



Consultation Paper No. 9/2004

Telecom Regulatory Authority of India

Consultation paper

On

Issues relating to

Broadcasting and Distribution of TV Channels

New Delhi

April 20, 2004

Table of Contents

| Chapters | | Page No. |
|-----------------------|--|-----------------|
| Preface | | 3-4 |
| Chapter – 1 | Introduction | 5-18 |
| Chapter – 2 | Conditional Access System | 19-32 |
| Chapter - 3 | Price issues on Cable Services | 33-53 |
| Chapter – 4 | Issues concerning Advertisement Time and Schedule | 54-65 |
| Chapter – 5 | Competition in Television Broadcasting and Distribution Services | 66-74 |
| Chapter – 6 | Quality of Service and Customer Service Guidelines | 75-79 |
| Chapter – 7 | Issues for consideration | 80-83 |
| Annexure-I | Clarifications on The Telecommunication (Broadcasting and Cable) Services Tariff Order 2004 | 84-86 |
| Annexure – II | The Register of Interconnect Agreements Regulations 1999 (2 of 1999) | 87-91 |
| Annexure - III | International Experience on Quality of Cable Service | 92-99 |

PREFACE

This Consultation Paper by the TRAI is a sequel to the Consultation Note of 15th January 2004 on issues relating to Broadcasting and Cable Services. The initial consultation note had generated tremendous response including substantial advice, opinions and recommendations. Subsequently the Authority held several consultations with various stakeholders, including consumer organizations. This paper is based on an analysis of the various inputs including comments received during the consultation process and a series of meetings held by the Authority with various stakeholders. The paper focuses on specific issues relating to the Cable Television Industry, and is divided into seven chapters:

- *Chapter 1* - Summary of evolution of cable services in cable industry in India, providing the background and chronological evolution of the legal framework for this industry. Emergence of new technologies for delivery of satellite television broadcasts is also discussed in this chapter.
- *Chapter 2* – Implementation of Conditional Access System, including terms and conditions of sale/purchase of Set Top Boxes.
- *Chapter 3* – Issues relating to pricing of the Basic Tier service (which under the Cable Television Networks (Regulation) Act 1995 should include at least 30 FTA channels), Pay Channels, Bouquets of pay channels and revenue sharing arrangements amongst service providers.
- *Chapter 4* – Regulation of Advertisement time and schedule on Free to Air Channels and Pay Channels.
- *Chapter 5* – Promotion of competition within the Cable TV Industry, and with the other television services delivery platforms like Direct To Home (DTH) and Broadband. The issues relating to regulatory steps regarding non-

discriminatory and mandatory interconnections are also discussed in this chapter.

- *Chapter 6* – Technical standards set by Bureau of Indian Standards (BIS) for Cable TV Industry and other quality standards relating to registration/redressal of consumer complaints, billing, etc. have been discussed.
- *Chapter 7* – Summary of issues discussed in the consultation paper.

This paper aims at providing consolidated information to stimulate discussion and seek comments on the policy approach for regulation of the Cable Television Industry. The issues on which feedback is required have been indicated in each chapter and also put together in Chapter 7. Written comments on these issues may please be furnished to Secretary, TRAI by 7th May 2004. For any further clarification on the matter, Secretary TRAI or Advisor (B&CS) may be contacted at trai07@bol.net.in (Ph.no. 26167448) and rkacker@trai.gov.in (Ph. No. 26713291) respectively. The fax number of TRAI is 011-26713442.

Sd/-
Pradip Baijal
Chairman, TRAI

CHAPTER 1: INTRODUCTION

1. Evolution of Cable TV

1.1 Cable Television (also called CATV or Community Antenna Television) was developed in the late 1940s in the USA for communities unable to receive TV signals because of terrain, or distance from TV stations. Cable television system operators located antennas in areas with good reception, picked up broadcast station signals and then distributed them by coaxial cable to subscribers for a fee.

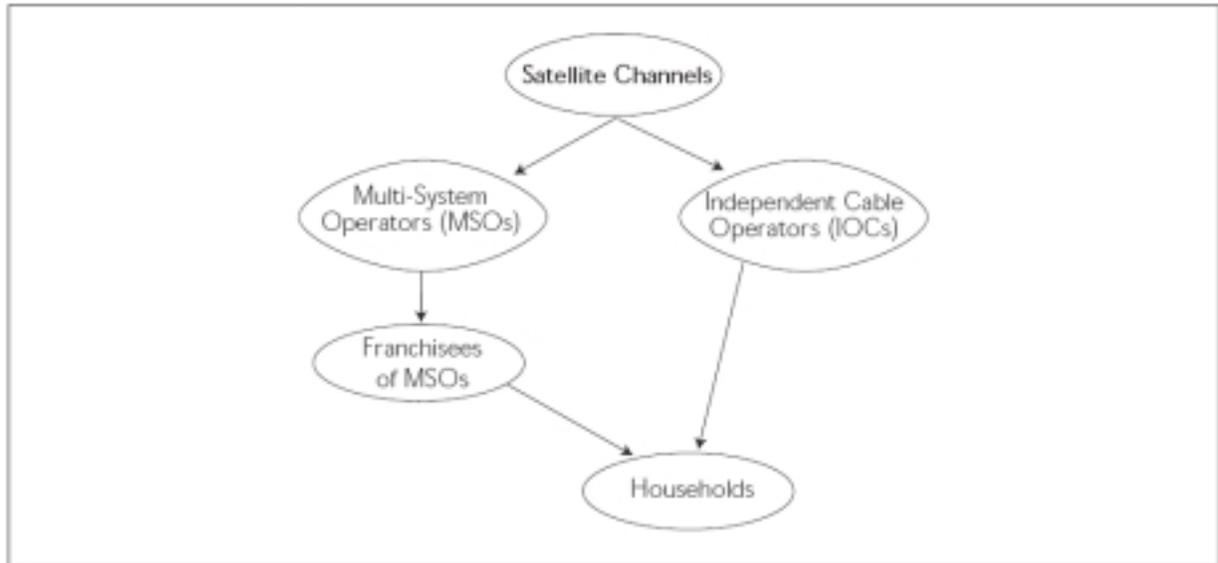
1.2 The Indian Cable TV industry has been in existence for over 15 years. Although Satellite Master Antenna TV (SMATV) systems for delivering multiple channels to homes have been in existence prior to 1991, it was the advent of the Gulf War in 1991 and its coverage on international news channels which really kick-started the spread of cable television in the country. The spread of cable television was also fuelled during the period 1992 onwards with the India specific content being beamed by various broadcasters.

Cable Industry Structure

2.1 India has some 249 million households. It is estimated that in the Indian Cable Television Market, 45 million subscribers are receiving Cable TV services, with an annual growth rate of 15% to 20%. At present, over 160 cable and satellite channels are broadcasting in national and regional languages. The distribution chain in the cable TV industry consists of Broadcasters, independent Multi System Operators (MSOs) and their franchisees, and Independent local cable operators. The distribution chain is depicted in the Figure 1.1.

Fig 1.1

Cable industry structure

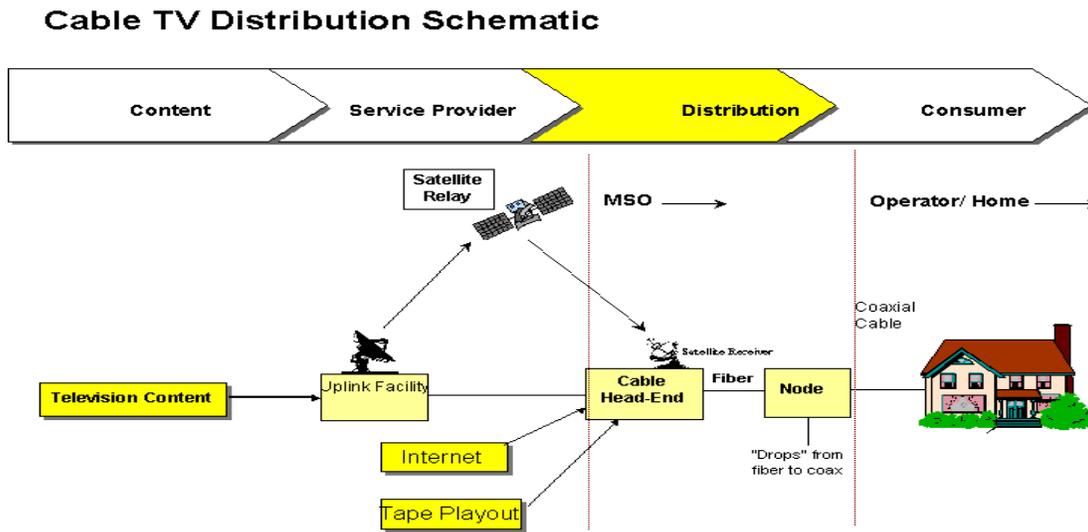


Source : Incable

Cable Delivery Mechanism

3.1 The MSOs and independent cable operators have set up head-ends to receive and transmit TV signals, which comprise essentially of satellite dishes, Receivers, Integrated Receivers and Decoders (IRDs), Modulators, Fiber Transmission Equipment etc. The satellite dishes are used to downlink and receive the channels in both Free to Air (FTA) Channel or Pay Channel mode. The signals received from the dishes are fed into the Receivers for FTA Channels and IRDs for the Pay Channels. The output from the Receivers and IRDs is modulated and fed into fiber/coaxial cables and periodically amplified to bring signals to the customer premises. Much higher capacity is possible after the system is upgraded to provide digital transmission. The delivery mechanism is depicted in Figure 1.2.

