 2014¹. Of this, Rs. 32000 crore (67 %) was attributed to subscription revenue generated from consumers and the balance Rs.15500 crore (33%) comes from the advertising market. It is estimated that subscription revenue growth at an annualized growth rate of 16% is expected to outpace the advertising revenue growth of 14% on account of improving monetization due to mandatory cable TV digitalization. The contribution of subscription and advertising revenue to the total TV sector in 2019 would be in the ratio 69:31 with the size being Rs. 67600 crore and Rs. 29000 crore respectively. Figure 2.1 below shows total pay TV channel subscription revenue and total pay TV channel advertisement revenue as a percentage of total pay TV channel revenue over the last 5 years (2009-2014). It indicates while advertisement revenue as percentage of total revenue to broadcasters has decreased over the years from 74.9 % in 2009 to 68.1% in 2014, it still dominates the total revenue receipt of the broadcasters.

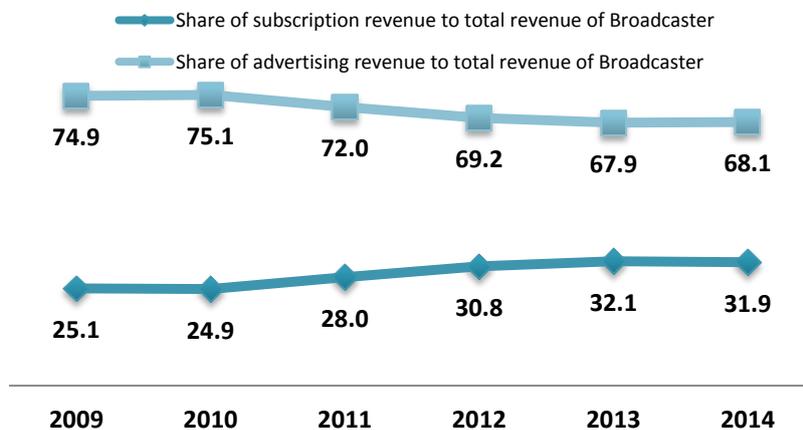


Figure 2.1: Revenue distribution of pay TV broadcasters

2.1.4 The Indian broadcasting landscape presents a very vibrant picture with more than 830 private satellite TV channels, 243 private FM Channels, 35 TV channels of public service broadcaster and 180 community radio stations. Broadcasting distribution sector

comprises 60,000 Local Cable Operators (LCOs), 6000 Multi System Operators (MSOs), 7 Direct-to-Home (DTH) operators, 2 Headend-In-The Sky (HITS) operators and a few IPTV service providers. The majority of the consumers are being serviced by Cable TV and DTH networks. The following graph shows the trends of Cable TV subscribers³ and DTH subscribers⁴ in India.

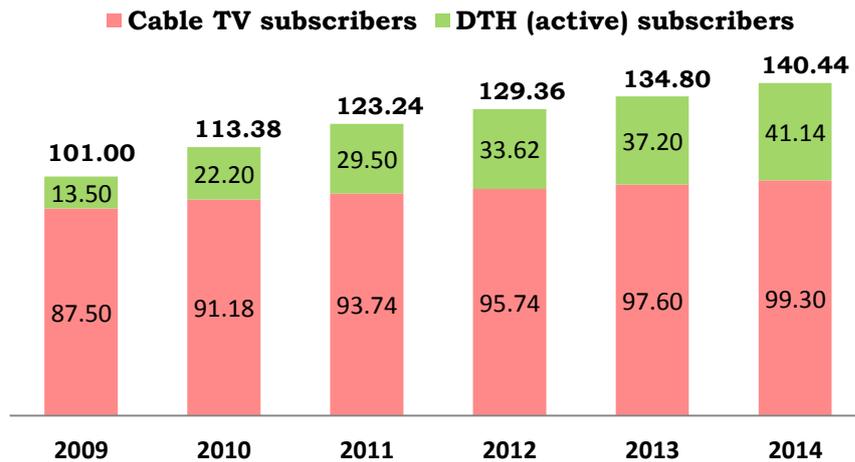


Figure 2.2: Pay TV subscribers in India (in millions)

2.2 Broadcasting TV services and Distribution Value Chain

2.2.1 The TV services distribution value chain comprises of broadcasters, Delivery Platform Operators (DPOs) and the end consumers. The DPOs comprise of DTH, HITS, IPTV and cable TV operators. The broadcasters “up-link” the content to the satellite for making it available for downlinking by the DPOs.

2.2.2 The DTH operators seek content from broadcasters and re-transmit it directly to the consumers. There is no intermediary between the DTH operator and end consumer. Presently, DTH services are provided by seven operators viz. (a) Free DTH services –Free Dish of Prasar Bharati and, (b) Pay DTH Service by Six private players – Airtel Digital TV, Dish TV, Reliance Big TV, Sun Direct, Tata Sky and

³ Asia Pacific Pay-TV & Broadband markets 2015, Media Partners Asia

⁴ As reported to TRAI for Quarter ending September 2015,

Videocon d2h.

2.2.3 MSOs downlink the broadcasters' signals from the Satellite and provide a bundled feed consisting of multiple channels to the LCO who further retransmit it to subscribers through cables. MSOs may also provide the broadcast TV services directly to their consumers. Although both analog and digital cable TV services are available in the country, mandatory digitalization of cable TV services is under implementation in a phased manner as per section 4A of the Cable Television Networks (Regulation) Act, 1995. The Phases I and II of the cable TV digitalization were completed by 31.10.2012 and 31.03.2013 respectively. With expiry of phase III digitalization notification date on 31.12.2015 and Phase IV mandated for completion by December 2016, the entire country will be under the umbrella of digitized cable TV services, leading to complete subscriber addressability thereby improving content monetization for distributors. There has been a huge growth on the content supply side including variety of regional, national and international TV services in different languages and genres. General Entertainment, News and Current affairs and Sports TV content have been key drivers of this growth. India today has a large broadcasting sector, comprising of 830 permitted private satellite TV channels which include 256 pay channels owned by 53 pay broadcasters⁵. The Pay and FTA TV channels are broadly categorized into 12 genres for regulatory compliance.

2.2.4 In IPTV supply chain, IPTV operator is connecting the broadcaster to the end consumer. Availability of high quality broadband delivery infrastructure that is being rapidly rolled out in the country is expected to be an enabler agent for proliferation of services.

2.2.5 There are two HITS operators providing the services in India.

⁵ As reported to TRAI

Functionally, a typical HITS operator performs like a MSO. Therefore HITS supply chain is similar to that of MSO. The digitalization of TV services in the far flung areas is expected to get a boost on operationalization of HITS services.

- 2.2.6 A few service providers have initiated efforts towards distribution of “Over The Top” (OTT) services. These developments are however at initial stages but offer additional opportunities for monetization of broadcast TV channel content. The DPOs are also looking at such opportunities for identifying additional revenue streams for services being aggregated by them.
- 2.2.7 The consumer is the focal point of the broadcasting business supply chain from whom the subscription revenue flows. The consumer eyeball numbers also generate advertising revenue from advertisers.

2.3 Business models

- 2.3.1 MSO’s business is dependent on the broadcaster for content. He depends mainly on the LCO for last mile connectivity as well as subscription revenue collection. It is estimated that around 6,000 MSOs (both analog and digital) are present in the Indian market today. As on 23.12.2015, the Ministry of Information and Broadcasting has granted registration to 576 MSOs to provide digital addressable Cable TV services. With the cable TV digitalization being underway, MSOs are expanding their business not just in their traditional markets but are also making inroads into new regions and different business models are evolving. Some of the major MSOs have started providing triple play service and other Value Added Services in the digitized markets. The distribution of MSOs over different states is non-uniform. Most MSOs are city based and confined to local areas. Some are regional MSOs while only a few are national MSOs.
- 2.3.2 LCOs business is largely based on providing services to specific

areas/ localities within a city. There is significant variation in the size of different LCO networks– ranging from a few 100 to over 10,000 subscribers. In all, an estimated 60,000 LCOs are providing TV services in the country. Given the nature of the cable business, where cabling the last mile continues to be done by a single party, monopolistic practices at the subscriber level continues.

- 2.3.3 The existing legal framework provides for individual or group of individuals or companies to obtain registration for providing cable TV services. While the registration of MSOs to operate in DAS areas is centralized at Ministry of Information and Broadcasting, the registrations of cable operators are decentralized being done at the local post offices. Absence of centralized mechanism for registration of cable operators and entry barriers inhibits capital investments by large business entities etc in the cable TV networks.
- 2.3.4 DTH operators are subject to annual license fee besides content and transponder costs. Since its introduction in 2003, uptake has increased considerably and has reached a figure of 41.14 million by September 2015⁶.
- 2.3.5 HITS operator can himself contract with different broadcasters for buying content, aggregating the same at the earth station and then uplinking with his own encryption to a satellite hired by him. These uplinked channels can be downlinked by using dish antenna for onward distribution through the last mile conventional cable networks to the television homes. The HITS operator can also decide to merely provide passive infrastructure facilities like transponder space on satellite, earth station facilities and the provision for simulcrypting/multicrypting of channels aggregated by different MSOs with different encryption systems to one or more MSOs or to a consortium of cable operators /MSOs desirous of uplinking TV

⁶As reported to TRAI for Quarter ending September 2015.

channels to his HITS satellite for downlinking and further transmission to the TV homes by the cable operators across the country. HITS operator in this case does not contract with the broadcaster for content. He only enters into the contracts with one or more MSOs or consortium of cable operators desirous of uplinking their aggregated channels from HITS earth station(s) to the HITS satellite. As per the HITS policy guidelines, no annual fee is required to be paid by the HITS operators.

2.3.6 The heavy dependence of broadcasters on advertisement revenue has influenced content development for increasing eyeballs. The investment in niche channel is minimal. This trend is clearly visible through the fact that there are large number of channels in established ad-friendly genres like kids, infotainment and education.

2.3.7 The television broadcasters are heavily dependent on advertising revenues as the share of subscription revenues reaching the broadcasters in Cable TV sector remains low. The sector size is split roughly in the ratio 66:34 in the favor of subscription revenue at the retail level. However the income of major broadcasters is roughly in the ratio of 35:65 in favor of advertising revenue. With the digitalization picking up, a marked increase in the subscription revenues has been noticed.

2.3.8 In the current scenario, the wholesale transactions between broadcasters and DPOs are being done on following modes:

- a. Fixed fee (lump sum) deals for either entire/all TV channels of the broadcaster (group companies) or for the part of their channels. A fixed amount is arrived at for fixed number of channels for fixed period.
- b. Cost per Subscriber (CPS) deals are being done on per subscriber basis.
- c. RIO based deals as per notified RIO by broadcasters.

- 2.3.9 Carriage fee is the charge paid by a broadcaster to a platform operator for carrying its broadcast TV signals over the DPO's network. Limited carrying capacity in analog cable TV systems vis-a-vis availability of large number of channels to be carried on DPOs network created scarcity of bandwidth. This was used to charge for bandwidth cost and termed as carriage fee. Though the capacity constrains have been addressed with the digitalization, carriage fee transactions are still prevalent between the broadcasters and MSOs. The regulations mandate MSOs to charge carriage fee uniformly from all broadcasters. Concerns of broadcasters have been that they are still paying high carriage fee in areas served by DAS where channel carrying capacity of MSOs have been increased. On the other hand, MSOs argue that there has been a reduction in carriage fee amount in DAS areas. However, no authentic figures are available with the Authority to assess the quantum of carriage fee in DAS implemented areas due to lack of information from the stakeholders.
- 2.3.10 Placement fee is other financial transaction between the broadcasters and DPOs for favourable positioning of their channels in the bouquets/EPG guide vis-à-vis competing channels. Such charges go under various names such as placement fees, marketing fees, packaging fees etc. Presently, placement fee is not regulated and is purely a business relation between broadcasters and DPOs.
- 2.3.11 The scenario prevailing internationally has also been examined. It is noticed that the regulatory framework adopted by different countries depend on the level of digitalization, competition, consumer awareness and various other issues. Different countries are at different points of regulatory contours. Though the international scenario has been examined and annexed at Annexure-I, there does not appear exact similarity of Indian scenario with present scenario of other countries.

Chapter 3

Evolution of tariff in Broadcasting and Cable TV sector

3.1 Broadcasting and cable services

3.1.1 The Broadcasting & Cable Services came under the regulatory ambit of TRAI on 09.01.2004. Since the sector was broadly unregulated and no details of prevailing prices were available, the Authority came out with a tariff order dated 15.01.2004, by which charges, payable by a cable subscriber to a cable operator, cable operator to a MSO and MSO to broadcaster, prevalent as on 26.12.2003, were specified as the ceiling.

3.1.2 Simultaneously, TRAI initiated a consultation process for the purpose of deciding upon an appropriate tariff regime for the sector. Thereafter, the Authority issued a self contained tariff order, namely, the Telecommunication (Broadcasting and Cable) Services (Second) Tariff Order, 2004 (6 of 2004) on 01.10. 2004. This is also known as **the Principal Tariff Order**. In the Principal Tariff Order, a mechanism was provided for pricing of new pay channels and FTA channels converted to pay channels. Protection was provided to the consumers by deciding that pay channels launched after 26.12.2003 should not be allowed to become part of bouquet of channels which were being provided on 26.12.2003. It was further provided that new pay channels may be offered individually or as a bouquet of channels which are not covered by the ceiling specified by the tariff order dated 15.1.2004. Thus, for those consumers who did not get new pay channels, the ceilings already prescribed were allowed to continue. Where the consumers got new pay channels after 26.12.2003, the extent to which the ceilings referred to above could be exceeded was limited to the rates for the new channels. In this Principal Tariff Order, the Authority also considered the question of fixing a ceiling price for new pay channels but having regard to the fact that fixation

of prices for new pay channels is difficult not only because of large variations of these prices but also the difficulty in linking channel prices to costs, the Authority decided that the broadcasters should be mandated to fix prices of such channels at levels similar to the rates prevalent on 26.12.2003 for similar channels and reserved to itself the power to intervene in such prices, if necessary. The Authority also decided that where the number of pay channels is reduced after 26.12.2003, the ceiling charge shall be reduced taking into account the rates of similar channels as on 26.12.2003.

- 3.1.3 The Authority, later, conducted a survey through Indian Market Research Bureau (IMRB) which showed that the monthly cable TV bill varied from city to city and region to region and even amongst various socio-economic clusters in a particular region. The said survey had also pointed out that in any conventional distribution chain, every player marks up the price by a certain percentage which accounts for his profits. There were no formal arrangements for sharing of revenue at different levels. The MSOs and LCOs derive their margins by negotiating on connectivity. This business practice prevailing in the sector was primarily due to non existence of an addressable system which would provide a mechanism to know the exact number of subscribers for a channel. This business practice resulted in negotiated settlements on rate and connectivity and the consumer getting channels of different broadcaster for a consolidated price which may not have relevance to the price of individual channels or bundles of channels. Cost based pricing, under these conditions, was not only found to be difficult since the product was not homogenous but it was also felt that the same could damage the incentive to improve quality of content. Given the large number of operators and the extent of price variation, it was not possible to formulate a uniform policy except in terms of general principles. It was after considering these aspects in totality, the peculiar nature of the sector and the history of unregulated growth, the Authority

decided to continue with the approach of regulating prices using historical prices.

- 3.1.4 An amendment to the Tariff Order was made vide the Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Second amendment) Order 2004 (8 of 2004) dated 1.12.2004, allowing an increase on account of annual inflation of 7% over the ceiling of cable charges fixed by the order dated 01.10.2004. The increase was to be effective from 1.1.2005.
- 3.1.5 Subsequently, on 29.11.2005, an increase of 4 %, over and above the 7% already allowed earlier, was provided to account for the increase in costs on account of annual inflation. This increase was to take effect from 1.1.2006. This amendment order was not brought into operation as the Hon'ble TDSAT stayed its operation. In its Order dated 22.12.2006, the Hon'ble TDSAT ordered TRAI to consider the matter of revision of rates afresh and mentioned that TRAI is free to consider if it requires passing some orders on revision of rates.
- 3.1.6 Meanwhile, the Authority on 31.07.2006, on the basis of a separate consultation process relating to principles to be followed for deciding the similarity of channels to those existing on 26.12.2003 amended the Principal Tariff Order. By this amendment, viz., the Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Sixth Amendment) Order, 2006 (5 of 2006), the genre and language of a new pay channel or a channel converting into pay from FTA became the relevant factors for deciding similarity of channels for purpose of price fixation of new pay channels.
- 3.1.7 The Authority decided to revisit the issue of tariff regulation for non-addressable Cable TV systems (popularly known as non-CAS) during the course of implementation of the Principal Tariff Order, in a holistic manner, inter alia, posing the question of forbearance, ceiling of cable charges at retail level and issue of annual

adjustment for inflation.