Figure 1.2



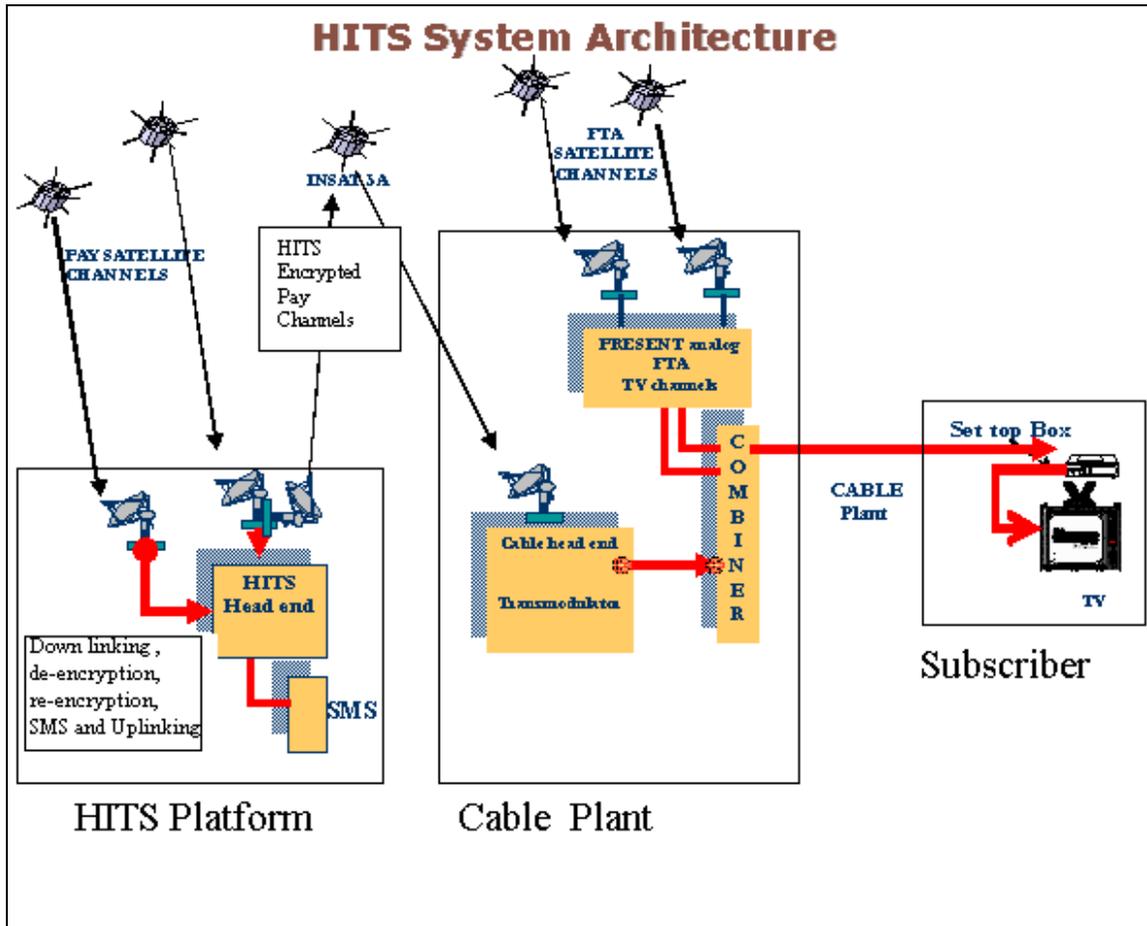
Source: Incable

Head Ends in the Sky

3.2 The Figure above shows the presence of a terrestrial Head End. The Head End can also be placed in the sky. The Cable TV distribution chain, in many places, may have additional players after the government issues licenses for *Head Ends in The Sky (HITS)*. .

3.3 In HITS all the pay channels are down linked and again uplinked to a satellite after encryption of channels. At cable headend these encrypted pay channels are downlinked using a single satellite antenna, transmodulated and sent to the subscribers. At the subscribers end, Set Top Boxes de-encrypt the pay channels based on authorisation received from Subscriber Management System (SMS) located at satellite uplink hub. As per the present practice, the cable operator is required to downlink FTA analogue channels and send this to the subscriber on the same cable plant. The STB will pass these FTA analogue channels to the TV set in the usual manner. It is also possible to provide FTA digital channels to the cable operators through HITS platform. The Cable TV delivery mechanism through HITS is depicted in Figure 1.3.

Figure 1.3



Source: ASC Enterprises

3.4 The advantages of HITS Scheme is that MSOs/LCOs will not be required to upgrade their systems for delivery of decrypted signals of Pay channels under the conditional Access System Regime. Various regulatory issues concerning HITS have been discussed in Chapter 5.

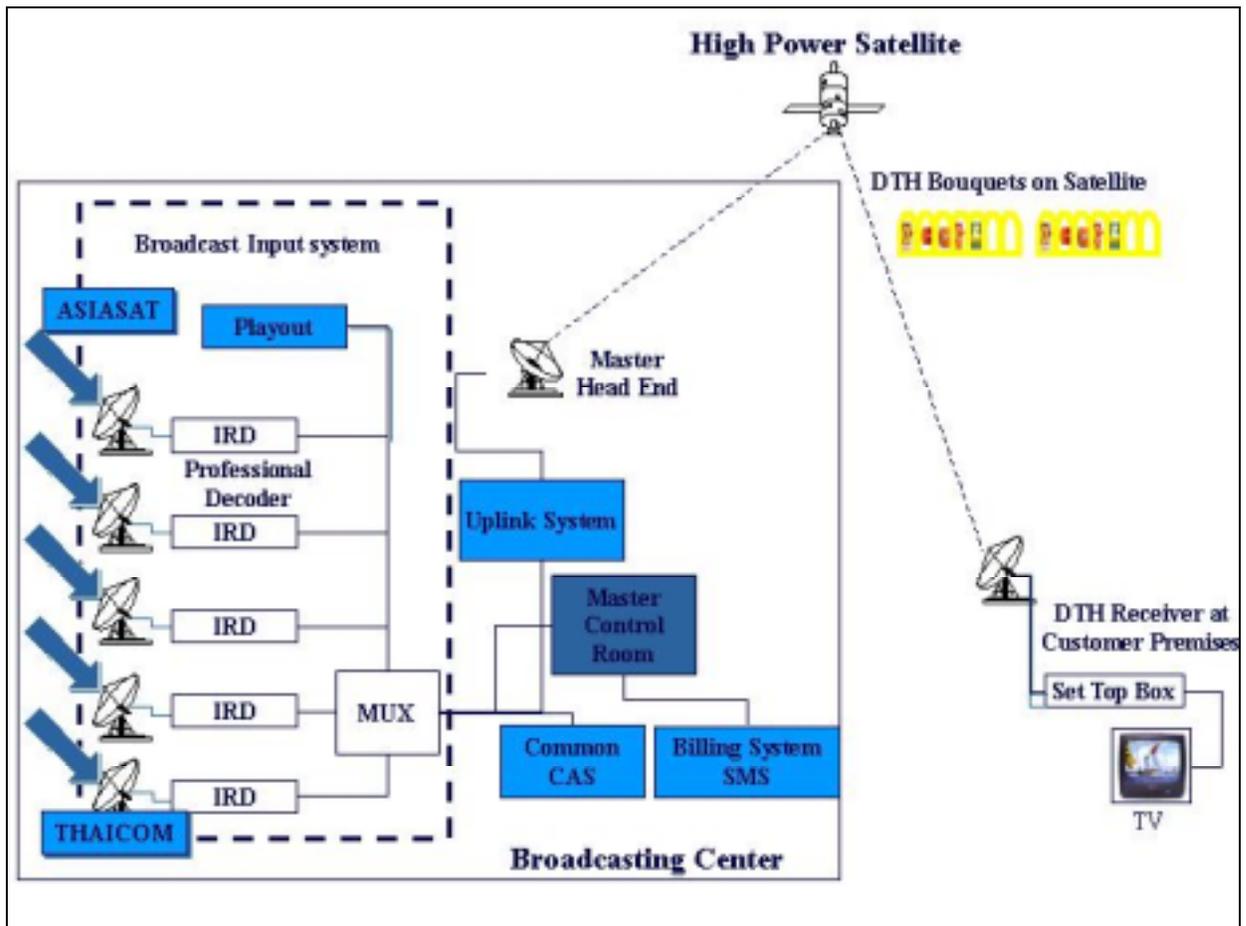
4. Alternate Platforms for Delivery Television Channels

Direct To Home Services (DTH)

4.1 DTH is a distribution platform for multi-channel TV programmes on KU-Band by using a satellite system that transmits the programmes/provides TV signals directly to

subscribers' premises. The reception of signals/programmes requires a small dish antenna and a Set Top Box. The Set Top Box contains software, which together with the viewing card unscrambles the digital TV signals and allows the viewer to watch the DTH service. The viewing card acts as a key to access any DTH platform for authorizing the service. The delivery mechanisms through DTH is depicted in figure 1.4

Figure 1.4



Internet protocol-based TV or IPTV

4.2 The advent of high-speed residential Internet access creates an alternative method to deliver video programming. Where adequate bandwidth exists IP TV is capable of a much richer suite of services. IPTV uses the same network infrastructure as

the Internet and it eliminates the need to build a dedicated application specific video network to the home.

- 4.4 IPTV platform consists of an Ethernet device connected to an Ethernet Switch; the Switch is connected to a Broadband Router, the Router to the WAN termination device (DSL or Cable modem etc). Fiber optic cable offers the ideal access medium for delivering high-speed IPTV: it is cheap, it has tremendous bandwidth and it is immune to Electromagnetic (EM) interference. IP TV requires a set-top box at each TV. The most popular interface is Ethernet, rather than coax used for CATV. The physical interface is not limited to Ethernet; any medium capable of delivering IP data rapidly enough can be used, such as IEEE802 series of standards (e.g. 802.11 Wifi Radio). Intelligent devices such as PCs do not require a set top box. Any network device equipped with the proper software is able to receive TV and radio programs.

5 Comparison of Cable TV, DTH and IPTV.

Cable TV

- Does not require a dish set-up, which makes it easier for people living in high rise buildings, and more convenient for those who do not want a satellite dish at home
- Cable network is generally believed to be more reliable, as it is not susceptible to problematic atmospheric conditions, e.g. rain fade and thunderstorms affecting signals, etc
- Cable network does not require the availability of a good orbital slot with a good look into potential pay-TV subscribers. DTH operators on the other hand face this problem as they continue to try to expand capacity/add more channels.

DTH

- National coverage from day one, which is impossible for cable. This gives DTH operators a significant variable cost advantage in markets where the population is not densely populated.

IPTV

- With the advent of convergence, one cable into home will cater to Telephone, Internet and IP TV thereby bringing down the cost of the IPTV in long run. Since IPTV over a connection like DSL, is based on dedicated bandwidth as against Cable TV/DTH which are based on shared bandwidth, IPTV is better suited for Video on Demand and niche content delivery.

6. Regulatory Regime for Cable Television

6.1 In India Cable TV has developed in an unregulated manner, but registered very impressive growth. However, it has now come to a stage where because of its unregulated growth the industry is likely to face problems of sustaining high quality services. The market is also marked by monopolies in the delivery of the service to the customer, including an increasing presence of large vertical monopolies of broadcasters, Multi System Operators/Cable Operators. This has resulted in, for example, varying quality of services and steep hike in fees charged by pay channels. Thus has risen the need for regulating this industry so that people get quality services at reasonable prices, competition is promoted and anti competitive trade practices are checked. There is also need for regulating natural monopolies till these are checked by competition from new technologies.

6.2 The Regulation for Cable TV Industry in India started with the promulgation of the Cable Television Networks (Regulation) Ordinance, 1994 on September 29, 1994, which was converted into the Cable Television Networks (Regulation) Act (hereinafter "Cable Act"), on March 25, 1995. The Cable Act provides that:

- To operate the cable television network the operator has to be registered with the registering authority (head post-master of the head post office of the area) as a cable operator.
- No person can transmit or retransmit programmes and advertisements through the cable network unless they conform to the programming code and the advertisement code respectively prescribed under the rules.
- Cable operators have to use equipment that conform to the standards prescribed by the Bureau of Indian Standards, on and from the expiry of a period of three years from the date of establishment and publication of such standards.
- Seizure and confiscation of equipment of cable operators if they are unregistered or breach programming or advertisement code or fail to transmit Doordarshan channels as prescribed under the Cable Act.
- Contravention of any of the provisions of the Cable Act could result in imprisonment up to two years and/or fine up to one thousand rupees for the first offence and for every subsequent offence imprisonment up to five years and fine up to five thousand rupees.
- Under the Cable Act, the authorised officer has to take actions in case of violation of section 3,5,6 and 8 relating to “ regulation of Cable Television Network”, and in terms of Section 18 of the Cable Act courts are not to take action for any offence punishable under the Act unless there is a written complaint by an authorised officer. In Section 2 of the Act which gives definitions of various terms, *“authorised officer” means, within his local limits of jurisdiction:- (i) a District Magistrate, or (ii) a Sub-Divisional magistrate, or (iii) a Commissioner of Police, and includes any officer notified*

in the Official Gazette, by the Central Government or the State Government, to be an authorised officer for such local limits of jurisdiction as may be determined by that Government

Thus the Cable Act provides concurrent jurisdiction by the Center and the State in enforcing the Act through authorized officers

6.3 The Cable Television Networks Rules that set down norms for registration of Cable Operators, Programming Code and the Advertisement Code were promulgated on 29th September 1994. The provisions of the rules relating to Registration provide that:

- All cable Operators shall register as cable television network with the registering authority.
- Registration is renewable after every twelve months at an annual fee of Rs five hundred.
- Companies providing cable services should have a minimum of 51% of the paid up shares held by Indian citizens.

6.4 The Head Post Master of a Head Post Office, of the concerned area was notified as the Registering Authority for registering cable operators.

6.5 The Cable Act was amended in 2002 and Section 4A was inserted in the original Act, which envisages “Transmission of programmes through addressable system” (popularly referred to as Conditional Access System or CAS) with effect from such date as may be specified in the Notification. A Notification dated 14 January, 2003 was issued by the Ministry of Information and Broadcasting, Government of India making it obligatory for every cable operator to transmit/re-transmit programmes of every pay channel through an addressable system in Chennai Metropolitan area, Municipal Council of Greater Mumbai area, Kolkata

Metropolitan area and National Capital Territory of Delhi within six months from 15th January, 2003.

- 6.6 Subsequently vide Notification dated 10th July, 2003 the date of implementation was deferred and fixed within six months from 1st March, 2003, and Chennai and the areas of NCT of Delhi, Kolkata, Mumbai to be covered by CAS were also specified. Thereafter vide Notification dated 29th August 2003, the earlier Notification dated 10 July, 2003 was amended and areas in NCT of Delhi where CAS was to be implemented were deleted.
- 6.7 The Hon'ble Delhi High Court, vide orders dated 4 December, 2003, quashed the Notification dated 29 August, 2003 issued by Ministry of Information & Broadcasting, Government of India. The cable operators of the notified areas partially withdrew pay channels from mid-night of 15 December 2003.
- 6.8 Delhi High Court in CW no. 8993-4/2003 in its order dated 26 December 2003 did not restrain the implementation of CAS in Delhi. The Delhi High Court further directed that after expiry of three months, appropriate direction shall be issued after taking into consideration the feed back of three months' experience. It stated:

“ Therefore, we are not restraining the respondent as prayed for by the petitioners. However, we allow the respondent to go ahead with their scheme of CAS in Delhi to be reviewed after a period of three months. We desire that in this period of three months all the loopholes, difficulties faced by the consumers, effect of the implementation and problems, if any, arising out of implementation can be assessed and remedial measures be taken in that regard.”

- 6.9 The Government of India issued a Notification No.39 dated 9th January 2004 under the proviso to clause (k) of sub-section (1) of section 2 of the TRAI Act 1997 as amended, whereby the scope of the expression 'telecommunication

services' under the TRAI Act was expanded to include the broadcasting services and cable services also. Thus, the broadcasting and cable services also came within the purview of the Telecom Regulatory Authority of India. Through an order on the same day, the Government of India, in exercise of the powers under clause (d) of sub-section (1) of section 11, added the following to TRAI's functions:

- (1) *Make recommendations regarding: -*
 - *the terms and conditions on which the "addressable systems" shall be provided to customers*
 - *the parameters for regulating maximum time for advertisements in pay channels and other channels*
- (2) *Specify standard norms for and periodicity of revision of rates of pay channels, including interim measures.*

6.10 The TRAI provided its interim Recommendations on 23rd February 2004, to the Government and based on a number of factors that were mentioned therein, recommended that the Government Notification No. SO 792 (E) dated 10th July, 2003, which notified the areas for implementing CAS, be kept in abeyance for at least three months. The Recommendation was accepted by the Government and vide Notification No. S.O.271(E), dated 27th February, 2004, the Government suspended the mandatory operation of CAS until such date as may be notified by the Government. Due to this Notification there are no separate CAS or non-CAS areas and such distinction has been withdrawn in this amendment. The notification is however not operative in Chennai on account of the stay given by Madras High Court in Writ Petition numbers 4863, 4890, 4936 and 4919 of 2004.

7. Regulatory Regime for the Head Ends In the Sky

7.1 In the year 2003 Government of India permitted the implementation of CAS using HITS concept to the organizations having licence to establish uplinking hub in C-

band under the uplinking guidelines. Following are special terms and conditions for issuance of license to the HITS platform operators:

- Direct or indirect foreign share holding in the applicant company shall be less than 49%.
- Terms and conditions of the licence agreement for setting up of a teleport for uplinking of TV channels permitted by the Ministry of I&B shall be applicable.
- Uplinking for turnaround will be permitted in C band only. Uplinking for turnaround will be permitted only on Indian Satellite.
- Downlink EIRP will be less than 33dbW.
- HITS operator will be permitted to uplink all channels, which are normally available in India over the cable and for which he seeks to obtain permission for turnaround.
- HITS operator shall have arrangements with the channel owners clearly laying down terms and conditions permitting turnaround of these channels.
- HITS operator shall not carry any channel prohibited by the Ministry of I&B.
- HITS operator shall ensure that the Cable Operator through whom channels are distributed make available FTA channels without Set Top Box (STB). In case HITS operator does not find it feasible, STB free of cost to the subscriber will have to be provided.
- HITS operator shall ensure that signals are distributed in an equitable and non-discriminatory manner. No independent operator will be refused a decoder if he does not want to join HITS.

Status of HITS

7.2 So far one license has been issued in favour of M/s ASC Enterprises Limited (ASC) for operation of HITS. However, it is reported that many broadcasters of

popular channels have refused to join the HITS platform. ASC has filed a complaint against denial of signals by these broadcasters in the Monopolistic and Restrictive Trade Practice (MRTP). MRTP had passed an interim order directing these broadcasters to provide their signals to the complainants. However, the interim order was challenged in the Supreme Court and the court remanded the matter to MRTP Commission directing it to pass a reasoned order after hearing both the parties. The case is still pending in the MRTP Commission.