3.1.8 Based on the analysis of various inputs and the comments of the stakeholders during the consultation process, on 4.10.2007, the Authority issued, the Telecommunications (Broadcasting and Cable) Services (Second) Tariff (Eighth Amendment) Order, 2007, effective from 1.12.2007 which, *inter alia*, provided the following for non-addressable cable sector:-

- (i) Shifted the reference date from 26.12.2003 to 01.12.2007. A 4% increase in the prevalent charges (the one which was already allowed by the Authority vide its tariff amendment order dated 29.11.2005) was allowed.
- (ii) Prescribed the specific ceilings at retail level. These ceilings were related to the number of channels received, as well as to different types of habitations (i.e., cities, towns, semi-urban areas, etc).
- (iii) Mandated the broadcasters to provide their channels on a-la-carte basis to the MSOs/cable operators as per their request. In addition, they could also provide channels on bouquet basis. However, in order to ensure that the MSOs/cable operators get an effective a-la-carte choice without being handicapped by perverse pricing of bouquets, the Authority also decided to mandate a relationship between a-la-carte rates and bouquet rates known as 'twin condition at wholesale level'.

3.1.9 Appeals were filed in the Hon'ble TDSAT against the Telecommunications (Broadcasting and Cable) Services (Second) Tariff (Eighth Amendment) Order, 2007.

3.1.10 During the pendency of the appeals filed against the Eighth Amendment Order before the Hon'ble Tribunal, the Authority, by the Telecommunications (Broadcasting and Cable) Services (Second) Tariff (Ninth Amendment) Order, 2008, dated 26.12.2008, permitted

an increase of 7% on account of inflation with effect from 1.1.2009 on the cable TV rates as prevailing on 1.12.2007 and also reclassified the cities for the purpose of determining consumer level ceiling of rates.

3.1.11 Hon'ble TDSAT, vide its order dated 15.01.2009, set-aside the Tariff Eighth Amendment order and asked TRAI to study the matter afresh in the light of the observations contained in its judgment and issue a comprehensive order covering all aspects including the issue of subscription base in a non-addressable system.

3.1.12 The Authority filed an appeal in the Hon'ble Supreme Court of India against the judgment dated 15.1.2009 of the Hon'ble TDSAT and the Hon'ble Supreme Court of India, on 13.4.2009 directed status quo as on the date of the order 15.1.2009 of Hon'ble TDSAT. On 13.05.2009, Hon'ble Supreme Court of India passed an order directing TRAI to consider the matter *de novo* as regards all aspects and give a report to the Hon'ble Supreme Court.

3.1.13 Pursuant to the said directions of the Hon'ble Supreme Court, the Authority embarked upon a comprehensive *de novo* exercise. The Authority carried out the exercise and submitted a report in the Hon'ble Supreme Court on 21.07.2010. In this report, a draft tariff order was also attached which, amongst others, had a provision for 9% inflation linked hike in the tariff ceilings. The said matter remained pending in the Hon'ble Supreme Court since 2009. Due to which there has been no inflation linked adjustments in the Tariff Order for next five years. In this background, the Authority approached the Hon'ble Supreme Court and filed an Interlocutory Application (I.A.) for seeking permission of the Hon'ble Supreme Court to review the Tariff Order. The Hon'ble Supreme Court allowed the IA of TRAI and in its order dated 28.02.2014 permitted TRAI to review the tariff ceiling to make adjustment for inflation and notify the same, in exercise of its powers conferred under section 11(2) of

the TRAI Act, 1997.

3.1.14 The Authority worked out the change in the Wholesale Price Index (WPI) from December 2008 to February 2014, based on the monthly WPI data maintained by the Ministry of Commerce and Industry. Taking the relevant factors into considerations, the effective inflation linked hike permitted by the Authority was to the tune of 27.5%. The Authority decided to implement the hike in two installments so as to give reasonable time to all the stakeholders to adjust to these hikes. The first installment of 15% for the period from December 2008 to March 2014 was made effective from 01.04.2014 by eleventh amendment to the Principle Tariff order. The second installment for the remaining inflation linked increase was made effective from 01.01.2015 through the thirteenth amendment to the principal Tariff Order. A table summarizing the inflation linked hike permitted till date is given below:-

Sr. No.	Date from which inflation linked hike allowed	Quantum of hike allowed	Remarks
1.	01.01.2005	7%	
2.	01.01.2006	4%	
3.	01.01.2009	7%	
4.	01.01.2014	15%	Set aside by Hon'ble TDSAT
5.	01.01.2015	11%	

Table 1:- Summary of inflation linked hike allowed till date

3.1.15 The eleventh and the thirteenth amendment to the Tariff Orders permitting 27.5% hike towards inflation linked hike was found untenable and was set aside by Hon'ble TDSAT on 28.04.2015. An appeal was filed by Indian Broadcasting Foundation in the Hon'ble Supreme Court, on 04.08.2015. The Hon'ble Supreme Court upheld

the order of Hon'ble TDSAT and directed TRAI to re-consider in the light of observations made in the order of Hon'ble TDSAT and pass an order afresh.

3.2 Evolution of tariff framework for Addressable Systems

- 3.2.1 On introduction of Conditional Access System (CAS), the Authority notified The Telecommunication (Broadcasting and Cable) Services (Third) (CAS Areas) Tariff Order, 2006 (6 of 2006) on 31.08.2006. The Authority prescribed standard tariff package for STBs to ensure the availability of STB at fair price to the consumers. The maximum price of the pay channels was to be declared by the broadcasters and a ceiling of Rs. 5/- per channel was prescribed by the Authority. A Ceiling for Basic Service Tier consisting of FTA channels was fixed.
- 3.2.2 DTH operators requested TRAI to ensure level playing field conditions including fixing channel tariffs for DTH in view of the fact that the DTH system was fully addressable. The Authority decided to go through a formal consultation process before deciding the tariff dispensation in respect of addressable systems. A consultation paper on "DTH Issues relating to Tariff Regulation & new issues under reference" was issued on 06.03.2009.
- 3.2.3 Prior to this, Hon'ble TDSAT vide its judgment dated 14.07.2006 had held that the broadcasters should offer pay channels /bouquets to the DTH operators at 50% of the non-CAS rates pending a tariff determination for DTH services by TRAI. Subsequently, in some other appeal, the Hon'ble TDSAT vide its judgment dated 13.05.2009 held that the principle of 50% would be applicable only on channels available in basic packages and not on add-on packages. An appeal was filed in the Hon'ble Supreme Court by a DTH operator against the judgment dated 13.05.2009 of Hon'ble TDSAT. This appeal was dismissed by the Hon'ble Supreme Court on 06.07.2009 with a direction to TRAI to decide the entire matter within a period of two

months without being influenced by any observation made in the impugned order of the Hon'ble TDSAT. While the tariff matter relating to DTH services was under consideration of the Authority, HITS policy was notified on 26.11.2009 by the Ministry of Information and Broadcasting.

- 3.2.4 The Authority decided to regulate the tariff for addressable systems in a single tariff framework so that the different addressable systems can be accommodated with suitable provisions.
- 3.2.5 The Authority decided that the wholesale rates of pay TV channel(s) and bouquets for all addressable systems should not be more than 35% of corresponding channel(s) and bouquets in cable TV services in non-addressable market. Further, the Authority decided that Broadcasters will continue to offer all bouquets that are available for the non addressable (non CAS) system to the distributors in addressable system. They will also offer their channels to the distributors in addressable systems on a la carte basis.
- 3.2.6 As far as retail tariff in addressable system was concerned, the Authority decided the forbearance in the matter of retail tariff fixation. The niche channels which included HD channels were kept under forbearance at whole sale as well as retail level. The Authority also decide to keep a watch on the retails tariff and intervene if found necessary.
- 3.2.7 In line with the above decisions, the Authority issued, on 21.07.2010, the Telecommunication (Broadcasting and Cable) Services (Fourth) (Addressable Systems) Tariff Order, 2010 applicable for all addressable systems.
- 3.2.8 The issue of linkage of tariff at whole sale level with that of non-CAS rates was challenged by the Broadcasters in the Hon'ble Supreme Court and Hon'ble Court on interim pronounced order that the wholesale rates of pay TV channel(s) and bouquets for all

addressable systems should not be more than 42% of corresponding channel(s) and bouquets in cable TV services in non-addressable market. This is prevalent at present.

3.3 Tariff for Digital Addressable Cable TV Systems

3.3.1 After introduction of Digital Addressable Cable TV systems, an Amendment to the Principal Tariff Order for Addressable Systems dated 21.07.2010 was made on 30.04.2012 to accommodate the provisions of the Cable TV amendments which paved a way for implementation of Digital addressable Cable TV Systems. The following provisions were incorporated in the amendment tariff order:-

- All channels (pay and FTA) to be offered on a-la-carte basis to subscribers.
- There would be a Basic Service Tier (BST) consisting of a minimum of 100 FTA channel. While MSO is required to offer BST, it is not obligatory for subscriber to subscribe to the BST. Instead, subscriber can form his own package of a maximum 100 FTA channels. In either case the MSO cannot charge the subscriber more than Rs. 100/- per month.
- It is open to the subscriber to subscribe to the BST or one or more FTA channels or one or more Pay channels or bouquets offered by MSO or any combination thereon.
- In case subscriber chooses Pay channel(s) with or without FTA channel(s) the MSO can fix a minimum monthly subscription not exceeding Rs. 150/-. If the total value of the channels/ bouquets opted by the subscriber exceeds Rs. 150/- then actual subscription charges has to be paid.

3.3.2 Currently, TRAI's regulatory framework provides separate regime for non addressable (Non-CAS) TV systems & addressable TV systems. On wholesale level, for both non-addressable & addressable systems, broadcasters are required to compulsorily provide their channels on

a-la-carte basis to the DPOs as per their request. In addition, they can also provide channels on bouquet basis. There exists a relationship between the rate of bouquet and the a-la-carte rate of a channel forming part of the bouquet in form of twin conditions. The wholesale ceiling rate in addressable system is linked to non-addressable rates (wholesale rates cannot be more than 42% of corresponding channel(s) and bouquets in non-addressable market).

- 3.3.3 At retail level, in addressable system, all the channels are required to be offered to subscribers on a-la-carte basis. The retail tariff is under forbearance with certain restrictions on the rate of a-la-carte channels forming part of bouquet. Ceilings have been prescribed on the retail tariff in non-addressable system.

Chapter 4

Tariff Models

- 4.1 Ever since the regulation of Broadcasting and Cable Services (B&CS) sector came under ambit of TRAI, various interventions on pricing of services both at the wholesale and retail levels have been done to address specific issues, while adopting a balanced approach towards growth of the sector and protection of consumer interests. The sector has come a long way since 2004. The sector has undergone various changes and digitalization has reached more than 60% of the cable & satellite TV homes. The discussions in chapter 2 and chapter 3 clearly indicate that the evolution of the sector has not been smooth and has witnessed numerous litigations. In spite of this, the sector has grown at a healthy rate of 14% CAGR during the last decade. However, stakeholders raise concerns quoting industry estimates that Average Revenue Per User (ARPU) has not grown at similar pace. The stakeholders in the value chain feel that the existing business model requires holistic review due to large scale digitisation and addressability.
- 4.2 The FDI in the sector has been below expectation in spite of the huge investment potential and liberalised policies. There is a need for ramping up the investment in the sector to improve the quality and diversity of content and for up gradation of networks to improve quality of service at distribution level. It is necessary to ensure that new business models are finalised after due consultation with the stakeholders, and reasonable rate of return are assured on investments to both broadcasters and distributors for increasing the investment in the sector. It is also necessary to increase mutual trust across the value chain and reduce the level of risks relating to discrimination, uncertainty etc. It will also help in reducing litigations.
- 4.3 Presently, broadcasters provide their channels to DPOs, who

distribute them to customers either directly or through Local Cable Operators (LCOs). The broadcasters have to publish Reference Interconnect Offers (RIOs) specifying terms and conditions for providing channels to DPOs and ensure that such channels are given to all DPOs on non-discriminatory basis. They have to enter into a written interconnection agreement for distribution of channels based either on RIO or on mutual agreement basis. DPOs form the bouquets of the channels and price both a-la-carte and bouquets of channels.

4.4 Broadcasters feel that the business model prevalent at present is not conducive to growth. They are very critical of the price cap prescribed by TRAI in 2004. As per them, the present regulatory framework has not supported innovations in content production and due to such restrictive approach the content quality has been degrading gradually. In support of their argument they indicate limited availability of niche channels.

4.5 DPOs are of the opinion that the present business model does not ensure non-discrimination and fair play. As per them, the price of the pay channels is increasing but revenue realization from the ground remains low. DPOs indicate that large gap between RIO and mutually agreed price compel them to sign and pay for all channels of a particular broadcaster irrespective of the subscribers choice. Instances have been noticed where composition of bouquets is decided by the DPOs under compulsion of mutual agreements with the broadcasters instead of keeping in view the consumers choice. Small and medium MSOs insist that mutual interconnection agreements are not meeting the intent of non-discrimination. Quite a few MSOs are of the view that presently there is no systematic method available to know whether broadcasters are providing TV signals to them on non-discriminatory basis. There are number of disputes regarding interconnect agreements between broadcasters and DPOs and also between DPOs and local cable operators. Such disputes are detrimental to the growth of TV broadcasting sector as a whole.

- 4.6 The customers are of the opinion that though the digitalization has increased number of channels and improved Quality of Service (QoS) but choice of channels and accordingly control in their hand to budget their expenses is still missing. Even now, in real sense, subscribers are indirectly forced to choose large bouquets only. Wherever a-la-carte channels are being provided, the cost of such channels is exorbitantly high and it indirectly forces them to accept large bouquets. In case of cable operators, the prevalent method of subscription or discontinuation of add on channels/ small bouquets is opaque, cumbersome and non-customer friendly. The availability of other value added services expected to grow on digital distribution platforms is very limited.
- 4.7 In such a scenario, there is a need to holistically re-examine the existing business model of digital addressable TV broadcasting sector and accordingly transform existing regulatory framework including tariff orders. This should be able to address the concerns of various stakeholders in the value chain, enhance the growth of the sector and protect the interests of the consumers. At a time when majority of the subscribers are receiving TV services through digital addressable systems, there is a need to finalise tariff orders for these systems without any linkage with non-addressable systems, which otherwise also have its inherent limitations due to nature of business and systems.
- 4.8 As per prevailing business model, tariff is regulated at wholesale and retail levels independently. With the kind of changes taken place in the TV broadcasting sector during the last decade and simultaneous developments happened in the Information & Communications Technology (ICT) sector in respect of Customer Relationship Management (CRM), it has become possible to think of integrated tariff models where retail price of the channels is decided and declared by the broadcasters and price for distribution services are decided and declared by the DPOs. In integrated tariff model also, the broadcasters

will be required to distribute their TV channels through registered DPOs only.

4.9 There can be various models of each type i.e. wholesale, retail and integrated. Some of the probable models for each type, along with their pros, cons, workability and challenges in implementation have been discussed in the subsequent paragraphs. The salient features of existing tariff orders in brief, for the purpose of broad understanding only, has been mentioned at the beginning of respective sections. The comments of the stakeholders are solicited to finalise a model which can be further developed into detailed tariff order for addressable systems. The stakeholders, who prefer separate tariff models at wholesale and retail levels just like the existing regulatory framework may suggest a suitable pair of wholesale and retail model. Similarly, the stakeholders, who prefer integrated tariff model, may suggest an integrated model. The suggested model could be out of the models discussed below or a modified model or a totally new model with necessary details and justification.

4.10 **Models at wholesale level**

4.10.1 At wholesale level, signals of TV channels are provided by the broadcasters to the DPOs. At present, TV channels are divided into two types - Free to Air (FTA) and Pay Channels. The FTA channels are advertisement driven and DPOs receive them free of cost. Pay channels get revenue both from Advertisements as well as subscription. The salient features of the existing tariff orders at wholesale level for addressable systems, in brief, for the purpose of broad understanding only, are as follows:

- (a) The rates of channels or bouquets offered by broadcasters to DPOs for addressable systems has a linkage with the rate of channels or bouquets offered for non-addressable systems. For addressable systems, the channels or bouquets are required to be offered at

42% of the corresponding rates applicable for non addressable systems.