8 Regulatory Framework for providing DTH service in India

8.1 Government on 2nd November 2000 decided that DTH broadcasting services would be permitted in India on the following conditions:

- **Licensing** – There would be no restriction on the number of DTH licenses having validity of 10 years from the date of issue of wireless operational license by Wireless Planning and Coordination Wing of the Ministry of Communications. Licenses are issued under the Indian Telegraph Act, 1885.
- **Eligibility Criteria** - Applicant Company to be an Indian Company registered under Indian Companies Act, 1956. Total foreign equity holding FDI/NRI/OCB/FII in the applicant company not to exceed 49%. Within the foreign equity, the FDI component not to exceed 20%. Investment by NRI/OCBs shall also form part of the above said FDI limit of 20%.
- **License Fee**
 - Entry Fee of Rs 10 crores.
 - Annual Revenue Share License Fee of 10% of gross revenue.
 - Royalty for use of Spectrum.

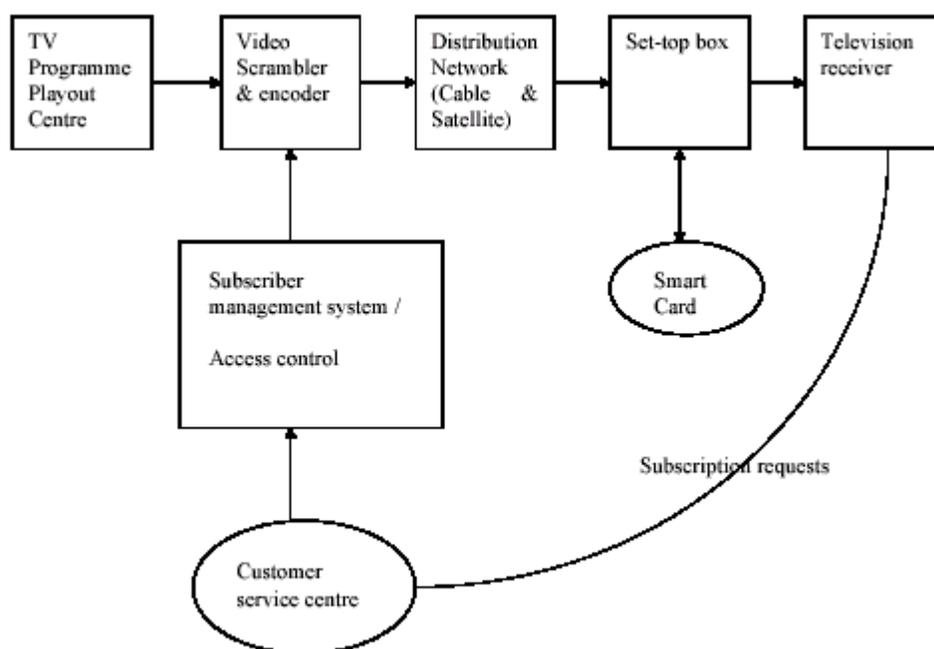
Status of DTH

- 8.2 Government has so far issued one license for DTH Services to M/s ASC Enterprises Limited. As in the case of HITS, some broadcasters have refused to come under DTH platform. ASC has commenced services but many popular channels are not available on its DTH platform.

Chapter 2 – Conditional Access System

A Conditional Access System (CAS) ensures that only authorised subscribers are able to view a particular programming package. A conditional access system is installed in the set-top box (STB) or integrated receiver decoder. This is an electronic box, which contains the necessary hardware, software, and interfaces to select, receive, unscramble and view the programmes. Figure 2.1 shows a typical conditional access system.

Fig 2.1 Typical arrangement for Conditional Access



Source: Ross Kelso, "Opening up access to broadband media services", RMIT, Australia.

2. The CAS covers two separate services:
 - Encryption and decryption of the key needed to decrypt programme material which the subscriber is authorised to receive
 - Subscription management

3. Since signals are scrambled in CAS, only those viewers with a valid contract are authorized to unscramble and view the chosen programmes. Moreover, when the viewer chooses a pay channel or a programme, the information is stored and updated on a database, which includes subscriber details, method of payment, and services purchased.

4. A CAS may be used not only for selecting pay channels, but can also be used for other services, like Video on Demand, etc. In some cases, encrypted programmes may also be received from different mechanisms like cable, satellite, terrestrial, broadcasting, etc on the same STB.

5. Mandatory introduction of CAS

- 5.1 Government had received a number of complaints from subscribers protesting unwarranted and frequent increase in subscription rates by cable operators. It also received reports of substantial under-reporting by different sections, depriving the different players of the cable industry of their entitled revenue/collection and government of tax. To deliberate and decide upon various issues on this topic, it was decided to set up a task force. The primary issue of concern for the committee was to establish the need for introducing CAS in order to provide a choice to the consumer.

- 5.2 The task force observed that in the existing arrangement, the consumer was paying for all the channels, irrespective of what he actually watched or desired to watch. There is need to make the system transparent in respect of pay channels/pay programmes, which can be watched by selective subscribers. The subscription of all pay channels should be transparently known and the payment receivable by individual 'pay' channels should be fully determinable. This transparency should also allow entitled revenue to accrue to the different links in the distribution chain of Cable TV. The task force was unanimous that the Conditional Access System is necessary to bring transparency at different levels but at the same time should not add to the financial burden on the consumers. The Task Force recommended that the

Government should mandate CAS by law. Government accepted the recommendation with the following anticipated benefits:

- The consumer would transparently know the cost of each pay channel.
- Consumer will have the choice to choose the pay channels and pay only for those channels, which they wish to watch.
- Cable operators will not be able to compel the subscriber to pay for all channels, even if they do not wish to watch them.
- Subscriber will have control over the content that is being watched in their homes.
- The deployment of STBs results in correct declaration of subscriber base and will result in transparency in the delivery system.

The Legal System for Introduction of Conditional Addressable System

5.3 The Cable Act was amended in December 2002 for the introduction of the Conditional Access System. The provisions of this amendment include:

- Section 4 A (1): The Central Government may make it obligatory for every cable operator to transmit or retransmit programme of pay channels through an addressable system in area which are notified from time to time. This means that pay channels cannot be viewed without attaching an addressable system to the TV set in the notified CAS areas.
- Section 4A (2): The Central Government may specify the number of Free to Air (FTA) channels to be included in the package of channels forming the basic service tier.
- Section 4A (4): The Central Government may specify the maximum amount which a cable operator may demand from the subscriber for receiving the programme, transmitted in the Basic Service Tier.

- Section 4A (7): The Central Government may ask cable Operators to publicise in the prescribed manner, the subscription rate and the periodic intervals at which such subscription rates are payable for receiving each pay channel provided by such cable operator.
- Section 4A (9): Stipulates that every cable operator shall submit periodic reports to the Central Government, in the prescribed form and manner containing information regarding,
 - The number of total subscribers;
 - Subscription rates;
 - The number of subscribers receiving programme transmitted in “Basic Service Tier” or particular programme or set of programmes transmitted on pay channels;

5.4 A notification dated 14th January, 2003 was issued by the Ministry of Information and Broadcasting making it obligatory to transmit or retransmit from 15th July, 2003, programmes of every pay channel through an addressable system in the following areas:

- (i) Chennai Metropolitan area
- (ii) Municipal Council of Greater Mumbai Area
- (iii) Kolkata Metropolitan area
- (iv) National Capital Territory of Delhi.

5.5 Ministry of Information and Broadcasting issued a notification dated 7th May 2003 specifying that a minimum of thirty free to air channels shall be included in the Basic Service tier. The ministry also specified that the ceiling rate of the Basic Tier shall be Rs.72 (Seventy Two) per month.

5.6 Ministry of Information and Broadcasting notified The Cable Television Network (Amendment) Rules, 2003 on 6th June 2003, which had the following main provisions:

Rule 9: Specified manner of publicizing rates of pay channels.

Rule 10: Specification of formats about reporting subscribers, channels etc.

Rule 11: Declaration of channels as “ Free to Air” and “ Pay” and rates, discounts etc of Pay Channels.

Rule 13: The Cable Operator shall make provision for rent and security deposit or refund thereof, warranty, repair and maintenance in the manner specified by the government.

5.7 Subsequently the notification dated 10th July 2003 was issued to defer the date of implementation of CAS in notified areas from 15th July 2003 to 1st September 2003. Thereafter vide notification dated 29th August 2003; the Central Government de-notified the areas of NCT of Delhi, where CAS was to be implemented.

5.8 The Central Government notified Cable Television Networks (Second Amendment) Rules, 2003 on 8th September 2003 to specify the manner of making provisions for rent, security deposits, etc. for STBs. The Cable Operators of CAS notified areas are required to intimate the following details of STBs to the Subscribers:

Rule 14 (1)

- Type of STBs whether Analogue or Digital, its main physical functions and its conformity with the Bureau of Indian Standards.
- Details of Payment Schemes, including validity period of the offers on sales, hire purchase or rent of STBs and amount of refundable security deposit payable by the cable Subscriber.
- Maximum time for refund of security deposit to any cable subscriber who returns the STB.

- Details of maintenance facility available with cable operators
- Maximum time to repair/ replace the STB.
- Period of warranty of STBs.