- (b) The composition of bouquets offered in addressable systems shall be the same as offered for non addressable systems.
- (c) Broadcasters have to offer all its channels on a-la-carte basis. In addition, the broadcaster may offer bouquet of channels, subject to the following conditions (known as twin conditions at wholesale level).
 - i. The sum of the a-la-carte rate of pay channels forming part of such bouquet shall in no case exceed 1.5 times of the rate of that bouquet of which such pay channels are a part.
 - ii. The a-la-carte rate of each pay channel shall in no case exceed 3 times the average rate of a pay channel of that bouquet.
- (d) Niche channel like HD/ advertisement free channels are under price forbearance. However, twin conditions are applicable, if niche channels are offered as part of bouquets.
- (e) Every broadcaster is required to report the a-la-carte and bouquet rate fixed by it to TRAI and shall also publish such rates on its website. Any change in the rate has to be reported at least 30 days prior to the proposed date of change.
- (f) If the broadcaster intends to convert a free to air channel into pay channel then it should inform to TRAI, at least 30 days prior to the proposed date of such conversion.

4.10.2 Some of the plausible models at wholesale level are listed below. Brief description of each model is given in the following paragraphs.

- a. Price Forbearance model
- b. Cost based model
- c. RIO based models
 - i. Universal RIO model
 - ii. Flexible RIO model
 - iii. Regulated RIO model

4.10.3 **Price Forbearance model:** It envisages minimal regulatory intervention for price fixation at the wholesale level for B2B transactions. This model envisages minimal regulatory reporting requirements but ensures that content is provided in a transparent and non-discriminatory manner. The broadcasters have complete freedom to price and market their TV channels as per their business requirements. The Broadcasters would be free to innovate their offers and marketing strategies for creating a competitive environment. The retail price to subscriber will be declared by the DPOs.

i. Pros:

- a. Freedom of pricing content will boost broadcasters' interest and bring in variety and quality of content including niche channels for education, health etc.
- b. Foreign direct investment may increase for broadcasters bringing in more direct/ indirect employment.
- c. More popular contents may attract more advertisements that may result in reduction in subscription charges from subscribers.

ii. Cons:

- a. This model may lead to monopolistic control of TV channels by large broadcasters.
- b. Monopolistic price control may result in litigations due to enormously high pricing of content.
- c. More bundling of TV channels may be encouraged by broadcasters.
- d. Consumers' choice may be limited.
- e. Growth of the sector in general may get adversely impacted due to limited flexibility to new entrants.
- f. Due to uncertainty of business at distribution level, investment may reduce.

iii. Workability:

- a. This model is feasible in an ideal, matured and pluralistic market that is largely governed by ethical and transparent business practices.
- b. Success of such model will be difficult keeping in view present status of sector due to vertically integrated entities, non-transparency and discrimination in providing

channels uniformly across DPOs.

iv. Challenges:

- a. Maintaining level playing field among stakeholders.
- b. Adequately controlling market dominance of few broadcasters.
- c. Controlling abnormal price increase for consumers due to price forbearance at broadcasters' level.
- d. choice to consumers may continue to be elusive.

v. Brief snapshot of the price forbearance model is given below:

Price determination	Freedom to broadcaster to determine price at wholesale level
Pricing Mode	Forbearance ; no regulatory price cap
Packaging	With Broadcasters at wholesale level and DPOs at retail level. No mandate for A-la-carte price per channel.
Level of Regulatory intervention	Low

4.10.4 **Cost based model:** It envisages that the price of a channel would be regulated on the basis of actual input costs incurred on creating content. Thereafter the average unit outflow of a channel will be determined considering total cost of the content production, revenue from advertisements and number of total subscribers subscribing to that channel. The broadcaster can then fix the price of the channel and bouquets by adding their profit margins. The details of calculation would be made available to regulatory authorities who may vet the reasonableness and fairness in arriving at the price of the channel.

i. Pros:

- a. It is a scientific method for price calculation and regulation.
- b. This would be transparent.
- c. Provides reasonable rate of return on investments.

ii. Cons:

- a. Media content is a creative product for which the production cost may vary significantly across time, location, genres and channels etc.
- b. There is a possibility of huge variation in content production cost within given genre. Hence, vetting the price of individual channel would be a huge regulatory burden.
- c. The methodology condones inefficiencies and allows payment in lieu of that also.
- d. Discourage the further investment at registered broadcaster level.
- e. It goes against the pricing principles where pricing of product at different stages of its lifecycle may be based on different criteria's to maximise overall gain.

iii. Workability:

- a. Channel price calculation will be very complicated exercise particularly when a channel is composed of different programs which may vary significantly on their production cost.
- b. There are different streams for revenue generation such as advertisement, customer subscriptions, over-the-top and other modes of services. The customers likely to use such services that are not known before notifying channel rates. So, this will be a challenge as to how to derive the channel price without having information in advance.
- c. The method of determination may be very complicated and may vary with each addition or alteration of the program in a channel. This may be impossible to administer.

iv. Challenges

- a. Implementation and workability will be a big challenge.
- b. Reasonableness of data used for cost calculation will always be a point of dispute which will be difficult to resolve.

v. Brief snapshot of the cost based model is given below:

Price determination	Price is determined considering the content production cost, advertising revenue, and the number of customers likely to subscribe to such channel etc.
Pricing Mode	Cost based price determination with provision of regulatory scrutiny;
Packaging Power	Channel price at wholesale level notified by the broadcasters and at retail level by DPOs.
Level of Regulatory intervention	Very High

4.10.5 **RIO based models:**

4.10.5.1 **Universal RIO model:** This model gives complete freedom to Broadcasters in deciding the price of each channel except that the broadcaster is mandated to notify the RIO and declare the price of each of its channel on a-la-carte basis. RIO will include other terms and conditions of interconnection also. Any discount, if proposed, has to be transparently declared upfront in the RIO on an objective basis. All deals with DPOs has to be carried out based on terms and conditions declared under RIO. No mutual agreements are permitted in this model. Broadcasters cannot offer bouquet of channels in this model. The model has inherent potential to enhance customer payout abnormally, but such possibility will be limited as price increase will impact eyeballs. Reduced eye balls will adversely impact revenue from advertisement which in turn will balance any abnormal increase in channel price by broadcasters.

i. Pros:

- a. Broadcaster being content provider has complete freedom in pricing its channels.
- b. Encourage launch of Niche channels and will increase content variety.
- c. Quality of content likely to increase.
- d. Likely to boost the investment at broadcaster level.
- e. It will enable the choice of channels to the DPOs.

ii. Cons:

- a. Complete freedom to broadcasters to price the channels even after acknowledging that content is monopolistic in nature may be anti-consumer and abnormally increase the ultimate price to customer.
- b. May impact the investment at distribution level.

iii. Workability

- a. Broadcaster would be having the control in pricing of the content. The success of the model will totally depend on mature behaviour of the sector, particularly of the broadcasters.

iv. Challenges

- a. Broadcaster will be framing the RIO terms and conditions without any regulatory interventions. Hence, possibility of RIO being pro - broadcasters interest cannot be ruled out.
- b. It will bring imbalance in value chain giving more powers in the hand of broadcasters at the cost of DPOs and other stakeholders in the value chain.

v. Brief snapshot of the Universal RIO model is given below:

Price determination	Broadcaster declares its pricing and other terms of offer in its RIO.
Pricing Mode	Forbearance. No regulatory price cap.
Packaging Power	With DPOs only.
Level of Regulatory intervention	Low

4.10.5.2 **Flexible RIO model:** It is very similar to Universal RIO model. In this model, the broadcaster has the freedom in notifying the price of the channel both for a-la-carte and bouquets. In addition to price formulation flexibility, the broadcaster can also enter into mutual agreements on certain issues as indicated in the RIO.

i. Pros:

- a. Broadcaster has more flexibility for mutual agreement with each DPO.

ii. Cons:

- a. Possibility of discrimination against DPOs may increase as flexibility of mutual agreements can be used against the smaller DPOs.
- b. Such discrimination may result in differential treatment to consumers served through different DPOs.
- c. Disadvantages of Universal RIO will be applicable to this model also.

iii. Workability

- a. Success of this model will again depend on maturity of the broadcasters in pricing their content and transparently providing terms and conditions for interconnections.

iv. Challenges:

- a. Ensuring level playing field for all DPOs and protection of consumer interests so that content is not priced abnormally high.
- b. Ensuring transparency and non discrimination.

v. Brief snapshot of the Flexible RIO model is given below:

Price determination	Price determination essentially on forbearance, but transparent RIO notification to be mandatory. Permits freedom for mutual agreement between Broadcasters and DPOs.
Pricing Mode	Forbearance; no regulatory price cap.
Packaging Power	With Broadcasters at wholesale level and DPOs at retail level.
Level of Regulatory intervention	Low

4.10.5.3 **Regulated RIO model:** As name of the model itself suggests, the broad contours of the RIO has to be notified by broadcasters. Regulatory framework may specify price cap for channels of each genre, linkage between prices of a-la-carte and bouquet of channels, framework for discounts offered by broadcasters to ensure non-discrimination, transparency, measures for

transparent declaration of number of subscribers of each channel/ bouquet, manner of providing TV channel signals to DPOs, checks for piracy etc. Under this model, a window can be opened for innovation, price discovery and production of diversified content by not prescribing any price cap for a category of pay channels subject to certain conditions such as that channels will be provided on a-la-carte basis only and will not form part of any bouquet either, directly or indirectly, at broadcaster or distributor level. Broadcasters would be free to declare their channels under this category. The issues relating to finalisation of price cap at wholesale level have been discussed in paragraphs 4.14.1 to 4.14.10 of this chapter.

i. Pros:

- a. Ensures a level playing field with non-discrimination and transparency amongst various stakeholders in the value chain.
- b. It provides flexibility to broadcasters to price their channels within the prescribed price caps while controlling risk of exorbitantly high price due to their monopolistic behaviour.
- c. It protects the interests of distributors and consumers.
- d. Encourages the broadcasters to offer niche channels.
- e. Enables price discovery of a category of pay channels based on competitive market principles.
- f. Disputes among stakeholders are likely to be reduced further encouraging growth of the sector.

ii. Cons:

- a. Some of the broadcasters may consider that prescription of regulatory framework for interconnect offer and price caps hinders their ingenuity.
- b. Each stakeholder has to make arrangements for compliance with the regulatory framework. This entails additional cost towards regulatory compliance.

iii. Workability:

- a. The model is likely to work smoothly keeping in view the present status of various stakeholders and maturity of the sector.

- b. It is more close to the existing regulatory framework except the fact that it provides forbearance for certain category of channels and price caps for pre notified genre. The price cap in this case may not be linked to non-addressable systems prices and level of transparency will be increased.

iv. Challenges:

- a. More number of resources would be required to ensure regulatory compliance.
- b. Periodic interventions may be required to re-adjust the various parameters based on the market conditions and development status of the sector.

v. Brief snapshot of the Regulated RIO model is given below:

Price determination	Price is notified by broadcasters through RIO after ensuring compliance to regulatory provisions.
Pricing mode	Within prescribed pricing framework; notified by the regulator
Packaging	Broadcasters at wholesale level and DPOs at retail level.
Level of Regulatory intervention	Medium

4.11 Models at Retail Level

4.11.1 At the retail level, TV channels are distributed to subscribers by the DPOs either directly or through LCOs. The DPOs aggregate TV channels from different broadcasters and provide them on a-la-carte and bouquets basis to the subscribers. In digital era new opportunities have emerged for monetization of the distribution network. The DPOs can also offer value added services such as play out services, video on demand etc. Cable operators can provide internet services also. The salient features of the existing tariff order provisions for addressable systems at retail level, in brief, for the purpose of broad understanding only, are as follows:

- a. At present the retail tariff in addressable system for both FTA and Pay channels is under price forbearance i.e. the DPOs are free to decide their price as per market conditions.
- b. All broadcast TV channels (FTA and Pay) are mandated to be provided to customers on a-la-carte basis so that customers can choose any channel. The DPOs are free to form bouquet of channels and price them.
- c. If the DPOs provide broadcast TV channels as bouquet(s), the bouquet price is linked to a-la-carte rate of the channels forming part of the bouquet to check unrealistic variations between bouquet price and a-la-carte price. The revised tariff order has been issued and will be applicable from 01.04.2016.
- d. It is mandated by the Government that public broadcasting service channels as notified from time-to-time must be carried by the DPOs and be delivered to the subscribers irrespective of whether the subscriber subscribes to any a-la-carte channel(s) or bouquet(s) or both.
- e. A Basic Service Tier (BST) comprising of 100 FTA channels at Rs. 100 plus taxes is mandated to be provided. The subscribers can make selection of these hundred channels.
- f. In case of the FTA channels, it is mandated that the price of FTA channels will be uniform.
- g. It is open to the DPOs to specify a minimum monthly subscription limit of not exceeding Rs. 150/-

4.11.2 As per applicable regulatory framework, the right of forming bouquet at distribution level rests with DPOs. Some of the TV channels have a high demand from the subscribers and in general parlance they are referred as driver channels. DPOs are of the view that, sometimes

broadcasters through mutual agreements, using the level of customers demand for driver channels, impose conditions upon them to bundle their other channels in the basic bouquet thereby restricting DPOs from freely packaging and pricing their channels to customers.

4.11.3 Similarly, broadcasters opine that DPOs demand huge sums of money in the form of carriage, marketing, packaging and placement fees from the broadcasters to provide them space and preferential location in the given genre and bouquet.

4.11.4 Subscribers generally have no options but to choose bouquets as offered by DPOs as a-la-carte prices notified at retail level are prohibitively high as compared to the bouquet prices.

4.11.5 In this way, the stakeholders in the value chain use their dominant power to address their commercial interest without caring to protect the interest of the subscribers. Both Broadcasters and DPOs tell different concerns for continuation of the present situation. While broadcasters raise concerns regarding high carriage charges, placement and marketing fee, DPOs point to very high RIO rates for the pay channels, huge discounts offered on the RIO rates forcing DPOs to sign the mutual agreements on the terms of the broadcasters. The fall out is that the retail distribution of channels becomes very complex ultimately affecting the subscribers.

4.11.6 It is noticed from consumer feedback that many of the existing provisions made to protect their interest do not get fully implemented at the retail level, and the consumers are deprived of the intended benefits. Consumers are also concerned about the big bouquet(s) pushed to them which often contain large number of channels with few driver pay channels. They also do not get realistic a-la-carte choices as prevailing rates are on much higher side. It is also noted that a bouquet sometimes contains variants of similar content such

as SD and HD or channels having different language audio etc. As a result, the consumers end up paying for all channels while they may actually not viewing all variants. There are channel which are classified as pay channels but charging differently at different platforms.

4.11.7 The Authority has noted that DPOs sometimes misuse the forbearance given to them for pricing the channels to the subscribers. Many a time a-la-carte prices even for FTA channels have been kept exorbitantly high and the manner of packaging channels have not been fair and transparent to the consumers.

4.11.8 In order to address the concerns of broadcasters and DPOs while protecting the interest of the subscribers, it is necessary to put in place a transparent regulatory framework including tariff order at retail level. For this purpose, some of the plausible models at retail level are listed below. Brief description of each model is given in the following paragraphs.

- i. Price Forbearance model
- ii. Exclusive a-la-Carte model

4.11.8.1 **Price Forbearance model:** This model envisages minimal regulatory intervention in fixing the retail price and also the manner of packaging and distribution of a-la-carte channels and bouquet being offered to subscribers.

i. Pros:

- a. DPOs have the freedom to market TV channels in both a-la-carte and bouquet form.
- b. DPOs would be free to innovate suitable pricing model and business strategies.
- c. Foreign direct investment may increase in the modernization of TV distribution infrastructure sector.

ii. Cons:

- a. This model may create entry barriers to new TV channels.
- b. Price of TV channels may increase to customers due to

oligopoly nature of market.

- c. Monopolies may work against the interest of consumers.
- d. The unrealistic pricing of broadcasters FTA and pay channels may discourage investment at the broadcaster level.
- e. It also has potential to create non-level playing field at the level of broadcaster.
- f. Due to huge variation in a-la-carte prices and bouquet prices, subscribers would be forced to subscribe large bouquets only. It restricts the choice of the subscribers.

iii. Workability:

- a. The workability of this model is feasible in a matured and pluralistic market that is largely governed by ethical and transparent business practices.

iv. Challenges:

- a. Maintaining level playing field among stakeholders.
- b. Market dominance by few DPOs.
- c. Controlling abnormal price increase due to price forbearance at retail level.
- d. Controlling unfair bouquet formation, limiting choice to consumers.

v. Brief snapshot of the **price forbearance** model is given below:

Price determination	Total flexibility to DPOs to notify retail price with minimal regulatory controls.
Pricing Mode	Forbearance ; no regulatory price cap
Packaging Power	DPOs at retail level have complete freedom for packaging and selling channels.
Level of Regulatory intervention	Low

4.11.8.2 **Exclusive a-la-carte-model:** It envisages capping of maximum retail price (MRP) for a-la-carte channels at retail level, in line with wholesale level caps, by the regulator. Such price cap can either be genre based or uniform across the channels. Both these strategies have their pros and cons. No bouquets can be provided under this

model. The ultimate price of the channel to the end customer is transparent across the platforms.

i. Pros:

- a. Price across the TV platforms is uniform.
- b. Customer has the choice to select only those channels which he wants to subscribe.

ii. Cons:

- a. Defining price caps on the MRP at retail level by the regulator is a cumbersome exercise.
- b. Price cap may be detrimental to the development of quality content and totally eliminate niche channels.
- c. Variety of the channels may be reduced and most of the broadcasters start competing for similar content.
- d. Growth of the sector and FDI may adversely be impacted in long term.
- e. DPOs' flexibility to price and package the channels will be adversely impacted.

iii. Workability:

- a. The success of the model hinges on the actual determination of MRP of the channel.
- b. Acceptability of the notified price cap and revenue share percentages may create operational problems and disputes.

iv. Challenges

- a. The innovation and ingenuity is likely to be badly impacted.
- b. Regulatory intervention is very high.

v. Brief snapshot of **Exclusive a-la-carte-model** is given below:

Price determination	Regulator declares a Maximum Retail Price (MRP) for each channel for the consumer either on genre basis or for all channels, which is uniform across all platforms.
Pricing Mode	Regulated
Packaging Power	Very limited with broadcasters and DPOs
Level of Regulatory intervention	Very high.

Issues for consultation:

- Q1. Which of the price models discussed in consultation paper would be suitable at wholesale level in broadcasting sector and why? You may also suggest a modified/ alternate model with detailed justifications.**
- Q2. Which of the corresponding price models discussed in consultation paper would be suitable at retail level in broadcasting sector and why? You may also suggest a modified/ alternate model with detailed justifications.**
- Q3. How will the transparency and non-discrimination requirements be fulfilled in the suggested pair of models? Explain the methodology of functioning with adequate justification.**
- Q4. How will the consumers interests like choice of channels and budgeting their expenses would be protected in the suggested pair of models? Give your comments with detailed justifications.**

4.12 Integrated Models:

4.12.1 The existing regulatory framework does not specify any integrated model. Some of the plausible integrated models are listed below. Brief description of each model is given in the following paragraphs.

- a. Conventional MRP Model
- b. Flexible MRP model
- c. Distribution network model

4.12.2 **Conventional MRP Model:** It provides freedom to broadcasters to notify MRP for their pay channels and bouquets of pay channels to customers. The DPOs act as a carrier of TV channels and are not allowed to repackage the channels and bouquets of channels from different broadcasters. DPOs are free to provide free to air channels and charge for it separately. Customer pays for the charges for free

to air channels as well as pay channels based on subscriptions. The broadcaster gives the revenue share to the DPO for distributing such pay channels. The revenue share offered to DPOs can be either in forbearance or made transparent by bringing it under regulations. This model relies on the availability of accurate measurement of total number of subscribers per month per channel/bouquet at any DPO platform to arrive at the amount due to broadcaster and DPO. The MRP will be in the public domain and uniformly applicable across platforms. This would also need to be reported to the regulatory authority.

i. Pros:

- a. Uniform prices for TV channels and bouquets of a given broadcaster across platforms.
- b. The customer will have full flexibility to choose channels of his own choice, while broadcasters will have flexibility to price their channels based on the customer demand.
- c. The quality of content of TV channels may improve to increase acceptability by customers.
- d. Variety of channels including Niche channels will increase with prime focus on customer choice.

ii. Cons:

- a. Broadcasters may still try to push their non-driver channels in bouquets along with driver channels.
- b. Customer may find it difficult to choose various pay channels/ bouquets of channels from each broadcaster.
- c. The distributor's dependence on pay channels revenue share.
- d. The flexibility of DPOs for packaging gets limited.
- e. Forbearance to price FTA channels has potential to create non-level playing field for FTA channels.
- f. Price of driver channels may be jacked-up by broadcasters adversely impacting consumer interest.

iii. Workability:

- a. Its success will depend on consumer awareness to choose different channels separately being a new concept.
- b. DPOs have to develop a consumer friendly framework facilitating customers to choose channels and bouquets of

- channels of their choice.
- c. Maturity of broadcasters in declaring MRP of channels and bouquets of channels will be of prime importance for success of this model.

iv. Challenges:

- a. To ensure that prices of existing channels do not abnormally increase.
- b. Enhancing customer awareness to enable selection of channels/bouquets will be a challenge.

v. Brief snapshot of the Conventional MRP model is given below:

Price determination	Broadcaster declares a Maximum Retail Price (MRP) for its channel(s) or bouquets to the consumer, which is uniform across all platforms. Revenue sharing between stakeholders can either be prescribed by broadcaster or Regulator in case of failure of mutual agreements.
Pricing Mode	On forbearance under the prescribed regulatory framework
Packaging Power	With broadcasters to customers
Level of Regulatory intervention	Low

4.12.3 **Flexible MRP model:** It is very similar to the conventional MRP model. Here DPOs also have options to make new bouquets from the channels in addition to bouquets available at his platform from different broadcasters. The MRP for the new bouquets created by DPOs is declared by them. Broadcasters continue to declare the MRP to consumers both for their a-la-carte channels and bouquets. The discounts or margins offered by broadcasters to DPOs can either be in forbearance or transparently declared in accordance with regulatory requirement.

Pros:

- a. Formulation of bouquet by DPOs to meet subscriber demand is more user friendly and easily adoptable to

market conditions.

- i. Cons:**
 - a. The level of discounts offered by the broadcasters to the DPO on a-la-carte and bouquet prices will be the key driver for success.
- ii. Workability:**
 - a. Similar to conventional MRP model.
 - b. Maturity of the sector will be necessary for success of this model.
- iii. Challenges:**
 - a. Similar to conventional MRP model.
- iv.** Brief snapshot of the Flexible MRP model is given below:

Price determination	Broadcaster declares a Maximum Retail Price (MRP) for their channel(s) or bouquets to the consumer, which is uniform across all platforms. Revenue sharing between the stakeholders can either be prescribed by broadcaster or regulator in case of failure of mutual agreements.
Pricing Mode	On forbearance.
Packaging Power	With DPOs as well as broadcasters.
Level of Regulatory intervention	Low

4.12.4 **Distribution network model:** This model envisages separation of charges for distribution networks and subscription of pay TV channels. This model gains importance from the fact that today, DPOs do not have any fixed source of revenue and to a large extent depends on the revenue share earned from the pay channels of broadcasters distributed to customers. As a result chances of mutual mistrust and litigations increase in value chain. This is also one of the basic points of conflict between MSOs/ HITS operators and LCOs.

- 4.12.5 Digital addressable broadcast networks, like DTH, HITS, IPTV and Cable networks essentially transmit the TV signal data in the broadcast mode to the subscribers. While the DTH, and HITS are unidirectional networks, IPTV and Cable networks are bidirectional capable. Due to bidirectional nature of these networks, these can be used to transmit other kinds of data also in either unicast, multicast or broadcast mode. Therefore for these networks, the network usage charges, depending upon the bandwidth used by the channels subscribed by the subscribers, could be independent of pay channel charges.
- 4.12.6 Further, the investments requirement of these networks is independent of the broadcaster's requirements. Huge amount of additional investment is still needed in the distribution networks to expand their reach and upgrade their capabilities. Therefore it can be argued that the DPOs should also have sources of revenue independent of revenue share from pay channels subscription revenue, to ensure reasonable rate of return on investment in the existing distribution networks and to ramp up further investment. This independent source of revenue could be in the form of monthly rental from subscribers depending upon the quantum of bandwidth used.
- 4.12.7 The rental amount, to be charged by the DPOs from the subscribers, should be able to recover the distribution expenses in the form of fixed costs like depreciation cost, operations cost, customer service cost, and variable costs like transmission cost which will vary due to variations in the number of channels chosen by the subscribers. It should also be able to recover reasonable amount of profit also. To protect the interest of the consumers, a uniform price cap across the distribution platforms on rental amount can be specified for initial pack of, say, minimum 100 channels or part thereof and then an additional amount of rent, pre-specified, can be charged by the distributor for each pack of,

say, 25 channels or part thereof. This rental amount may be independent of type of channels, i.e. pay or FTA, chosen by the subscribers, as the distribution expenses do not vary because of the type or nature of channel.

4.12.8 On similar lines, it can be argued that, since broadcasters invests huge amount of money to produce content and channelize it, they should also have control in their hand to decide the retail price of their product i.e. the pay channel and should not depend upon the distributor. It will help them in optimising the retail price of pay channels in such a way that they can maximise their sum of revenue from subscription and advertisements. This will be in line with the demand of broadcasters to get flexibility to price their content directly to subscribers. The pay channels shall be distributed through the DPOs only as per existing guidelines. The subscription amount for pay channels collected, accounted and consolidated by DPOs may continue to be as being done presently. The broadcaster can pay handling charges to the DPOs as some percentage, say 20%, of the pay channels subscription amount. This and similarly other sources of revenue from other value added services, if any, earned by the distributors can be taken into consideration while fixing the rental price caps for DPOs.

4.12.9 The broadcaster may notify the retail price of its pay channels on a-la-carte basis. They may also have freedom to form the bouquets of only pay channels and declare their prices. The FTA and pay channels cannot be packaged in a single bouquet. The a-la-carte and bouquet prices shall be linked with each other based on pre-specified conditions. The retail price notified to customers for any pay channel or bouquets of channels shall be same across the platforms. In addition to rental charges, the subscriber shall also pay charges to the distributor for content of pay channels chosen by the subscriber. For FTA channel chosen by the subscribers, other than rental charges. There would be no additional charge.

4.12.10 In this model, while there will be minimum assured amount of revenue generation for the distribution platform, the broadcasters shall also have the freedom to price their pay channels. At present, broadcasters do not have freedom to declare price of their pay channels directly to customers. Therefore, even if some broadcasters want to reduce the price of their pay channels to customers, they are dependent on the DPOs who may not pass on the reduced price of the channels to customers.

4.12.11 The provision for the easy selection of the channels and bouquets of the channels will be the key for success for this model. The process of easy channel selection has been discussed in detail in chapter 5.

i. Pros

- a. This model may also be consumer friendly as competition at broadcast as well as distribution level will reduce the effective price to subscribers.
- b. Interests of the broadcasters and DPOs are not in conflict resulting into reduced litigations.
- c. It provides flexibility to broadcasters to price their channels within the prescribed regulatory framework.
- d. It may also improve diversity and quality of content.
- e. DPOs would be at liberty to market FTA channels and platform services.
- f. Provides full freedom to customers to choose the channels and bouquets of the channels of its choice.
- g. Provides stand alone viable model for distribution platform operators and LCOs to improve its network infrastructure. This will further improve the quality of the services and capacity of network.
- h. It will ensure the reasonable rate of return to investors of broadcasters and distributors. In turn it may help in attracting investment in the sector.
- i. Ensures a level playing field amongst various stakeholders in the value chain.
- j. It protects the interests of consumers.
- k. Encourages the broadcasters to offer niche channels.
- l. Enables price discovery of a category of channels based on competitive market principles.
- m. Increase in investment may bring more direct/ indirect employment.

ii. Cons

- a. Freedom to form bouquets by DPOs at retail level will be reduced.

iii. Workability

- a. This is highly workable model.
- b. The success of the model will depend on proper pricing of the content by the broadcasters to customers without exercising significant market power to over-price the monopolistic content.
- a. The success of this model will also depend upon realistic estimation of network transmission cost for a pack of channels.

iv. Challenges

- a. The Customer habit for the selection of channels is presently for choosing a large bouquet. However, in this model, emphasis has been given on smaller bouquets and a-la-carte channels. Therefore, awareness of customer becomes important for success of this model.
- b. Ensuring realistic network infrastructure cost for growth of DPOs while protecting the interest of the consumers.
- c. Ensuring reasonable content pricing at retail level by the broadcasters.
- d. Proper framework for selecting the channels of choice by consumers.

- v. Brief snapshot of the **Distribution network model** is given below:

Price determination	Broadcasters are free to notify the price of pay channels to customers under broader regulatory framework. DPOs will get the rental for the bandwidth used based on the number of channels subscribed by the subscriber.
Pricing Mode	A combination of rental and content cost
Packaging Power	Primarily with broadcasters but DPOs can also form bouquets.
Level of Regulatory intervention	Medium

Issues for consultation:

- Q5. Which of the integrated distribution models discussed in consultation paper would be suitable and why? You may also suggest a modified/ alternate model with detailed justifications.**
- Q6. How will the transparency and non-discrimination requirements be fulfilled in the suggested models? Explain the methodology of functioning with adequate justification.**
- Q7. How will the consumers interests like choice of channels and budgeting their expenses would be protected in the suggested integrated distribution models? Give your comments with detailed justifications.**

4.13 Channel Pricing Framework

4.13.1 We have already deliberated on various pricing models which can probably be used at wholesale and retail level. In the following sections we will discuss the methodologies that can be used to arrive at the price of the channels. It is important to note that in addressable system the level of transparency has increased significantly in respect of the flow of content and the revenues along the value chain. Also new opportunities are available for providing enhanced media experience to the viewers creating further scope for monetization, better quality of service and improving the ARPUs. Here it would be appropriate to briefly recapitulate the factors that governed evolution of pricing in analog era and how the legacy continues to affect the pricing in present addressable system. If we look at the cable TV sector, during the initial phase the main objective of content owners was to maximize their reach to the consumers. At that stage channel price was not a significant factor of consideration and the focus was on advertisement revenue.

4.13.2 Over the years, many more channels were introduced, most of them

being general entertainment channels (GEC) with mass appeal to suit the advertisement driven business models. As the cable industry grew, the number of LCOs increased manifold. Since there was no method to verify the actual number of subscribers in an analog system, except enumerating them on ground, the revenue share in the value chain and distribution of channel at retail became more complex which further increased the focus on advertisement model.

4.13.3 The viewers began getting many more channels with the result that some channels became highly popular with the consumers. These channels were often called driver channels for the broadcasters. Simultaneously, with increasing digitisation, the subscriber base also increased exponentially and subscription revenues became significant.

4.13.4 Today there are 51 pay broadcasters with 262 pay channels. However, nearly half of pay channels belong to the top five broadcasters (**Annexure-II**). There are only a few driver channels controlled by a limited number of broadcasters. Enhanced pull for driver channels by subscribers, higher penetration and increased subscription revenue resulted in monopolistic practices.

4.13.5 The consumer pull for few driver channels made cable operators apprehensive about the viability of their businesses in absence of such channels on their platform. Broadcasters with powerful driver channels succeeded to piggy back their not so popular TV channels with the driver channels to their subscribers. This resulted in a large number of bundled channels being pushed to the subscribers as a bouquet with very little choice. The pricing of the bouquets was done in such a manner that it was significantly lower than the sum of the individual channel prices. Discounts were offered if the operator agreed to package all channels into their basic package. Additional incentives were offered if the channels were carried in the

prime band or if they were placed in close proximity to popular channels of other broadcasters. The distributors were enticed to surrender their privileges of placement and packaging under the lure of monetary considerations without any regard to the consumer interests. They entered into commercial dealings depending upon various considerations as per their commercial interests. This led to irrational market behaviour which hindered the growth of a market driven pricing structure and retail distribution mechanism that ought to have developed in a pluralistic market.

- 4.13.6 Similar market behaviour continue to persists in the digital addressable era wherein the channels continue to be pushed in bundled form while seeking preferred placement in EPG and in the basic bouquet formed by the DPOs through commercial considerations. The resulting pricing structure thus gets completely distorted vis a vis actual ground realities negating choices to consumers. Such legacy issues still continue to prevail today and are depriving the benefits of digitalisation not only to the stakeholders in the industry but also to the consumers.
- 4.13.7 These driver channels lead to indirect monopolistic power not only in terms of commanding content and pricing but also exercise significant control over the entire value chain. This continues to create a skewed level playing field in the broadcasting sector among the stakeholders.
- 4.13.8 Significant market powers have also influenced distribution networks. DPOs started demanding carriage fee and placement fee to carry broadcasters' channels due to limited carriage capacity in analog networks. Such practices still continue in the digital networks in spite of a substantial increase in the network carriage capacity.
- 4.13.9 As can be seen, the monopolistic behaviour of significant market

power is well demonstrated both by broadcasters as well as DPOs. At present, all stakeholders are subject to relevant regulations. Since significant market powers have the potential to adversely influence the value chain, it needs to be determined whether there should be a differential regulatory framework for such significant market powers.