Concerns for implementation of the Conditional Access System

5.9 Despite the anticipated advantages of CAS and various legal provisions to protect the interests of the consumers, the implementation of CAS has run into difficulties. Some of the reasons for this are listed below:

5.9.1 Lack of information

Most of the consumers in the notified area were ill informed of the different aspects of transition to the CAS regime. The same appears to be true for the cable operators. This lack of information in implementation had given rise to a situation of apprehension and anxiety in the short-term.

5.9.2 Price of STB

- Some Multi System Operators (MSO) had brought out pamphlets regarding sale/lease/rental price of STBs. But this information has not percolated to actual consumers. At the same time, there was considerable variation in pricing of STBs fixed by the various MSOs.
- There are certain areas where consumers were getting cable services at nominal prices without any STB. They were unable to afford the cost/rental of the STB. With implementation of CAS the monthly bill of Cable Services were actually increasing instead of the intended benefit that costs would go down.

- Particular group of consumers having more than one television set in their houses were also apprehensive of increase in the monthly bills.

5.9.3 Prices of a-la-carte Channels

One of the intended benefits of CAS is that the consumer is able to choose channels of his choice. But post CAS, a-la-carte channels against bouquets were priced in such a manner that consumers had little choice of selecting individual channels. In such a state of affairs, there was no visible benefit of CAS.

5.9.4 Non transferability of STB on change of residence

A substantial segment of consumers are living in rented houses. They apprehend that they will have to change the STB on change of residence.

5.9.5 Technologies of STBs

Both analogue and digital STBs were available in the market. Consumers had little information on benefits of either of them. Moreover there were apprehensions that existing STBs will soon become obsolete and more advanced STBs having additional features will be available.

5.9.6 After sales service

The cable operators were not sufficiently equipped with trained manpower for after sales service of STBs. Minor/major defects in the equipment may necessitate change of STB.

5.9.7 Cable Operators Concern on the Investment on STBs

Cable operators were unwilling to make large investments due to uncertainty in the implementation of CAS and also because of lack of capital available with the number of operators.

International experience on mandatory introduction of CAS

- 5.10 STBs are in wide use around the world but are deployed at the discretion of the operator. Operators choose to deploy STBs because it helps to create addressability, secure control of the last mile, and garner subscription revenues, which may otherwise be lost in the distribution chain. Authority has not come across any model where CAS has been mandated through law.

Comments received on Introduction of mandatory CAS

- 5.11 The implementation of CAS on a mandatory basis is unique and it is believed that it may be without precedent in any other country in the world. While it is understood that the objective in doing so is of protecting consumer interest but at the same time it is apprehended that over regulation in a sector that is growing rapidly might have unforeseen long-term implications.

Authority's View on Introduction of CAS

- 5.12 The Authority in its interim recommendations had stated that it is not discussing the desirability and continuity of Conditional Access System, but how best it can be implemented without there being any undue exploitation of the consumers. That being the basic concern, the Authority's analysis has manifested certain basic problems which need to be addressed before the system becomes fully operational and this is the primary consideration which impelled the Authority to

make a recommendation to keep the implementation of CAS in abeyance till the loopholes in the system are plugged/taken care of.

5.13 In view of the above, comments of stakeholders are requested on the following

Q: Should CAS be introduced to view pay channels? If yes, should it be mandated by law or voluntarily introduced by Service providers?

Q: If CAS is to be mandated, what safeguards need to be built in to protect the consumer and improve implementation?

Q If CAS is to be introduced voluntarily, how should it be done and who would take initiative to introduce it?

6. Terms and Conditions for availability of STBs

6.1 It has been discussed in para 5 that introduction of STBs failed to have a significant impact. Since it is imperative that CAS be properly implemented, it has become necessary to review the terms and conditions governing the sale/rent of STBs.

Funding of STBs

6.2 Comments received on funding of STBs -

- STB is a consumer durable for use by the TV viewer and should logically be paid for by the owner of the TV to which the Box is to be attached. If rented, then its cost should be deposited as a refundable non-interest bearing deposit.
- Primary responsibility to provide an STB should be of MSO and price/rent of standard equipment should be regulated. However prices of advanced STBs should not be regulated.
- Cable or Satellite operators should pay for STBs because it is ultimately the System's asset, which can be shifted from one subscriber household to another.

- Broadcasters should provide STBs as they are the main beneficiaries.
- Pricing of STB should be realistic and consumer friendly, STB should be interoperable and to be maintained by cable Operators.

Alternative models for funding of STBs

6.3 The purchase or rental of STBs is some times subsidized in order to stimulate the market. There are different models available for subsidization of STBs which are discussed below:

- The CAS provider could cover the subsidy.
- All broadcasters using the Conditional Access Service would pay on comparable basis towards the recovery of the STB subsidy.
- The conditional access service operator would enter into a “lock-in” contract with the customer for designated period. In this case, customers’ freedom of choice of services could be reduced, as they would be obliged to obtain services through the specific conditional access service operator for the designated period.

6.4 Regulation is not necessary to specify how STBs are to be subsidized. However if two or more conditional access operators and broadcasters are subsidising the STBs, the arrangement requires a commercial agreement among players, which with the existing set up is difficult to arrive at. These arrangements may require regulatory intervention for equitable, reasonable and non-discriminatory terms and conditions.

6.5 International Practice regarding funding/subsidization of STBs

- STBs are required for viewing Pay Channels in many countries. In the US these are required only for access to the premium channels. The Pay TV operators provide the STBs in Thailand, Hong Kong and Australia. In the US and UK, the cable companies provide the STBs. The Technology for the Boxes in all markets

is proprietary. The funding differs in these countries - it is rented in US and UK (embedded in the monthly charges), in Hong Kong and Thailand, the option is available for purchase/rent of STB. Few companies also provide STBs free of cost with certain subscription packages. In Australia these are provided by the Pay TV company.

- In Pakistan a cable operator is allowed to charge from customers a fixed monthly subscription fee, as specified in the Schedule of the PEMRA Rules, 2002, for decoders or STBs sold to them. The licensee is not allowed to charge more than the approved rates.
- In Taiwan, the Government Information Office allows MSOs to rent or sell STBs to subscribers but local governments have begun to impose price cap on STBs. The city of Taipei enacted a ban on selling STBs for more than US\$ 100 per unit-about US\$ 50 less than cost.

Inter-operability of STBs

6.6 One of the primary concerns and the cause of resistance to implementation of CAS was non-interoperability of STBs. The comments of stake holders received in this regard are summarized below:

- STBs should be useable in any area and with any LCO/ICO, as in the case of DTH.
- Technical interoperability regulation should not be applied to STBs, since it raises the cost of STBs, stifles innovation and differentiation between operators and creates technical legacy problems. The competition among MSOs in some area with multiple DTH and other operators should ensure optimum pricing is offered to viewers. Adding inter-operability functionality to low cost STBs can increase the basic cost by as much as 15-20%. It tends to penalise everyone for the sake of those who want to change operators. Interoperability should be allowed to high end STBs.

- If regulation is required to ensure interoperability with minimum expense, then appropriate commercial transfer rules should be developed if and when the need arises.
- Interoperability of DTH STBs is mandatory whereas such requirement is not there for Cable TV STBs. This kind of disparity should be removed.

6.7 International cases regarding interoperability of STBs services:

- In the **United States**, digital DTH service providers have different conditional access systems. The companies DirecTV/USSB are an exception and are treated as a single provider, in that they provide complementary products. Subscribers use the same receiving equipment for the two services, which provide different programmes. In order to receive all of the most popular programmes, a customer must subscribe to both services.
- In **France**, there are three large digital DTH service operator groups: CanalSatellite, Télévision par Satellite (TPS), and AB Productions. TPS and AB Sat launched their packages in December 1996. AB Sat and CanalSatellite signed a Simulcrypt agreement in April 1997, which allowed CanalSatellite's subscribers to receive AB Sat programmes. Both operators share the same smartcard and AB Sat pays an access fee to CanalSatellite.
- **Spain** has adopted rules to ensure compatibility of conditional access systems so that a single STB provides access to all digital DBS services.
- On April 7, 2000, **Italy** approved regulations concerning the definition of common standards for Pay TV decoders. Pursuant to law 78/99, single decoder is compulsory.

- 6.8 In India interoperability is a must for DTH services. BIS while laying down Indian Standards for Digital STBs for DTH services have provided that the STB shall be open architecture (non-proprietary) and shall ensure technical compatibility and effective interoperability amongst different DTH service providers. On the other hand, this condition has not been laid down for STBs for the Cable Distribution System.
- 6.9 If technical interoperability of STBs is not a cost effective solution then it has to be ensured that consumers are able to easily return them on change of residence or for change of service provider.
- 6.10 Authority has received the following comments on conditions on which set top boxes can be returned to the service provider:
- A subscriber should get refund of total amount deposited for return of STBs in the first year. A deduction of depreciation should be allowed from the second year.
 - Consumers should be able to return STBs without any pre-condition. Maximum period for return of security deposit on STBs be fixed at 15 days.
 - The consumers be allowed return of 70% if returned within three months. They may be allowed 50% to 30% return if returned within one year but no refund be allowed if returned after one year. No refund should be permissible for rented STBs.
 - Consumers need to be able to easily return the STB of one cable operator and to obtain the equipment of other cable operator when it switches services so that successful operators are rewarded and problem operators are punished in the market place.
 - Consumer should have complete freedom to return STBs. This is essential to provide choice to consumers to select a service provider.

6.11 In view of the above, comments are requested on the following:

Q: Should operators provide subsidies on STBs? If so who should bear the cost of this subsidy? Will there be a need to regulate the commercial arrangements between players to share the burden of subsidy?

Q: Should it be made compulsory for service providers to give an option to subscribers to get STBs on rent?