- 4.13.10 The identification of the significant market power at DPO level maybe relatively easier and can be based on the percentage of number of the subscribers being served in a given area. But identification of broadcasters as significant market power may be a lot more difficult. Various criteria can be adopted for identifying a broadcaster as significant market power such as BARC rating, percentage of total subscriber base across India or percentage of total subscriber base in a given territory etc. Stakeholders' comments are solicited to formulate the regulatory framework.

Issues for consultation:

- Q8. Is there a need to identify significant market powers?**
- Q9. What should be the criteria for classifying an entity as a significant market power? Support your comments with justification.**
- Q10. Should there be differential regulatory framework for the significant market power? If yes, what should be such framework and why? How would it regulate the sector?**

4.14 Channel pricing methodologies

- 4.14.1 The existing channel pricing framework wholly depends on market prices of the analog network frozen in 2004. Subsequently, the prices of a-la-carte channels and bouquets were also derived based on various formulations. Even after digitalization, the prices of analog era were used as a reference to derive the channel prices in addressable systems. This price structure continues to operate till

date. With rapid changes that have taken place over the years, several aberrations have crept into the current pricing system.

- 4.14.2 In order to ensure a balance between freedom of the broadcasters to price their content, and to protect the interests of the consumers, the pricing framework must be transparent, flexible and growth oriented. Interests of the DPOs also need to be protected. Therefore, the pricing framework must be designed in a manner that it ensures adequate flexibility to broadcasters to prescribe content price while also protecting the DPOs from monopolistic practices.
- 4.14.3 The indirect method of deriving price from the analog pricing regime must be done away with. It is necessary to move away from the legacy system while prescribing new pricing framework. There is a need to relook at the channel price caps that were imposed in 2004.
- 4.14.4 One possible option could be that all available channels may be classified into different genres with a regulated genre price cap placed on each genre. Broadcasters may be allowed price forbearance within the prescribed genre caps. The presently defined genres along with the minimum and maximum declared RIO rates as are given below:

Genres	Maximum RIO price	Minimum RIO price
GEC (English)	6.52	2.05
GEC (Hindi)	10.58	0.45
GEC (Regional)	6.72	2.10
Infotainment	6.74	1.98
Kids	5.62	0.21
Lifestyle	12.60	4.04
Movies	9.66	2.39
Music	3.47	2.10
News	3.86	0.63
Religious	2.10	2.10
Sports	18.90	6.74

Table 2: Genre of pay channels and their RIO rates

4.14.5 In the existing genre classification similar type of content is being grouped into different genres on the basis of language. The existing categories of genres have resulted into some anomalies e.g. there are many common channels in different GEC genres but their prices are not uniform. The genre categorization therefore, needs to be re-examined keeping in view the development of new and different type of content.

4.14.6 The market has clearly demonstrated that similar content in different languages only have different area of dominance but nature of uptake and popularity remains very similar. Therefore there is a need to club together similar genres of different language channels for fixation of the price cap. Such clubbing will also reduce the number of genres and give greater flexibility to the broadcasters in channel pricing. However, multiple genres may need to continue to be on the EPG so that it continues to be consumer friendly in finding a channel of the choice. It is suggested that the following genres for fixation of price cap be defined:

- a. News and Current Affairs
- b. Infotainment
- c. Sports
- d. Kids
- e. Movies
- f. Devotional
- g. General Entertainment

Here GEC (Hindi), GEC (English) and GEC (Regional language) are clubbed with General Entertainment; and music and lifestyle are clubbed with Infotainment.

4.14.7 Once channel genres have been decided upon, the issue of genre price caps emerges. Presently, some sort of genre ceiling is being considered based on the RIO price notifications for similarly placed channels in that genre. In most of the cases RIOs are pegged at the highest limit of the Genre cap. Broadcasters presently notify the

RIO rates to TRAI as well as declare them on their websites. If the concept of genre is adopted, the genre caps can be calculated and rationalized. The calculations based on industry figures clearly indicate that the prices in the market are currently hovering at around 10% of the notified RIO rates and therefore retaining the highest prevailing RIO rates as genre ceilings may be against the interest of the consumers. Broadcasters justify existence of higher RIO rates saying that blanket price ceiling imposed in 2004 has generated a fear in the sector that a channel price once notified and priced will continue to remain fixed at that level and they may not have any flexibility to re-notify the channel prices at a later date. Therefore, the RIO prices get notified at the maximum permissible price within that genre ceiling rather than the most optimal price. These fears could be addressed if a provision is made in the regulatory framework itself to re-visit the genre price caps at a pre-defined frequency say two years.

- 4.14.8 Distribution platform operators feel that present RIO rates are rather monopolistic in nature and need to be rationalised further keeping in mind the actual levels at which the market is presently functional. The broadcasters might however argue that the discounts presently are given to carry all channels and ensure high reach in the market. As per them, most agreements with distribution platform operators happen on the basis of cost per subscriber (CPS). In a CPS deal, the DPOs pay the deal amount for each activated customer to that broadcaster irrespective of the number of channels subscribed by the subscriber. These complicated market practices can be simplified by ascertaining number of subscribers taking each of the many channels available and this can be determined at DPOs platform transparently in digital systems. Consumer interests can be best protected if channel prices are rationalised and transparent choices made available. This is best done by prescribing price ceiling for each

genre which gives adequate flexibility to broadcaster while protecting consumer interest. It is therefore, desirable and practicable to rationalise the genre price caps. Broadcasters can however continue to offer discounts to the DPOs in their bid to encourage a higher uptake of their channels in a transparent manner.

4.14.9 Non-uniform discounts from broadcasters to DPOs have been a point of dispute in the past. Such discounts offered in the name of freedom of business tend to defeat the very purpose of non-discrimination and distort the competition on the ground. This assumes greater significance due to the existence of dominant market power and monopolistic TV content. It has been noticed that there is no transparent criteria for accounting the discount offered by broadcasters to DPOs. Many a time calculation for the discounts is based only on the perceived reach of different channels which may be far from the ground realities and are likely to distort healthy functioning of the market.

4.14.10 One possible way to address this issue could be to compute the revenue due from DPO on the basis of different channels actually being subscribed. Broadcasters may workout the criteria to compute the discount based on transparently declared parameters such as the number of subscribers subscribing the channels, number of broadcast TV channels subscribed on the platform etc. Any other type of discount that has not been defined and transparently declared may not be allowed. The broadcasters thus retain the flexibility to carry out their business, however abnormal discounts have the potential to distort the market. Therefore, there is a need to consider limiting the maximum discount that can be offered by the broadcasters to the DPOs.

Issues for consultation:

- Q11. Is there a need to continue with the price freeze prescribed in 2004 and derive the price for digital platforms from analog prices? If not, what should be the basic pricing framework for pricing the channels at wholesale level in digital addressable platforms?**
- Q12. Do you feel that list of the Genres proposed in the consultation paper (CP) are adequate and will serve the purpose to decide genre caps for pricing the channels? You may suggest addition/deletion of genres with justification.**
- Q13. Is there a need to create a common GEC genre for multiple GEC genre using different regional languages such as GEC (Hindi), GEC (English) and GEC (Regional language) etc.? Give your suggestions with justification.**
- Q14. What should be the measures to ensure that price of the broadcast channels at wholesale level is not distorted by significant market power?**
- Q15. What should be the basis to derive the price cap for each genre?**
- Q16. What percentage of discount should be considered on the average genre RIO prices in the given genre to determine the price cap?**
- Q17. What should be the frequency to revisit genre ceilings prescribed by the Authority and why?**
- Q18. What should be the criteria for providing the discounts to DPOs on the notified wholesale prices of the channels and why?**
- Q19. What would be the maximum percentage of the cumulative**

discount that can be allowed on aggregated subscription revenue due to the broadcasters from a DPO based on the transparent criteria notified by the broadcasters?

4.15 Introduction of Niche channels

4.15.1 Niche channels are generally those channels which usually target a specific demographic audience or interest group such as Education, Health programs, cookery etc. The broadcasting sector presently has around 580 FTA channels and approximately 262 pay channels, but still the number of niche channels are miniscule. Broadcasters are of the view that present regulatory environment is not conducive for development of the niche channels. Since Niche channels have limited appeal by virtue of a specialized offering, the return on production of such channels broadly depends on the customer subscriptions. It is possible that these new niche channels may not initially find adequate viewership to attract substantial subscription. The possibility of success of niche channel is bleak in an environment where channel pricing is regulated. Also the newer niche channels may not fall into the existing genre categories wherein tariff ceilings are prescribed. Therefore, there is a need to encourage production of niche channels by relaxing price restrictions and allowing higher gestation period so that such channels gain sufficient viewership.

4.16 Tariff orders pertaining to niche channels

4.16.1 The Telecommunication (Broadcasting and Cable) Services (Fourth) (Addressable Systems) Tariff (First Amendment) Order, 2012 dated 30.04.2012 noted in explanatory memorandum that ad-free channels, HD channels and 3D channels generally known as niche channels are in forbearance. Niche channels generally follow a subscription driven cost recovery model. The advertisements on niche channels would only target premium sections of viewers. A

few advertisement free channels that rely completely on a subscription based revenue model are another segment that caters for a niche audience willing to pay for uninterrupted viewing experience.

4.16.2 The Authority in Tariff Order dated 30.04.2012 indicated that it would revisit the issue relating to niche channels at an appropriate time. As discussed above, a need is now felt to review the framework of niche channels. While doing so, provisions have to be made to ensure that such forbearance is not adversely used against the interest of subscribers.

4.16.3 Considering the need to encourage development of niche channels, a concept of “**Niche Channel Genre**” can be considered. The broadcasters for this genre will have forbearance to price the channel subject to fulfilling certain conditions. The Niche channel will be available only on al-a-carte basis from broadcasters along the value chain to consumers and in no circumstances such channels will form part of any bouquet in entire value chain.

4.17 **Criteria for defining niche channels**

4.17.1 To encourage the production of niche channels and consideration to relax regulatory price restrictions in prescribing channel price, it is important to ensure that such provisions are not misused. Here we must keep in mind that content of most of the existing channels especially driver channels cannot be allowed under any circumstances to be classified as niche channels. All channels which were initially classified as niche channel but subsequently disqualified to be a niche channel has to be placed under one of the classified genre and fulfil regulatory price cap prescribed for such genre.

4.17.2 There can be various methods to classify a channel as a niche channel. Some of them are discussed below:

a) Audience attributes-

The basic characteristics of the niche channel are that these are accessed by special interest groups. Therefore, one of the considerations for classification as niche channel can be based on some predefined subscriber numbers for such channels or as a percentage of total subscribership of channels of the pay TV universe.

b) Gestation period-

Gestation period can also be considered as one of the criteria for classification of the niche channel. Newly introduced genres and channels that have previously not been viewed by audiences in the country and may require an adoption by the subscribers can be considered as niche channels. Such channels can be classified as niche channels for gestation period of say 12-18 months subject to a condition that they will cease to be classified as niche channel as soon as their viewership crosses the criteria as defined above in the audience attribute.

c) Nature of content, production, distribution and marketing costs

Channels that may entail much higher initial investments and longer recovery periods than that for high viewership channels may also be classified as niche channel subject to a condition that they will cease to be classified as niche channel as soon as their viewership crosses the criteria as defined above in the audience attribute.

Issues for consultation:

Q20. What should be parameters for categorization of channels under the “Niche Channel Genre”?

Q21. Do you agree that niche channels need to be given complete forbearance in fixation of the price of the channel? Give your

comments with justification.

Q22. What should the maximum gestation period permitted for a niche channel and why?

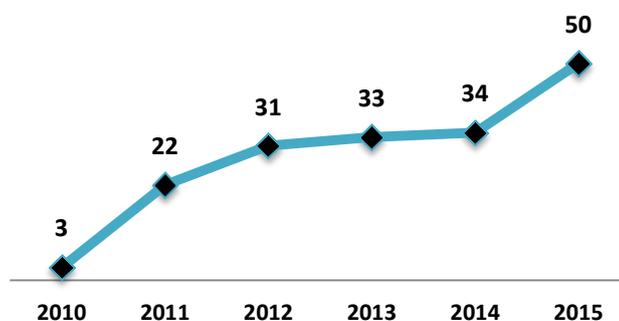
Q23. How misuse in the name of “Niche Channel Genre” can be controlled?

Q24. Can a channel under “Niche Channel Genre” continue in perpetuity? If not, what should be the criteria for a niche channel to cease to continue under the “Niche Channel Genre”?

4.18 Pricing of High Definition (HD) channels

4.18.1 HD channels were introduced into the Indian TV market in 2010 with only 3 HD pay channels. Presently there are about 50 HD channels on offer in the market (Refer Fig 4.1). HD channel reception at the subscriber premises requires three major elements – a) HD TV Content, (b) compatible set-top-box and c) HD ready TV receiver. HD content occupies more bandwidth so HD channels were introduced with MPEG4 compression technology. HD channels and HD enabled TV receivers are becoming common. With mass production and consumption of HD content the cost of hardware for HD content production has also seen a significant downtrend.

Fig 4.1 - Growth in number of HD channels



4.18.2 Presently HD channel prices at wholesale level are not being regulated. HD and SD are the different format for TV content. Large variety of content is presently available in both HD and SD format. There are quite a few channels in HD format which are also available in SD format. However, the price in HD format is exorbitantly high as compared with SD format. An analysis of the HD channels prevailing in the market and their prices has revealed following trends:-

- (a) The increasing popularity of HD channels is evident from the number of subscribers opting for HD channels which has risen exponentially across all platforms since 2010.
- (b) Adoption of HD enabled consumer premises equipment is also showing a healthy increase.
- (c) Some platform operators are reporting HD subscriptions as high as 30% of their total subscriber base.
- (d) The number of pay broadcasters offering HD channels has also steadily increased over the last few years.
- (e) Initially HD channels were offered as premium Ad-free channels and were completely dependent upon subscription revenues. The trend has however changed as such channels have also begun to carry quite a few advertisements. The average advertisement duration on HD channels has increased steadily over the years. This has generated a healthy advertisement based revenue stream for the HD broadcasters, in addition to the subscriptions.
- (f) When compared at the wholesale levels, prices ratios (in terms of RIO rates) of HD and SD channels for similar content are exorbitantly high thereby indicating large price differential.

4.18.3 TV broadcasting is moving from SD to HD and in near future content will be produced in HD format. As claimed by stakeholders most content production as of now is done in HD format, which is uplinked by broadcasters for providing to DPOs for further distribution to consumers. Thus, apart from production cost which may not be significantly different from that of SD production costs,

broadcasters have to bear additional expenditure towards incremental bandwidth cost for uplinking. Therefore, there does not appear a valid justification for pricing HD channels abnormally high as indicated above.

- 4.18.4 It may be noted that in order to view these HD channels, the DPOs and consumers also bear extra costs. While DPOs have to incur additional cost towards allocation of higher bandwidth for carrying HD channels and in providing compatible set-top-boxes employing the latest compression technologies, consumers have to use High Definition compliant TV receivers. Therefore, the rationale for fixing abnormally high price for HD content TV channels needs a thorough examination as it appears to work against the interest of subscribers.
- 4.18.5 Subscribers are also complaining that they are forced to get SD channels in the same bouquets along with HD channels for similar content. While they are additionally charged for taking HD channels, no provision exists to reduce the price of the SD channel in the bouquets in lieu of HD channels. They are of the opinion that broadcaster/ DPOs must ensure that similar content not be forced on them in different formats.
- 4.18.6 DPOs have brought out that broadcasters produce the content in HD format and down convert to SD format for distribution to subscribers considering that many subscribers as of now have only SD compatible set-top-boxes. The charges for such content are same and fall under present regulatory framework as any other channel. In such a scenario, the price difference of several times in HD channel price when compared with SD channel price is unjustified and against the interest of subscribers.
- 4.18.7 There is a need to define some relationship between the price of the HD channel and the price of the SD channel and it should be

notified transparently.

Issues for consultation:

- Q25. How should the price of the HD channel be regulated to protect the interest of subscribers?**
- Q26. Should there be a linkage of HD channel price with its SD format? If so, what should be the formula to link HD format price with SD format price and why?**
- Q27. Should similar content in different formats (HD and SD) in a given bouquet be pushed to the subscribers? How this issue can be addressed?**

4.19 Manner of offering

- 4.19.1 The price of channels or bouquets at retail level is presently under forbearance. However, it is observed that prevalent forbearance at retail has not resulted into better subscriber choices and uptake of channels on a-la-carte basis is limited.
- 4.19.2 The flexibility of packaging at retail level is presently given to DPO. However, it is primarily being influenced by the broadcasters. Here it is important that one of the primary objectives of digitalization is to serve the subscriber interest better, giving them more choice of the channels, better quality of content and at a reasonable price. Such formation of bouquets and restricted availability of a-la-carte channel due to higher prices is against the interest of the consumer. This situation becomes more complex when the entry level bouquet is formed with both Free to Air (FTA) and pay channels. In case of addressable cable TRAI has already mandated a BST pack of 100 FTA channels of consumer choice, including those mandated by the Govt., to be provided to the customers at Rs.100/-. However, due to conflicting commercial interests, such packages do not get popularized thereby resulting in lower adoption.

4.19.3 Therefore, there appears to be a need for regulatory intervention to correct the situation. In this regard, one of the options that can be examined is enumerated below:

4.19.4 **Exclusive Pay and FTA bouquet** - No pay channels will be clubbed with the FTA channels in a bouquet. This means that the DPOs will be free to formulate bouquet of FTA channels and bouquet of pay channel separately. FTA bouquets can be offered to consumers at a reasonable price with add on pack of FTA channels. The “must carry” mandate of FTA public service broadcasting channels as notified by the Government should be provided as “PSB” bouquet by all DPOs to the subscribers irrespective of whatever channel(s) or bouquet(s) are subscribed by them. The pay channels can be offered as a-la-carte and bouquets. This would enable consumer to have better selection of channels depending upon his choice and affordability.

Issue for consultation:

Q28. Do you agree that separation of FTA and pay channel bouquets will provide more flexibility in selection of channels to subscribers and will be more user friendly? Justify your comments.

4.20 Ease of channel or bouquet subscription

4.20.1 In digital domain, the facility of an EPG is made available to TV subscribers. The EPG provides the consumer a smooth man-machine interface which helps in easy navigation amongst various channels available on the platform for quick selection and viewing. The EPG facilitates listing of various genre groups and the channels in each group. It has been noticed that customer generally adopt the basic bouquet pack. Add-on pack and subsequent change in packages are not very frequent. This is one of the reasons why the

customer basic pack has become important and gets established as long term viewing pattern. The consumers also do not have easy and user friendly methods for subscribing to new channels or bouquets. In digital era new technologies can be harnessed to advertise the content and make subscription process simpler. One of the methods already adopted by DTH operators is where they make use of registered mobile number of the subscriber to subscribe to additional channel or bouquet. Apps need to be developed to provide ease of subscription.

Issue for consultation:

- Q29. How channel subscription process can be simplified and made user friendly so that subscribers can choose channels and bouquets of their choice easily? Give your suggestions with justification.**
- Q30. How can the activation time be minimized for subscribing to additional channels/bouquets?**

Chapter 5

Other issues related to broadcasting tariffs

5.1 In the previous chapter we have discussed various Tariff related issues and suggested some probable models and methodologies for tariff determination at wholesale and retail level with an objective to stimulate the growth of the broadcasting sector while protecting the interests of the consumers. In this chapter some other issues which have a direct bearing on the way channels are priced and made available to the consumers have been deliberated.

5.2 Carriage fee

5.2.1 Charges paid by a broadcaster to a distribution platform operator (DPO) for carrying its broadcast signals over the DPO's network are commonly termed by industry as Carriage fee. This trend started in analog era perhaps due to bandwidth constraints of transmission medium in cable TV systems. An analog cable system can generally carry around 80-100 channels while the number of channels available for broadcast outweighed the network capacity.

5.2.2 DPOs charge carriage fee in lieu of the bandwidth cost which they have to commit to carry the channel. Here it may be noted that "must carry" provision mandates DPOs to carry broadcasters channel on non-discriminatory basis on their networks even if such channels do not find enough viewership. In such cases the network capacity gets blocked without any returns to the DPOs. Hence, carriage fee emerged as an opportunistic fee to be demanded to strike a balance between limited network capacity and large number of channels available.

5.2.3 With implementation of digital addressable cable TV systems in 2011, the network capacity for carrying digital channels increased significantly to around 500 channels per head-end. However the

number of permitted private satellite TV channels also sharply increased to around 800. The head-end equipment installed by MSO also places limits on the carrying capacity of the MSO's digital network. In order to increase the network capacity further, an MSO is required to upgrade / modernize its head-end infrastructure which entailed additional costs for the MSO. In order to defray a part of such costs, carriage fee transactions took place between the broadcasters and MSOs.

5.2.4 Similarly on DTH Platform (another digital addressable platform) there is major constraint on the network capacity to carry channels due to limited transponder capacity. Creating additional carriage capacity requires more transponder bandwidth and hence more cost.

5.2.5 The quantum of carriage fee is presently under forbearance. The provision relating to carriage fee as specified in "The Telecommunication (Broadcasting and Cable Services) Interconnection (Digital Addressable Cable Television Systems) Regulations, 2012" dated 30.04.2012 reads as under:

"(12) Every multi system operator shall publish in its Reference Interconnect Offer the carriage fee for carrying a channel of a broadcaster for which no request has been made by the multi system operator:

Provided that the carriage fee shall be uniform for all the broadcasters and the same shall not be revised upwards for a minimum period of two years from the date of publication in the Reference Interconnect Offer."

5.2.6 The carriage fee demanded by different DPOs is not uniform. It varies with genres and area of operation. In some cases, it gets subsumed in the commercial dealings. As a result, the details of the Carriage fees charged are not clearly available. This blurs the true price transactions for TV channels which results in distorting the market. Broadcasters have raised the issue of high carriage fee at different

platforms. They are of the view that carriage fee payable to the DPOs at present are very high and detrimental to the growth of the sector. They have urged that the process adopted by DPOs should be transparent and non-discriminatory.

- 5.2.7 Broadcasters have indicated that carriage fee is being charged even in cases where the channels has been asked by MSOs and not been provided by Broadcasters under “Must carry” provisions. Here it is important to analyze that why carriage fee is required? If carriage fee is required to compensate the cost of the infrastructure utilized for carrying the TV channel, then the carriage fee must be derived from the cost of the bandwidth to carry a channel and there must be a regulatory cap to avoid any misuse by dominant distribution platform operators. Here, it will also be reasonable to examine as to whether DPOs get compensated for providing carriage capacity to TV channels by subscription revenue share received from the subscribers. If so, how maximum reimbursement for TV carriage capacity can be linked with percentage of subscribers available on the channel on distributors platform. There is a need to examine the applicability of carriage fee payments to the DPOs in the addressable regime.
- 5.2.8 The carriage fee is essentially to partly defray the infrastructure cost and other expenses incurred by the DPOs. A few parameters that may be of relevance to arrive at the carriage fee can be:
- a. Cost of the resources to provide adequate carriage capacity to carry a TV channel over the transmission network of the DPO.
 - b. Opportunity cost related to utilization of existing infrastructure.
- 5.2.9 It is also important to examine if Carriage Fees is justified in case a DPO under the ‘*must provide*’ clause requisitions a particular channel from a broadcaster. A DPO is expected to requisition any channel from a broadcaster for distribution on its platform only when the DPO foresees a demand and good subscription for the channel is

expected from its subscribers. If a DPO considering his business interest requisitions a channel under ‘*must provide*’ clause, then he commits the required bandwidth on his platform willingly in view of his business interests. In such a situation there does not appear any justification to demand reimbursement of the carriage capacity in terms of the carriage fee. Comments of the stakeholders are invited.

5.3 **Placement fee**

5.3.1 Placement fees are charged for placing a given channel in its genre at most advantageous position such as in neighborhood of a popular channel or for giving it certain easy to remember Logical Channel Numbers (LCNs) in the EPG. This fee is also termed by different names such as technical fee, packaging fee etc. by different platform operators. However, in this consultation we will term it as placement fee and it includes all different terminologies used for the purpose. Placement fees are paid for a sort of marketing activity to ensure maximum visibility to a channel. Broadcasters tend to pay higher placement charges for certain defined Logical Channel Numbers (LCNs) or proximity to a powerful driver channel. Such charges may also depend upon the positioning of the channels vis-à-vis competing channels. A few examples of such arrangements could be as follows:

- a. Channel placement on the EPG at a LCN with a better recall and/or quick selection potential.
- b. Channel placement at a chosen fixed LCN across maximum number of platforms.
- c. Channel placement within the given genre in close proximity to another popular channel.

5.3.2 Placement fee at present is not under the regulatory framework and is prevalent in the market. While ensuring that a channel is carried by the DPO on its platform is necessary to protect the interests of new broadcasters and FTA channel providers, placement of a channel within its genre at a specific location is part of the marketing

activity. A broadcaster is free to choose different options for marketing its channels. Placement of a channel in the EPG at a specific location is one of the various marketing options. Such activities are more driven by business understanding arrived at between the broadcaster and DPO. It is also relevant to note that there are presently no clearly laid down parameters to regulate exact placement of channels on the platform of a DPO except that all channels of similar genre should be clubbed and placed together. In this background, comments of the stakeholders are invited as to whether placement fee needs to be regulated.

5.4 **Marketing fee**

5.4.1 It has been observed that broadcasters in a bid to garner maximum eyeballs for their channels insist during their agreements with the DPOs that their channels be accorded maximum viewership. This is sought to be ensured by including their channels in the most widely subscribed 'base pack' or 'entry pack' of the DPO. This has given rise to the practice of broadcasters paying 'marketing fees' to the DPOs to ensure that they carry broadcasters channel(s) within specific packs. Marketing fee is also known by different names. However, in this consultation paper we will use the term "marketing fee" and it includes all the words and notions used by the stakeholders for such purposes. The practice of paying marketing fee to ensure that a particular channel reaches to maximum subscriber base has a direct and deleterious bearing on the consumers' choice to view channels of their choice. Once a DPO is bound by the broadcaster to carry its channel in a certain bouquet / pack, the DPO in turn is bound to supply the content to his subscribers in a similar bundle irrespective of the subscriber choice. The subscriber is thus burdened with a bloated bouquet with a large number of unwanted channels owing to the arrangement agreed to between the broadcaster and DPO.

5.4.2 It is thus essential to examine whether charges such as marketing fees need to be regulated and if so then what should be the appropriate approach and contours for such a regulatory framework. There may be a counter view that the placement and marketing fees etc. falls well within the domain of B2B decision making amongst stakeholders and may have little or no need for the regulatory intervention and it may be left to the industry. It is therefore essential to deliberate and seek the views of the stakeholders.

Issues for consultation

- Q31. Should the carriage fee be regulated? If yes, what should be the basis to regulate carriage fee?**
- Q32. Under what circumstances, carriage fee be permitted and why?**
- Q33. Is there a need to prescribe cap on maximum carriage fee to be charged by distribution platform operators per channel per subscriber? If so, what should be the “price Cap” and how is it to be calculated?**
- Q34. Should the carriage fee be reduced with increase in the number of subscribers for the TV channel? If so, what should be the criteria and why?**
- Q35. Should the practice of payment of placement and marketing fees amongst stakeholders be brought under the ambit of regulation? If yes, suggest the framework and its workability?**

5.5 Variants of Channels

5.5.1 Instances have come to the notice of the Authority where same or similar content is used for creation of multiple channels. Certain channels that have a common video stream feed and are superimposed with a different language audio feed are labeled as another distinct channel and marketed as such. In essence the linguistically modified channel is nothing more than a modified

variant or a slightly different clone of the original channel content. Such channels may be termed as variant channels or clones. One such category of channel clones could be that with exactly the same video content but with different language overlaid on it and uplinked simultaneously (simulcast) or with a time differential built-in (shufflecast).

5.5.2 Another category of clones could be SD channels that are down-converted or exact replicas of the original HD channels except for the enhanced definition feature. The consumer seeking to subscribe to the HD channel is invariably constrained to subscribe to the SD channel. The subscriber is thus laden with such additional cloned channels that entail an additional tariff burden on him. This may be viewed as an anti-consumer measure as it amounts to burdening the subscriber with additional tariff for such variants or cloned channels with content that is almost akin to the original one.

5.5.3 There is clearly a case to review such practices, which are not in consumer interest. It is however open for consultation as to the approach which may be adopted for regulation of such variant or cloned channels.

Issue for consultation

Q36. Is there a need to regulate variant or cloned channels i.e. creation of multiple channels from similar content, to protect consumers' interest? If yes, how should variant channels be defined and regulated?

5.6 Channel visibility on Electronic Program Guide (EPG)

5.6.1 Electronic program guide is schedule of the programs being broadcast over the channel. It is used to inform the viewers about the programs and their timings in advance. In addressable TV system, the facility of an Electronic Program Guide (EPG) is commonly made available to a digital TV subscriber. The EPG provides the consumer

a smooth man-machine interface which helps in easy navigation amongst various channels available on the platform for quick selection and viewing. The EPG facilitates listing of various genre groups and the channels in each of such groups.

- 5.6.2 It has been observed that in many cases, EPG displays only those channels which have been subscribed by the consumer. It excludes the display of those channels which, though offered by the platform operator, have however not been subscribed by the consumer.
- 5.6.3 In this scenario the subscriber remains largely unaware of program content of the channels to which he has not subscribed. In case a subscriber is made aware of the content available on these available channels, there is always a possibility of him evincing interest to sample the available fare that might further lead to a subscription to one or more of these channels. This could be achieved by providing a preview / teaser of the channels contents, to the subscriber, even if those channels have not been subscribed.
- 5.6.4 Non-visibility of these channels on the EPG amounts to a “lost opportunity cost” to the platform operator. Given the common refrain that the ARPUs prevailing in the TV broadcasting sector are low, there may be a need to review the current practice of exclusion of such unsubscribed channels from the EPG and provide a preview of all channels available on the platform say on Picture in Picture (PIP) windows to the consumer at no additional cost. The preview may also indicate the cost of subscribing to such channels to enable the consumer to take an informed decision accordingly. Alternatively, at least the EPG may include the details of the programs of the channels not subscribed by the customers. This will enable better utilization of the platform operators’ latent capacity, improved monetization to broadcasters and may also help enhance the ARPUs.

Issue for consultation

Q37. Can EPG include details of the program of the channels not subscribed by the customer so that customer can take a decision to subscribe such channels?

Q38. Can Electronic Program Guide (EPG) include the preview of channels, say picture in picture (PIP) for channels available on the platform of DPOs but not subscribed by the customers at no additional cost to subscribers? Justify your comments.

5.7 Pay-per-program viewing and tariff options

5.7.1 Presently, all platform operators offer their channels on a-la-carte basis to the subscribers on a periodic, usually monthly subscription basis. In addition subscribers are also offered bouquet of Channels on a regular subscription basis. Some DPOs offer long duration plans (annual, semi-annual plans). A-la-carte offerings allow a consumer to select only channels of his choice. This goes towards enhancing greater consumer choice in subscription and viewing of channels. This has been made possible under a digital addressable TV regime.

5.7.2 It has been observed that in order to attract larger number of subscribers, a few operators have introduced low-denomination pre-paid top-up packs which give the consumer the flexibility to recharge their subscription on a per-day basis. This appears to be a popular option amongst consumers as it affords him better selectivity and choice.

5.7.3 Further, it is noticed that quite a few DPOs specially DTH operators have implemented a facility to view a movie on demand by subscribing through their registered mobile number and paying additional charge. On the same line, it may be relevant to further explore the need for a pay-per-program option to the subscriber. This may be conducive for a subscriber who wishes to selectively view only a particular program of his choice on a particular channel, which he

may not have otherwise subscribed either on an a-la-carte or as a part of a bouquet. The charges for viewing such channels on pay-per-view basis should be less than the charges for that channel on A-la-carte basis. Such a dynamic program choice and selection flexibility given to the consumer by the platform operator may also enable him to derive higher ARPUs.