Q: Should prices of STBs be regulated? If so should it be regulated just for rental of STBs or even for sale of STBs?

Q: Should prices of Basic analogue/digital STBs capable only of decrypting of signals be regulated or prices of even those STBs having additional features need to be regulated?

Q: In case it is decided to regulate hire purchase or rental of STBs, what should be maximum permissible limit of refundable security deposit and how should rent be determined?

Q: Should interoperability of STBs be mandatory for Cable TV Systems? If not, on what conditions should STBs be returned to the Cable Operator?

Q: What should be the quality of service norms for :

Maximum time to repair/replace the STB;

(ii) Maximum time for refund of security deposit on return of STB;

(iii) Period of warranty of STBs.

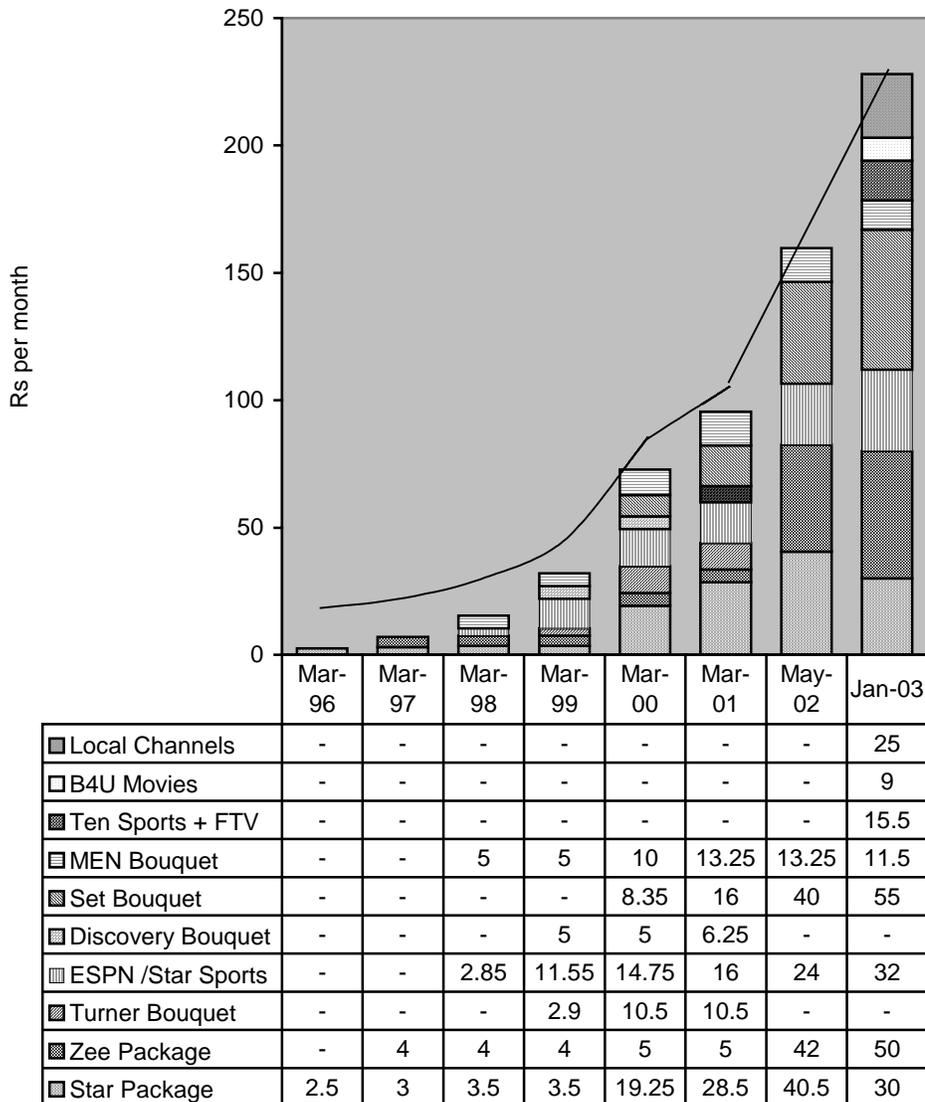
Q: How would answers to these questions be different if the CAS is introduced on a mandatory basis or voluntary basis?

Chapter 3: Price Issues on Cable Services

Introduction

1.1 Initially, most of the channels in the country were free to air. Over the last few years, channels are turning into pay channels and have started charging subscription fees; there has also been a sharp increase in the subscription fees. As more and more channels turn into pay channels and subscription fee rises, the monthly charge for the subscriber is increasing (Please see chart below).

Increase in Monthly Subscription Rates per Household



Source COFI

1.2 Immediately after the broadcasting and cable services came within the purview of the Telecom Regulatory Authority of India, the Authority found that there were no standard rates or conditions at which the cable operators provide services to the subscribers. The Authority also received reports that there may be an increase in the rates charged to the subscribers. To bring some certainty in the rates prevailing for these services, it was considered necessary by the TRAI to intervene in the matter and it specified as ceiling the rates at which the charges will be paid by the cable subscribers to cable operators, by the cable operators to multi service operators and by multi service operators to broadcasters, as those prevailing on 26th December 2003 with respect to both free-to-air channels and pay channels, and for both CAS and non-CAS areas, until a final determination by the Telecom Regulatory Authority of India on the various issues involved.

1.3 The TRAI provided its interim Recommendations on 23rd February, 2004, to the Government that the Notification No. SO 792 (E) dated 10th July, 2003, which notified the areas for implementing CAS, be kept in abeyance for at least three months. The Government accepted the Recommendation and vide Notification No. S.O.271(E), dated 27th February, 2004, the mandatory operation of CAS was suspended until such date as may be notified by the Government. TRAI in its tariff order dated 15th January, 2004 had specified ceiling charges payable for cable services as those prevailing on 26th December 2003 with respect to both free-to-air channels and pay channels, and for both CAS and non-CAS areas. Due to the above mentioned Notification there is no separate CAS or non-CAS areas and as such the distinction between CAS and Non-CAS area was withdrawn from the earlier tariff order which led to the situation that

- In non-CAS areas, the 26th December 2003 ceiling would continue as such.
- For such erstwhile-notified mandatory CAS areas, where CAS was not actually implemented, the ceiling of 26th December 2003 will continue.
- For erstwhile notified mandatory CAS areas where CAS was implemented, the Authority recognises that CAS may continue on a voluntary basis and in such a

case the ceiling would again be the rates prevailing on 26th December, 2003, which the Authority recognises may have been lower than the rates in non-CAS areas. Since a number of requests for clarification were received, a clarification was issued on 19th February, 2004 a copy of which is at Annexure-I.

- 1.4 The amendment is not applicable for Chennai Metropolitan Area on account of the stay granted by Madras High Court in Writ Petition numbers 4863, 4890, 4936 and 4919 of 2004.

Powers of TRAI to Specify Rates of Services

- 1.5 Powers are vested with the TRAI to notify rates of Telecommunication services. The relevant provision of the TRAI Act is as under:

“(2) Notwithstanding anything contained in the Indian Telegraph Act, 1885(13 of 1885) the Authority may, from time to time, by order, notify in the Official Gazette the rates at which the telecommunication services within India and Outside India shall be provided under this Act including the rates at which messages shall be transmitted to any country outside India:

Provided that the Authority may notify different rates for different persons or class of persons for similar telecommunication services and where different rates are fixed as aforesaid the Authority shall record the reason therefore.”

2. Principles of Pricing

- 2.1 A monopoly or a dominant firm with significant market power has an incentive to charge monopolistic prices. An important regulatory task has been to ensure that the prices charged to consumers are reasonable.

2.2 Regulatory Authorities worldwide have considered a number of approaches to price regulation of services. Common approaches include:

- Price Based on Costs – these could be either historical costs or marginal costs. Again, these costs could be either financial or economic costs. Finally, the costs could be normative or applied unit-wise.
- Price cap mechanism, which includes the possibility of increasing tariffs based on combined effect of inflation and productivity increase. One variant is prevailing price as ceiling.
- Tariff forbearance
- Revenue Cap

With the increase of competition in the market, regulators tend to reduce the extent of price regulation and increasingly leave it for the market forces to decide the prices.

Issues relating to pricing include:

- (i) Methodology of pricing
- (ii) Pricing of pay channels
- (iii) Prices of a-la-carte channels vis-à-vis bouquets of channels
- (iv) Charges payable for multiple Televisions in a household
- (v) Carriage charges for Free to Air channels
- (vi) Uniformity of Cable TV Services Rates
- (vii) Revenue sharing arrangement between Broadcasters, MSOs and LCOs.

3. Pricing of Pay Channels: Subscriber Price

3.1 Cost Based Price

Costing of pay channel like any other costing requires details of capital expenditure and operational expenditure but cost determination for pay channels become difficult because:

- Some Pay Channels are broadcasted and viewed in more than one country making it difficult to apportion cost to a specific country/region.
- It is difficult to cost the contents being broadcasted, as it is not a standardized commodity. Video services are highly differentiated, programming quality is very difficult to measure objectively, and both services and their costs are changing rapidly.
- If revenues are being earned also from advertisement then it is not clear how much of the cost would be recovered through subscription fee.

Price Cap

3.2 A price cap form of regulation avoids the problems of measuring and controlling programming costs, but introduces the problem of controlling quality. Moreover at a particular price, a broadcaster may still be able to exercise market power and increase profits, but reduce overall economic efficiency by reducing programming quality. As indicated in the previous section, pricing on content is difficult in view of it not being a standardized product.