Issues for consultation

- Q39. Is the option of Pay-per-program viewing by subscribers feasible to implement? If so, should the tariff of such viewing be regulated? Give your comments with justification.**
- Q40. Will there be any additional implementation cost to subscriber for pay-per-view service?**

5.8 Audit and reporting issues related to tariff

- 5.8.1 TV broadcasting sector has matured over the past decades and the digitalization has aided to achieve greater levels of transparency and accountability in the sector. In the analog era, poor technological capability, fragmented nature of stakeholders and the lack of trust amongst stakeholders led to vast under reporting and disputes related to subscription verification and payments. Industry consolidation and institution of a regulatory framework has had a salutary effect on the state of the sector. Further, the digitalization process has progressed satisfactorily leading to greater addressability and transparency. The Subscriber Management System (SMS) is an integral part of the accountability regime under DAS. The numbers of consumers who have subscribed to various channels are the mainstay of the revenue transactions between various stakeholders. The SMS is maintained by the DPOs, while the broadcasters have built into their agreements provisions to audit the SMS and seek periodic reports from the DPOs. The integrity of SMS and the

verification of the data by broadcasters are essential to bring credibility in the value chain.

5.8.2 Of late, it is observed that the provision of Audit and Reporting has in itself emerged as a point of disagreement between the broadcasters and DPOs. This in turn has been the cause for numerous disputes and litigations between the stakeholders. Absence of a robust and a transparent mechanism to review and audit the subscriber management system would negate benefits of digitalization. The results of audit inspection directly impact some of the following issues:

- a. It drives the broadcaster financial decisions based on the subscriber numbers.
- b. It also helps in streamlining the collection and settlement of subscription revenues to be realized from the DPOs.
- c. It also influences the payment of carriage fees to the DPOs.
- d. It helps in verification of regulatory and statutory compliances.

5.8.3 The broadcasters complain that the DPOs do not fulfill their obligations under the audit and reporting requirements leading to a situation where the accurate number of subscribers for their channels is not ascertainable in a transparent manner. Such absence of accurate numbers leads to disputes in revenue transactions. Broadcasters complain that the DPOs use a variety of means to thwart their attempts to gather reliable SMS data and to verify the correctness of such a system. They are denied access to the SMS, or not provided any assistance to conduct audits.

5.8.4 The DPOs on other end have expressed concerns about the myriad forms of non-standardized reports and data demanded by the broadcasters under the pretext of carrying out audit. They also complaint that often the personnel deputed to conduct audit either do not have technical competence or are poorly trained to conduct

such audits. Here it is important to mention that a DPO distributes the channels from multiple broadcasters (generally more than 20). The non-standardized audit process, reporting formats lead to difficulties in providing required subscriber data to different broadcasters and to assist in conduction of audit. Furthermore sometimes the data demanded by a broadcaster goes far beyond the justifiable requirement of the audit applicable to the broadcaster. DPOs hold the view that they are well within their rights to resist any attempts to seek data unrelated to the objectives of the audit. The DPOs also submit that they are subjected to multiple audits by different broadcasters throughout the year adding to additional time spent, demands on trained manpower that results in cost commitments on them. Further, the DPO's manpower has to constantly tasked to assist the broadcasters in carrying out the audit throughout the year.

- 5.8.5 Since SMS is central to the TV channel distribution eco-system, and all information is digitally stored into it, we can use the power of ICT to automate the process of data collection at a central facility. A standardized reporting framework can be prescribed which will lead to transparency and trust among the stakeholders. It will also help simplify reporting requirement and bring into operational efficiencies leading to a salutary effect.
- 5.8.6 The strengths of ICTs can be harnessed to set up an online facility for collecting information automatically from the SMS of all the DPOs in the pre-defined format. This information can be pulled by the central server or can be pushed by the SMS of the DPOs in real time. Such information exchanged can be automated using web services. The infrastructure for creation of such central facility can both be installed and managed by the industry body or a third party. The requirements of generation of different reports for broadcasters can be met by automated report generation system. Such reports can

easily be sent periodically electronically to all concerned stakeholders. The checks and balances can be introduced in the system to ensure the protection and integrity of the data collection and data processing. If despite of all precautions, some broadcasters have concerns regarding correctness of the data captured by central facility, then he can opt for the physical audit of SMS of the concerned DPO also. Such audits may be conducted by domain experts on behalf of broadcasters. In order to ensure that such physical audit are not resorted frequently, the broadcasters may pay some fee (to be mutually decided in agreements) for conduction of the audit to DPOs. DPOs will be obliged to get such audit conducted within a week of such notification. Penal provision can be made in case the audit team of broadcasters finds that information has been tempered with or manipulated at DPO level. Such penal provisions will be part of agreement between DPOs and broadcasters. The proposed online facility is suggested to have following features:

- a) The central facility can be set up and maintained either by the industry body or any third party.
- b) The central facility can provide the requisite data or reports to the broadcasters on payments basis to meet its operational expenses.
- c) The central facility will standardize the parameters, data, forms, formats, and reports to be shared amongst the stakeholders.
- d) The central facility will lay down the mechanism for checking the integrity of the SMS of DPOs.
- e) The Server of the central facility will access and retrieve the requisite information from the SMS of DPOs.
- f) The broadcasters will not have direct access to the SMS of DPOs. However, broadcasters will have option for the audit. DPOs will be obliged to get such audit conducted in time bound manner.
- g) The central facility will provide requisite information as may be

needed to regulatory/ statutory agencies.

- h) Adequate safeguards will be built in to prevent abuse of the system.

Issues for consultation

- Q41. Do you agree with the approach suggested in para 5.8.6 for setting up of a central facility? If yes, please suggest detailed guidelines for setting up and operation of such entity. If no, please suggest alternative approach(s) to streamline the process of periodic reporting to broadcasters and audit of DPOs with justification.**

Other Issues

- Q42. Stakeholders may also provide their comments on any other issue relevant to the present consultation.**

Chapter 6

Summary of issues for consultation

- Q1. Which of the price models discussed in consultation paper would be suitable at wholesale level in broadcasting sector and why? You may also suggest a modified/ alternate model with detailed justifications.**
- Q2. Which of the corresponding price models discussed in consultation paper would be suitable at retail level in broadcasting sector and why? You may also suggest a modified/ alternate model with detailed justifications.**
- Q3. How will the transparency and non-discrimination requirements be fulfilled in the suggested pair of models? Explain the methodology of functioning with adequate justification.**
- Q4. How will the consumers interests like choice of channels and budgeting their expenses would be protected in the suggested pair of models? Give your comments with detailed justifications.**
- Q5. Which of the integrated distribution models discussed in consultation paper would be suitable and why? You may also suggest a modified/ alternate model with detailed justifications.**
- Q6. How will the transparency and non-discrimination requirements be fulfilled in the suggested models? Explain the methodology of functioning with adequate justification.**
- Q7. How will the consumers interests like choice of channels and budgeting their expenses would be protected in the suggested integrated distribution models? Give your comments with detailed justifications.**
- Q8. Is there a need to identify significant market powers?**

- Q9. What should be the criteria for classifying an entity as a significant market power? Support your comments with justification.**
- Q10. Should there be differential regulatory framework for the significant market power? If yes, what should be such framework and why? How would it regulate the sector?**
- Q11. Is there a need to continue with the price freeze prescribed in 2004 and derive the price for digital platforms from analog prices? If not, what should be the basic pricing framework for pricing the channels at wholesale level in digital addressable platforms?**
- Q12. Do you feel that list of the Genres proposed in the consultation paper (CP) are adequate and will serve the purpose to decide genre caps for pricing the channels? You may suggest addition/deletion of genres with justification.**
- Q13. Is there a need to create a common GEC genre for multiple GEC genre using different regional languages such as GEC (Hindi), GEC (English) and GEC (Regional language) etc? Give your suggestions with justification.**
- Q14. What should be the measures to ensure that price of the broadcast channels at wholesale level is not distorted by significant market power?**
- Q15. What should be the basis to derive the price cap for each genre?**
- Q16. What percentage of discount should be considered on the average genre RIO prices in the given genre to determine the price cap?**

- Q17. What should be the frequency to revisit genre ceilings prescribed by the Authority and why?**
- Q18. What should be the criteria for providing the discounts to DPOs on the notified wholesale prices of the channels and why?**
- Q19. What would be the maximum percentage of the cumulative discount that can be allowed on aggregated subscription revenue due to the broadcasters from a DPO based on the transparent criteria notified by the broadcasters?**
- Q20. What should be parameters for categorization of channels under the “Niche Channel Genre”?**
- Q21. Do you agree that niche channels need to be given complete forbearance in fixation of the price of the channel? Give your comments with justification.**
- Q22. What should the maximum gestation period permitted for a niche channel and why?**
- Q23. How misuse in the name of “Niche Channel Genre” can be controlled?**
- Q24. Can a channel under “Niche Channel Genre” continue in perpetuity? If not, what should be the criteria for a niche channel to cease to continue under the “Niche Channel Genre”?**
- Q25. How should the price of the HD channel be regulated to protect the interest of subscribers?**
- Q26. Should there be a linkage of HD channel price with its SD format? If so, what should be the formula to link HD format price with SD format price and why?**

- Q27. Should similar content in different formats (HD and SD) in a given bouquet be pushed to the subscribers? How this issue can be addressed?**
- Q28. Do you agree that separation of FTA and pay channel bouquets will provide more flexibility in selection of channels to subscribers and will be more user friendly? Justify your comments.**
- Q29. How channel subscription process can be simplified and made user friendly so that subscribers can choose channels and bouquets of their choice easily? Give your suggestions with justification.**
- Q30. How can the activation time be minimized for subscribing to additional channels/bouquets?**
- Q31. Should the carriage fee be regulated? If yes, what should be the basis to regulate carriage fee?**
- Q32. Under what circumstances, carriage fee be permitted and why?**
- Q33. Is there a need to prescribe cap on maximum carriage fee to be charged by distribution platform operators per channel per subscriber? If so, what should be the “price Cap” and how is it to be calculated?**
- Q34. Should the carriage fee be reduced with increase in the number of subscribers for the TV channel? If so, what should be the criteria and why?**
- Q35. Should the practice of payment of placement and marketing fees amongst stakeholders be brought under the ambit of regulation? If yes, suggest the framework and its workability?**
- Q36. Is there a need to regulate variant or cloned channels i.e.**

creation of multiple channels from similar content, to protect consumers' interest? If yes, how should variant channels be defined and regulated?

- Q37. Can EPG include details of the program of the channels not subscribed by the customer so that customer can take a decision to subscribe such channels?**
- Q38. Can Electronic Program Guide (EPG) include the preview of channels, say picture in picture (PIP) for channels available on the platform of DPOs but not subscribed by the customers at no additional cost to subscribers? Justify your comments.**
- Q39. Is the option of Pay-per-program viewing by subscribers feasible to implement? If so, should the tariff of such viewing be regulated? Give your comments with justification.**
- Q40. Will there be any additional implementation cost to subscriber for pay-per-view service?**
- Q41. Do you agree with the approach suggested in para 5.8.6 for setting up of a central facility? If yes, please suggest detailed guidelines for setting up and operation of such entity. If no, please suggest alternative approach(s) to streamline the process of periodic reporting to broadcasters and audit of DPOs with justification.**
- Q42. Stakeholders may also provide their comments on any other issue relevant to the present consultation.**

List of Acronyms

Abbreviation	Description
ACMA	Australian Communications and Media Authority
ARPU	Average Revenue per User
B2B	Business to Business
B&CS	Broadcasting and Cable Services
BNetzA	Bundesnetzagentur
BST	Basic Service Tier
CAGR	Compound Annual Growth Rate
CAS	Conditional Access System
Com Com	Commerce Commission
CPS	Cost per Subscriber
CRM	Customer Relationship Management
DAS	Digital Addressable System
DD	Doordarshan
DPO	Delivery Platform Operators
DTH	Direct-to-home
EPG	Electronic Program Guide
FCC	Federal Communications Commission
FDI	Foreign Direct Investment
FM	Frequency Modulation
FTA	Free to Air
GEC	General Entertainment channels
HD	High definition
HITS	Headend-in-the-sky
ICT	Information & Communications Technology
IMRB	Indian Market Research Bureau
IPTV	Internet Protocol Television
ISRO	Indian Space Research Organisation
KCC	Korea Communications Commission
LCN	Logical Channel Numbers
LCO	Local Cable TV operators
LFA	local franchising authority
MDA	Media Development Authority
MIAC	Ministry of Internal Affairs and Communications
MIB	Ministry of Information and Broadcasting
MIIT	Ministry of Industry and Information Technology
MSO	Multi System Operator
NASA	National Aeronautics and Space Administration
NCC	National Communications Commission
OFCOM	Office of Communications
OTT	Over-The-Top
PEMRA	Pakistan Electronic Media Regulatory Authority
PIP	Picture in Picture
QoS	Quality of Service

RIO	Reference Interconnect Offer
SAPPRFT	State Administration of Press, Publication, Radio, Film and Television
SD	Standard Definition
SITE	Satellite Instructional Television Experiment
SMS	Subscriber Management System
STB	Set Top Box
TDSAT	Telecom Disputes Settlement and Appellate Tribunal
TRAI	Telecom Regulatory Authority of India
TSP	Telecom Service Provider
TV	Television
WPI	Wholesale Price Index

International Practices

United States of America

1. The Federal Communications Commission (FCC) is charged with regulating interstate and international communications by radio, television, wire, satellite and cable in the United States. In the USA, Public Broadcasting Service (PBS) produces public television, offering an educational television broadcasting service through terrestrial television. Nearly 53% to 60% of public television's revenues come from private membership donations and grants by the federal government. Broadcast television/Over-the-air (OTA) is another free service being provided by local broadcast stations which are either commercial stations or non commercial educational stations. While the revenue for the former comes through the sale of advertising, the latter meet their operating expenses through contributions received from listeners and viewers, as well as from government funding.
2. The Cable services in USA is subscription based which include a feed of local broadcast channels (OTA), cable programming services, premium services – known as per channel or per program, and the channel mandated for public, educational or governmental (PEG) use. The Cable operators are required to provide a Basic Service which includes, at a minimum all OTA broadcast channels and PEG access channels. Though rates for cable services are not regulated in USA, basic service tier rates are regulated if the cable system is not subject to effective completion. There is no law that requires (or prohibits) cable companies to offer channels or programs on an "a-la-carte" basis. In so far as tariff regulation for wholesaletariff cable services is concerned,Cable Company may be required to given compensation to the local broadcast stations for use/re-transmission of their signals. If must carry option is invoked by these broadcast stations, then no compensation from the cable company is charged. Direct broadcast

satellites services are pay TV services. FCC doesn't regulate the prices at retail level for satellite services. At wholesale level, the tariff regulation for satellite services is similar to cable television where certain compensation is required to pay by Satellite television providers to broadcast stations for retransmission of their signals.

Australia

3. In Australia, broadcasting services are divided into following categories of licence:-
 - National public broadcasting
 - Commercial broadcasting services
 - Community broadcasting services
 - Subscription broadcast services (pay TV)
 - Narrowcasting services

4. Australian Communications and Media Authority (ACMA) regulate telecommunications, broadcasting, radio communications and internet. Presently, there are three national public broadcasters viz. Australian Broadcasting Corporation (ABC), Special Broadcasting Service (SBS) and the National Indigenous Television (NITV). ABC and SBS are terrestrial transmission while NITV is carried by cable and satellite, along with some limited over-the-air transmissions in certain remote areas. The ABC is primarily government funded in addition to some revenue brought in from its retail outlets. SBS follows a hybrid-funded model i.e. primarily by the federal government through triennial funding arrangements and limited advertisements of five minutes per hour. NITV are funded by the Commonwealth of Australia. Commercial broadcasting services are free-to-air services. Advertising revenue is a dominant source of income for commercial broadcasting, contributing approximately 90 per cent to the total revenue. Revenue also comes from program and format sales, affiliate revenue fee, etc. Community broadcasting services are free-to-air services provided for non-profit

community and educational use which are tailor made for the consumption of local communities. It generates revenue through broadcast sponsorships, selling of airtime, memberships, subscriptions, government grants and fundraising activities, etc .

5. Cable, Satellite and IPTV services are subscription broadcast services in /Australia. The price at which these services are available is largely unregulated both at wholesale and retail level. The license condition mandates service providers to draw major chunk of the revenue from subscription fees with limited advertising revenue. Narrowcasting services are targeted to special interest groups, like Italian speakers, country music etc., that are intended during a limited period or for a special event. Subscription for narrowcasting services differs from open narrowcasting services in that they are made available only on payment of subscription fees.

United Kingdom

6. Office of Communication (Ofcom) is the regulator for the UK communications industries, with responsibilities across television, radio, telecommunications and wireless communications services. All television broadcasts in the United Kingdom are now in a digital format through following transmission methods:-
 - Terrestrial television
 - Cable television
 - Satellite television
 - IPTV services & Internet TV
7. In UK Public service broadcasters are of two types viz commercial PSBs and non-commercial PSBs. BBC and S4C are non-commercial PSBs i.e. they are funded only through the TV license paid by the TV households. Channel 3, Channel 4 and Channel 5 are commercial PSBs, largely funded via advertising, sponsorships and product placement.
8. Major source of revenue of subscription/ Pay TV services (cable,

satellite, internet, IPTV, mobile etc.) is subscription. Another source of revenue is the advertisements on the pay channels. The prices are left largely unregulated both at retail and wholesale level. However, these prices may be regulated on a case to case basis. Example- Wholesale “must-offer” obligation of Sky channels. The wholesale must-offer (‘WMO’) obligation imposed in 2010 requires Sky to offer to wholesale its Sky Sports 1 and 2 (‘SS1&2’) channels to other pay TV retailers with certain prices and terms set by Ofcom. Wholesale prices will track changes in retail prices over time based on a constant absolute (pounds) margin between retail and wholesale price. Although Ofcom doesn’t review the prices at wholesale and retail level, it awards a price accreditation scheme logo to websites that provides information related price comparisons between various pay services. The logo is awarded to websites that have had their price comparison services put through a rigorous independent audit. The audit checks whether the information provided to consumers is accessible, accurate, transparent, comprehensive and up to date.

Germany

9. Broadcasting sector in Germany comprises Terrestrial services, Cable TV services, Satellite services and IPTV services. The Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway, or Bundesnetzagentur (BNetzA) as it is commonly known, promotes effective competition in the regulated areas and ensures non-discriminatory access to networks. The ARD, the public service broadcasting, consists of nine regional public broadcasting corporations for 16 federal states. The public service broadcasters for radio, television and Internet are financed primarily by the license fee paid by every citizen.

10. The legislative power is shared between the federation (Bund) and 16 federal states (Länder). Tariff review and monitoring comes under the purview of the national regulator-BnetzA, while the role of the state

level media authorities (LMAs), inter-alia, include grant of permission to private broadcasters and content regulation on the cable TV services.

11. State level media authorities (LMAs) have defined the following tiering system for the channels of commercial broadcasting:-
 - **Must carry:** includes public TV stations, private stations with regional programming and local channels. These are seen as the 'duty' or 'basic' offering.
 - **Can carry:** includes suggestions on type of channels that should be carried to offer diversity and plurality of opinions to the subscriber.
 - **Non must carry:** are competitive channels and not regulated further.

12. On the other hand, tariff at retail level is regulated by the national regulator based on the guidelines defined in the Telecommunications Act (TKG). The Act states that prices will be regulated if there is the presence of a dominant player (which leads to unfair competition). Retail tariff regulation comes under 'ex-post' regulation i.e. those which require a retrospective review. To establish the need for regulation, a review is conducted to check whether the tariff is in line with the costs for efficient service provision. Thus, regulations for tariff charged and services provided are not explicitly linked. While services are regulated at the local level, prices are regulated at the national level only in specific cases when the need for a review is invoked.

13. Wholesale tariffs also fall under 'ex-post' regulation. The TKG mandates regulation of pricing if the market is deemed unfair or if one party is dominant and has significant market power. This further implies that a particular stakeholder in the value chain cannot impact the ability of another to earn a reasonable margin on business (i.e. distributors cannot impact the ability of broadcasters to earn a reasonable margin by levying an unusually high surcharge for carriage and placement fee).

Pakistan

14. Pakistan Electronic Media Regulatory Authority (PEMRA) regulates establishment and operation of all broadcast media and distribution services in Pakistan. Pakistan Television Corporation (PTV) is an autonomous public sector media organization completely owned by the Government. Though PTV channels are FTA channels, a monthly TV license fee is to be paid by the consumers. Private companies are also providing Terrestrial services/ Multichannel Multipoint Distribution Service. In addition, Cable TV services are also available in Pakistan. PAMERA regulates the subscription fee and STB/decoder charges of Cable TV services. The retail tariff is regulated by specifying a cap and the operator cannot charge more than the specified cap.

South Korea

15. Korea Communications Commission (KCC), the South Korean media regulator, manages broadcasting and communications with full authority, promotes the convergence process between broadcasting and telecommunications, and mitigates government regulations. In South Korea, there are four nationwide terrestrial television networks- three general networks and one educational network. Korean Broadcasting System (KBS) and Educational Broadcasting System (EBS) are national public broadcasters, owned by the Korean government. Munhwa Broadcasting Corporation (MBC) and Seoul Broadcasting System (SBS) are national commercial broadcasters which are owned by private players. Apart from these four networks, there are several local commercial broadcasters which broadcast local entertainment and news. The main source of revenue for public broadcasters is TV reception fee which is charged from individuals, groups or organizations that have color TV receivers. Another source of revenue for public broadcaster is through advertisements. Commercial broadcasters are funded only through the advertisement revenue.

16. Currently, in each region of the country, people can choose from the pay TV services of at least 5 to 6, including one cable TV operator, three IPTV operators, and one satellite broadcaster. The source of revenue for these Pay-TV services are subscription fees and advertisement revenue. In Korea, The retail tariff is presently unregulated. However, retail rates remain subject to requirement of KCC approval for any changes. Wholesale rates have been left for market.

4.21 Following table provides a summary of the intervention observed in some countries⁷:

Country	INDIA	USA	UK
Details	1	2	3
1. Name of Regulator	Telecom Regulatory Authority of India (TRAI)	Federal Communications Commission (FCC)	Office of Communications (Ofcom)
2. Wholesale rate regulation	Wholesale rates in non-CAS (analog) have genre-based ceilings. (Inflation linked hikes permitted) - The corresponding ceiling rates for addressable platforms (cable, DTH, IPTV and HITS) is 42% of the rates for Non-CAS.	Unregulated - Operators must also comply with general competition law.	Wholesale rates may be regulated on case-to-case basis, example "Wholesale must carry obligation" (retail-minus price specified for Sky channels).

⁷Pay TV policies in Asia, September,2015 ,CASBAA, www.fcc.gov, www.ofcom.org.uk

<p>3. Retail rate regulation</p>	<p>Retail rates is majorly unregulated.</p> <ul style="list-style-type: none"> - A-la-carte rate of FTA should be uniform. - A-la-carte rate of pay channels subject to 'twin condition'. - Basic service tier of 100 FTA channels not exceeding Rs. 100/pm. - Minimum subscription amount to be Rs. 150 for bouquet of channels. 	<p>Basic Service Tier is regulated by local franchising authority (LFA) only if "effective competition" doesn't exists.</p> <ul style="list-style-type: none"> - Cable programming service, Pay-per-view and Pay-per-channel are unregulated. 	<p>Unregulated</p> <ul style="list-style-type: none"> - Operators must also comply with general competition law.
<p>4. Program packaging (Including tiering, bundling, any mandatory a-la- carte)</p>	<p>In digital areas, a-la-carte channel offerings are mandatory at wholesale and retail levels.</p>	<p>Tiers of cable service:</p> <ul style="list-style-type: none"> a. Basic service tier must include terrestrial channels, PEG(Public, Educational, Government) channels and may include channels chosen by operator. b. Cable programming c. Pay-per-view and Pay-per-channel: Not mandatory. - The satellite provider choose to provide or not provide "local-into-local" services, "distant networks" and "significantly viewed channels". 	<p>Tiers of pay TV:</p> <ul style="list-style-type: none"> a. FTA- BBC1-2, ITV1, Channel 4-5 b. BST- Bundled channels c. Premium channels- Includes sports and movies channels (more expensive) d. A-la-carte- Not mandatory. e. Pay-per-view - TV content bundled with other services such as telephony is not subject to regulation.

<p>5. Retransmission arrangements (Including "must- carry")</p>	<p>"Must-carry" obligation for distribution platform operators and "Must-provide" obligation for the broadcasters. - Public broadcast channels to be mandatorily carried on commercial TV platform.</p>	<p>Cable and Satellite operators obtains a "re-transmission consent" from broadcasters by paying a compensation. - Broadcasters may assert "must- carry" provision with the operators. This doesn't involve compensation.</p>	<p>Relevant legislation requires the PSBs to make their core channels available without fee on all major platforms (ie. those networks used by a significant number of end-users as their principal means of receiving television programming).</p>
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DETAILS	AUSTRALIA	NEW ZEALAND	GERMANY
	4	5	6
<p>1. Name of regulator</p>	<p>Australian Communications and Media Authority (ACMA)</p>	<p>Commerce Commission (Com Com)</p>	<p>Bundesnetzagentur (BNetzA)</p>
<p>2. Wholesale rate regulation</p>	<p>Unregulated - Operators must also comply with general competition law.</p>	<p>Unregulated</p>	<p>Ex-post regulation of prices if sufficient competition doesn't exists.</p>
<p>3. Retail rate regulation</p>	<p>Unregulated. - License is subject to condition- "subscription fee to be predominant source of revenue for the services".</p>	<p>Unregulated</p>	<p>Ex-post regulation of prices if sufficient competition doesn't exists.</p>
<p>4. Program packaging (Including tiering, bundling, any mandatory a-la- carte)</p>	<p>No restrictions. - A-la-carte provisioning not mandatory.</p>	<p>No restrictions. - Packing of programming into differentiated packages is a common practice in the market.</p>	<p>Tiers of pay TV (defined by state media authority): a. Must carry- public TV stations, private stations regional and local programming. b. Can carry- suggestions on type of channels that can be carried. c. Non must carry- competitive channels, not regulated further.</p>

5. Retransmission arrangements (Including "must-carry")	No government "must-carry" rule. - Retransmission of free-to-air broadcasts subject to payment of equitable remuneration to underlying rights holders pursuant to a statutory licence.	No requirements . Retransmission of FTA channels is negotiated commercially	No information available.
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DETAILS	PAKISTAN	CHINA	SOUTH KOREA
	7	8	9
1. Name of regulator	Pakistan Electronic Media Regulatory Authority (PEMRA)	Ministry of Industry and Information Technology (MIIT) and State Administration of Press, Publication, Radio, Film and Television (SAPPRFT)	Korea Communications Commission (KCC)
2. Wholesale rate regulation	No information available.	Unregulated	Unregulated
3. Retail rate regulation	Regulated. - Subscription fee capped at [Rs. 400/pm for analog and Rs. 550/pm for digital]; STB/decoder prices regulated by schedule-B; Installation/ Connection charges @ Rs. 1000.	Basic cable prices determined by local state planning commission in consultation with SAPPRFT. - Pricing of value-added cable service or digital TV services above the basic level can be solely determined by the operators.	Former rate caps on retail rates have been eliminated. - However, retail rates remain subject to requirement of KCC approval for any changes.
4. Program packaging (Including tiering, bundling, any mandatory a-la- carte)	No information available.	Tiers of cable service: a) Basic service tier with rates regulated by regulator. b) Additional channels c) Value-added channels	No restrictions. - A-la-carte provisioning not mandatory.

5. Retransmission arrangements (Including "must- carry")	No information available.	Although not required under written law, in practice, state-owned provincial satellite channels must re-transmit the CCTV evening news.	Cable, IPTV and DTH platform operators must carry PBS channels. - Acrimonious disputes over "retransmission consent" of FTA channels have resulted in government intervention.
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DETAILS	SINGAPORE	JAPAN	TAIWAN
	10	11	12
1. Name of telecom regulator	Media Development Authority (MDA)	Ministry of Internal Affairs and Communications (MIAC)	National Communications Commission (NCC)
2. Wholesale rate regulation	Unregulated	Unregulated	No direct wholesale regulation, but strong government interference. - Wholesale market is heavily cartelized.
3. Retail rate regulation	Retail rates are filed, but no rate control at present. - This notification process is required of all niche and nationwide subscription television service providers including for their OTT service offers.	Unregulated. - Basic broadcasters (Kikan Housou Jigyousha) are required to submit their pay TV terms and conditions to the Minister of MIAC and disclose them publicly (e.g., on their websites).	Subscription cable sector is strictly regulated. Consumers pay a flat fee of about NT\$500 a month to watch more than 100 channels. - Rates for new digital packages are unregulated, as are satellite DTH rates. - NCC will implement the a-la-carte pricing scheme in 2017, though the cable price will be still capped but the capping will be based on group of channels.

<p>4. Program packaging (Including tiering, bundling, any mandatory a-la- carte)</p>	<p>Cross-carriage system imposes regulation of bundling and pressure for a-la-carte. - Also foresees regulation of channel numbering, but no steps have been taken in that direction. - Regulator requires notification of channels in channel line-ups.</p>	<p>Tiering/bundling of channels is allowed and utilized in practice.</p>	<p>For analog cable, mandatory carriage of large, prescribed basic package (90-100 channels). - Above cable basic level, and for all IPTV: a-la-carte prices must be set but in practice some bundling has been permitted, with prices lower than the sum of a-la-carte rates. - Packaging/bundling not subject to approval.</p>
<p>5. Retransmission arrangements (Including "must-carry")</p>	<p>Nationwide subscription television service providers required to carry all licensed FTA channels. - Such carriage is exempted from payment of copyright licensing fees.</p>	<p>Designated cable operators are required to rebroadcast terrestrial TV channels broadcast by basic broadcasters (Kikan Housou Jigyousha) in areas of poor terrestrial reception. - Whether any payment is required in respect of such rebroadcasting is a matter for negotiation.</p>	<p>Cable operators must carry four major analog FTA channels. - No copyright licensing payments are required. - No similar rules for IPTV or DTH operators.</p>

4.22 The broad trends observed from the above comparison are narrated below:-

- (i) The first priority for the regulator has always been to protect the interests of consumer. Countries studied have defined regulations based on market conditions.
- (ii) Second, while there are no direct regulations at the whole sale level, there are provisions in most of the countries to protect interests of other stakeholders in the value chain. This means

that regulators work towards promoting effective competition across the value chain. Regulators also intervened in the absence of effective competition. For example, unusually high fees or charges for any transaction across the value chain is subject to a retrospective review in Germany. The review is intended to check if the fee charged is in line with the costs incurred or if it includes unsubstantiated surcharges.

- (iii) With respect to B2B transactions, regulators are observed to adopt a policy of minimum intervention. The overarching objective is to allow equal power of negotiation to all stakeholders, thus enabling free market forces to operate.
- (iv) All countries that have taken forward retail level regulation have also supported the enforcement of this regulation through a strong (and often, decentralized) monitoring mechanism.

4.23 Countries have adopted following different ways through regulated retail tariff: -

- (a) **Mandating retail tariff and services together:** In US, retail rates are only regulated in markets that are believed to have 'ineffective competition'. The regulator has clearly defined how effective competition is measured at the retail level. The rates are however regulated only for 'basic tier' of services (which has also been defined by the regulator) that all cable operators and satellite operators are mandated to provide to their subscribers.
- (b) **Mandating a range for tariff and reviewing them proactively in context of services:** Pakistan and Taiwan have a defined price cap at the retail level, within which all services have to be provided to the consumers. In South Korea, although there is no price cap, retail rates remain subject to requirement of regulator's approval. Additionally, Taiwan and South Korea undertake a

periodic review, where operators have to submit information about their pricing policy (including any proposed increase in rates), subscriber base as well as the services that they provide, which is approved by the regulator.

- (c) **Mandating services and regulating prices through a reactive mechanism:** In Germany, the regulation is primarily driven by services. A key reason for this is because Germany mostly has Free-to-air services and pay TV penetration is very limited. Also since Germany is divided into 16 distinct regions or *landers*⁸, a decentralized approach towards provisions of service is seen as being necessary, given the diversity amongst regions. The state media authorities or LMAs mandate tier-ing of channels at the local level and give clear guidelines on the kind of services that must be made available to consumer. While there is no cap or restriction on tariff linked to these tiers, tariff can be reviewed retrospectively through a clearly defined review process undertaken by the central regulator.

⁸ The state media authorities are called 'Landesmedienanstalten' and are present across the 16 'landers' or regions that have been defined in Germany.

Annexure II**Number of Pay channels provided top five broadcasters**

S. No.	Name of the Company	Number of Pay channels
1.	Star India Private Ltd. & its group companies	43
2.	Taj Television (I) P. Ltd (including ZEE & its group companies)	40
3.	TV 18 Broadcast Ltd. & its group companies	35
4.	SUN TV network & its group companies	33
5.	Sony Pictures Networks & its group companies	17