3.3 The prevailing price shows large variation in the charges levied. A common uniform price cap may not be reasonable if the market has to be extended to different segments. In such a situation flexibility is provided by the price cap mechanism.

3.4 Comments of Stakeholders on Pricing of Pay Channels

- Regulation of price of pay channels leads to lack of innovation by programmers resulting in stagnation or decline in overall quality, variety of programmes and other television offerings.
- Being a creative media, the contents of Television channels have unique programming and quite often comprises of copyrightable material and other intellectual property which cannot be standardized like telecom, electricity and water and thus cannot be priced in a standard manner.
- The subscription fee of pay channels needs to be regulated. The popularity of a channel or high cost of content should be rewarded by increased advertising revenue and viewers should not be taxed by charging higher subscription fee.
- Subscription price should be increased only in case of increase in transmission or carrying cost and not on account of increase in content. Cost increase for software i.e. content, should not be passed on to the consumers. In the existing set-up, broadcasters are tempted to bid excessively for rights to events knowing that the burden could be passed on to both advertisers and viewers.
- Rates of Pay channels be regulated and should not be more than Rs 150/Rs 200 per subscriber per month.

4 Pricing of a-la-carte Channels vis-à-vis Bouquet of Channels

4.1 Many consumers/consumer organizations of erstwhile CAS areas complained that compared to a bouquet of channels, an individual channel is priced in such a manner that the subscribers do not have a real option to choose channels on a a-la-carte basis. Authority has also received complaints that generally, a bouquet of channels has just one popular channel and on the basis of this channel the entire bouquet of channels is pushed in the market. The price package being offered by a leading MSO in an erstwhile CAS notified area of Delhi is as in table 3.1 below.

Table 3.1 – Price Package of an MSO in erstwhile CAS notified area of Delhi

| Bouquets | Channels | A La carte rates (Rs.) | Bouquet Rates (Rs.) (Discount on total price of individual channel) | Full Package (Rs.) (Discount on total price of individual channel) |
|-------------|----------------------|------------------------|--|---|
| Star | Star Plus | 24 | 55.50 | 190 |
| | Star World | 14 | | |
| | Star Movies | 20 | | |
| | Star Gold | 10 | | |
| | National Geographic | 10 | | |
| | Adventure1 / History | 15 | | |
| | Channel V | 8 | | |
| | Star Vijay | 10 | | |
| Sony | Sony | 20 | 65 | |
| | HBO | 20 | | |
| | AXN | 14 | | |
| | Animal Planet | 4 | | |
| | Discovery | 10 | | |
| | Set Max | 14 | | |
| Zee Turner | Zee TV | 25 | 60 | |
| | Zee Cinema | 20 | | |
| | Cartoon Network | 20 | | |
| | CNBC | 20 | | |
| | Zee MGM | 15 | | |
| | Alpha Bangla | 15 | | |
| | Alpha Gujarati | 15 | | |
| | Alpha Marathi | 15 | | |
| | Alpha Punjabi | 15 | | |
| | Pogo | 15 | | |
| | Trendz | 10 | | |
| Zee English | 10 | | | |
| | CNN | 5 | | |
| | Reality TV | 5 | | |
| ESS | ESPN | 29 | 32 | |
| | Star Sports | 29 | | |
| TEN Sports | TEN Sports | 32 | 32 | |
| Nickelodeon | Nickelodeon | 10 | 10 | |
| Hallmark | Hallmark | 12 | 12 | |
| Total | | 510 | 266.50 | 190 |

4.2 Comments of Stakeholders on Pricing of a-La-carte channel and Bouquet of channels.

- The ceiling rate for bouquets should not vary disproportionately when compared with the combined rates of individual pay channels which constitute the bouquet so that consumers are not forced to opt for bouquets instead of individual pay channels. The basic fundamental of the pricing of an individual channel can be made as per a specified formula, for example, we could have:

$$P_n < [(P_b/N) * 2]$$

where P_n is the price of any individual channel,

P_b is the price of the bouquet, and

N is the total number of channels in the bouquet

The formula implies that the price of Star Plus, Zee and Sony channel should be Rs 13.88, Rs 8.57 and Rs 21.67 respectively if prices of a bouquet are taken as given in Table 2.2 above. However with this formula, the prices of individual pay channels like Star Sports and ESPN will be same as the ESS bouquet price.

- The price of an individual pay channel should not exceed the average price of a pay channel contained in a bouquet by 10% / 5%.
- Price of an individual channel should not be more than the bouquet cost.
- Price of a bundle should not be less than 90%/80% of sum of individual channel rates.
- There should not be any regulation on bundling of channels. It is an excellent method to introduce new channels, which are unknown to customers but need subscription revenue on account of their content cost.
- Full bouquet needs to be discounted as it may contain many channels but only one or two are actually viewed at any one time

5. *Carriage Charge for FTA Channels*

5.1 The Cost Accounts Branch, Ministry of Finance carried out an exercise for working out economic cost of delivery of channels in the cable network. It had extensive consultation with stakeholders and obtained inputs by visiting the MSO and the cable network systems. The technical parameters and assumptions, considered for working out the economic cost of 'Free to Air' channels, were also examined and ratified by the technical experts of Broadcast Engineering Consultants India Ltd (BECIL), Prasar Bharti and costing experts of TRAI. The specific assumptions made and basic parameters included in the exercise were examined in detail. These parameters and assumptions include:

- Economic cost of carrying channels has been worked out on the assumption that the bandwidth available to cable system is about 500 MHz. Capital Investment on head end [i.e. standardized equipment being used in the premises of cable operators] considered on the basis of 8 numbers of parabolic 12' dish antenna (professional grade) along with other associated accessories, capable of delivering about 60 channels. Distribution Network depends upon the quality of service, the quality and length of cables used, number of cabled T.V. homes and equipment's capability to deliver signals to the households, in the service area/ radius.
- Depreciation worked out on the basis of the life of head-end and network was taken at 7 and 5 years respectively.
- Operating costs include costs of manpower, rent, electricity and water charges, repairs/maintenance, transportation, advertisement, and depreciation. Miscellaneous expenses reflect bad debts and sundry charges.
- The investment in cable network is assumed to be hundred percent funded through equity. The post tax cost of equity is taken as 12% p.a. (i.e. 18.97% pre tax).
- Total Subscriber per head end is taken as 32340.
- Economic cost worked out is exclusive of any local/central taxes payable.

5.2 Based on the above assumptions, the price for carriage of 60 Channels was worked out as Rs 72 plus taxes per month.

6. More than one TV in a household - Issues of Charges for carriage and Additional pay Channel Price

Carriage Charge for additional TV

6.1 In the costing model discussed in para 5, multiple TVs in a house are not considered and therefore additional cost for providing services are not accounted. The additional unaccounted cost is that of a 20 meters of drop cable from sub-trunk cable to the customer premises. This amount can be charged as one time installation fee and in that case there will not additional charges payable.

6.2 Alternatively, total number of points connected through cable network can be increased to account for multiple televisions in a household. The estimates of number additional points on account of multiple televisions can be obtained by undertaking surveys. Assuming 5% of cable homes have additional television, the number of subscribers will increase from 32340 to 33957 resulting in decrease of carriage charge for 60 channels per television from Rs 72 to Rs 69.

Charges payable for pay channels

6.3 Different views have emerged on charges payable for pay channels on additional TV in a household, which are discussed below.

- Consumers - there should not be any additional charge for viewing pay channels on additional TVs in a household. When a consumer has paid charges for different pay channels, he is fully entitled to receive them on any TV in the household.
- Cable Operators – additional TV amounts to an additional point and therefore charges should be paid accordingly.

7. Uniformity of Cable TV Service Rates

7.1 Currently there are no uniform rates for cable TV services. Rates tend to vary from one area to another and at times these are different within the same area.

Charges for cable services in many cases depend on the purchasing power and income levels of people residing in that area. It has been desired by many stakeholders that there should be uniform rates for the same set of services. A common uniform price may be both difficult to implement and not reasonable. The flexibility in pricing enables cable operators to secure market penetration in lower income areas.

- 7.2 It has already been discussed in para 1.5 of this chapter that TRAI Act provides that the Authority may notify different rates for different persons or class of persons. Under Section 4A (5) of the Cable Act, central government can determine different rates for different areas. The relevant provisions of the Act is reproduced below:

Section 4A (5): Notwithstanding anything contained in sub-section (4), the Central Government may, for the purposes of that sub-section, specify in the notification referred to in that sub-section different maximum amounts for different States, cities, towns or areas set in any manner.

8. Periodicity and Extent of revision of Rates

- 8.1 Many consumers and consumer organizations have complained that there are frequent hikes of the cable charges, which has led to sharp increase in the monthly bill of cable services. There is need to regulate frequent and sharp increase in the prices.

- 8.2 Charges payable by subscribers can be classified into the following two categories:

- Carriage charges for carrying Free to Air Channels.
- Charges payable for receiving and viewing pay channels.

- 8.3 Pay channels are generally offered in form of bouquet of channels. Even if an individual channel does not hike its price, the monthly bill may still go up as more channels are being added in the bouquet of channels. In such a scenario the regulation of periodicity of

hike of individual channel alone may not help control the monthly bill and therefore there is need to regulate the periodicity of prices of bouquet of channels also.

8.4 Comments of stakeholders on periodicity of revision of rates.

- Carriage Charge should be reviewed after a period of at least two years as it is based on infrastructure and the operational expenditure for manpower, maintenance, electricity etc. Such expenditures do not vary substantially on a year-to-year basis.
- For pay channels the periodicity of change in the rates could be yearly. Charges payable for pay channels /cost of a bouquet could also be changed yearly or when a new pay channel is added.
- The periodicity of price fixation for pay channels should not be regulated; it should be left for broadcasters to decide as these depend on cost of programming and events during the year.
- Rate should be fixed for a period of atleast one/two years and maximum percentage at any time should not be more than 25%.

9. International Practices on Regulating Prices

The mechanism of price regulation of few countries is discussed below:

United States of America

9.1 Channels rates in USA were/are regulated by following Acts:

- The Cable Act, 1984
- The Cable Act. 1992
- The Cable Act 1996

The 1984 Cable Act permitted local franchising authorities, and not the federal communication commission to regulate only if the cable franchise area was served off the air by fewer than three unduplicated broadcast signals; in 1991, the Commission raised this number to six. In passing the 1992 Cable Act, Congress found rates for cable services rose significantly following the 1984 Cable Act. Congress directed the Commission to establish rules to govern the rate regulation of cable service tiers offered by cable systems that are not subject to effective competition. These rules are intended to improve service to the cable subscriber and to ensure competitive rates.

- 9.2 Each service tier is regulated in a slightly different manner. Local franchising authorities are responsible for regulating the basic service tier and, until March 31, 1999 (as provided by the 1996 Act), the Commission was responsible for regulating cable programming services tiers. Both follow rules set by the Commission, which established a "benchmark" rate based on a number of factors, including the number of subscribers, channels, and a number of other factors. Pay-per-channel and pay-per-program services are not regulated.
- 9.3 In addition, under the 1996 Act, small cable operators are partially or wholly exempt from rate regulation. A "small cable operator" is defined to include any operator that serves fewer than 1 percent of all subscribers in the United States and that is not affiliated with entities that have gross annual revenues exceeding \$250 million. In any franchise area where a small cable operator serves fewer than 50,000 subscribers, rate regulation does not apply to the operator's cable programming services tiers, or to its basic tier if it was the only tier subject to regulation as of December 31, 1994.
- 9.4 Rates for a cable system's service tiers and associated equipment may be regulated only if the cable system is not subject to effective competition. There are four separate tests to establish that effective competition exists:

- (1) The households subscribing to a cable system constitute fewer than 30 percent of the households in its franchise area; or
- (2) (a) There are at least two unaffiliated multi-channel video programming distributors (one of which may be the cable system in question), with each offering comparable video programming to at least 50 percent of the households in the franchise area, and
(b) The households subscribing to all but the largest multi-channel video programming distributor exceed 15 percent of the households in the franchise area; or
- (3) The franchising authority is itself a multi-channel video programming distributor offering video programming to at least 50 percent of the households in the franchise area; or
- (4) A local exchange carrier or its affiliate (or any multi-channel video programming distributor using the facilities of such carrier or its affiliate) offers video programming services directly to subscribers by any means (other than direct-to-home satellite services) in the franchise area, but only if the video programming services so offered in that area are comparable to the video programming services provided by the unaffiliated cable operator in that area. In the absence of a demonstration to the contrary, a franchising authority may presume that a cable system is not subject to effective competition.

9.5 In order to exercise its authority to regulate basic cable rates and equipment, the Commission must certify a franchising authority. Unless notified otherwise by the Commission, a franchising authority's certification becomes effective 30 days after it is filed with the Commission. A franchising authority whose request for certification has been denied or revoked may petition the Commission for re-certification. In addition, a franchising authority that lacks the resources or legal authority to regulate basic cable service rates may petition the Commission to assume regulation, but the franchising authority must affirmatively demonstrate its inability to regulate to the Commission. The Commission will not intervene to regulate basic cable service rates should a franchising authority

- choose not to seek certification or choose not to request that the Commission assume jurisdiction. Appeals of local decisions will be heard by the Commission or by state or local courts, depending upon the subject matter involved.
- 9.6 The 1996 Act modified the regulation of cable programming services and the rate complaint process established under the 1992 Cable Act. Pursuant to the 1996 Act, the Commission's authority to regulate the rates charged for cable programming services (those are the channels that are not on cable system's basic tier and are not sold on a per-channel or per-program basis) was terminated for services provided after March 31, 1999. Therefore, the cable company determines the rates charged for cable programming services and the Commission does not have the authority to review these rates or to investigate allegations that the rates are excessive.
- 9.7 The 1996 Act did not modify the local franchising authority's ability to regulate basic cable rates. Therefore, complaints about basic cable rates should be filed with the franchise authority.
- 9.8 Rates for channels sold on a per-channel or per-program basis are not regulated.

OECD Countries other than USA

- 9.9 Specific regulation of Cable Television Pricing is not widespread in OECD countries. Countries that have specific regulation to regulate Cable Television pricing in some form or the other are Belgium, Canada, Germany and Turkey. In most of the countries price of only the Basic service tier are regulated. A table indicating countries where prices are regulated is given in table 3.2 below.

Table 3.2 Regulation of Cable Television Pricing

| | Are cable television prices for subscription service specifically regulated by government | Additional comments or major reasons for regulation. |
|-------------|---|---|
| Australia | No | Cable companies must operate in a manner, which is consistent with the Trade Practices Act (1974), which specifically prohibits misuse of market power and anti- competitive behaviour. |
| Austria | No | |
| Belgium | Yes | Regulated by the Ministry of Economic Affairs. |
| Canada | Yes | Basic Services regulated but not discretionary services |
| Denmark | No | |
| Finland | No | |
| France | No | |
| Germany | Yes | |
| Greece | Service yet to commence | |
| Iceland | N/A | |
| Ireland | N/A | |
| Italy | Service yet to commence | |
| Japan | No | |
| Luxembourg | N/A | |
| Mexico | N/A | |
| Netherlands | No | |
| New Zealand | No | |
| Norway | No | |
| Portugal | No | |
| Spain | N/A | |
| Sweden | No | |
| Switzerland | No | |
| Turkey | Yes | Regulated with reference to inflation. |
| UK | No | |

Source: OECD paper on Current Status of Communication Infrastructure Regulation Cable Television, Paris 1996 (Table 9)

Pakistan

9.10 Pakistan has regulated pay channel prices. The rates for local pay channels were kept at Rs.2 per month per subscriber so as to give boost to the local channels. However, rates of foreign broadcasters were kept at Re.1 per channel. The reason for lower prices for foreign satellite channels is stated to be that these channels are distributed in other countries and collect revenues from all of them whereas expense for content and running of channel remains constant. Distributors have been permitted to offer discounts on this price to make their packages attractive. Sports channels were permitted to collect Rs.2 per subscriber per month considering their high cost of production and acquisition of rights.

9.11 Prevailing rates of cable services in Pakistan have been prescribed as ceilings:

TARIFF CEILING:

- I. One time connection charges Rs. 2000/-
- II. Monthly subscription fee..... Rs. 225/
- III. Premium Service fee..... Rs. 125/-

These charges are for maximum 20 channels including pay/encrypted channels, one Islamic and all Pakistani channels.

Taiwan

9.12 While Taiwan's cable TV law refers to pay channels and pay per view, it fails to authorize additional fees for such services and the government adopted the position that the basic rate cap is cap. In first quarter of 2003, the Government Information Office allowed cable operators to charge upto US\$9 per channel for additional a-la-carte channels, but it refused to allow tiered pricing of pay channel package.

South Africa

9.13 Regulation of pay channels is not prevalent in South Africa. However, as per section 30 (6) of the Broadcasting Act, 1999, subscription-broadcasting services may draw their revenues from subscriptions, advertising and sponsorships. In no case may advertising or sponsorships, or a combination thereof, be the largest source of revenue; a restriction is imposed that revenue from advertisement cannot exceed the revenue from the subscription.

9.14 In view of the above comments are requested on the following:

Q: Should pay channels be subject to price regulation? If yes, what should be the methodology for determining prices?

Q: Should the type of price regulation depend on the extent of competition in the market? If yes, then what should be the link between the price regulation and the extent of competition?

Q: What is adequate competition? Should one use a thumb rule that three or more operators in the market or entry of services through alternate technologies like DTH or IPTV and acquiring a specified level of market share is sufficient to result in adequate competition?

Q: Should bundling of pay channels into a bouquet and discounts thereon be allowed?

Q: If bundling of pay channels is allowed, should the ceiling rate on individual pay channels in relation to a bouquet price be specified? If so, what should be the ceiling rate of an individual channel?

Q: Do you think the price of Rs.72per month for Basic tier Service requires any review? Should these charges be made applicable in whole of country or applied only where CAS has been implemented?

Q: Do you agree that charges payable on additional TV set in a house is limited to installation payment equivalent to cost of 20 meters of drop cable? If no, should prices be revised after revising the subscriber base by taking into account number of additional TV in a household?

Q: Do you think there should be additional charge of pay channels on additional TV in a household? If yes, should it be the same as the first TV or discounts be offered on additional TV?

Q: Should there be uniform rates of cable service?

Q: What should be the periodicity of revision of rates for basic tier and Pay channels?

Q: Should there be a restriction imposed on the quantum of jump of revision of periodic subscription fee for pay channels?

Q: Should price regulation be done centrally or should it be done by local authorities / state governments?

Q: Should price regulation be different under a mandatory CAS regime and a voluntary CAS regime and if so what would be the difference?

10. Revenue sharing between Broadcasters, MSOs and LCOs

10.1 Generally revenue share agreements between different parties in the distribution chain are mutually negotiated. Regulated sharing arrangements are required only when the market is not able to arrive at such rates or when the dominance of one party is being exercised to arrive at such agreements.

10.2 As per section 11 (1) (b)(iv) of the TRAI Act, Authority can also regulate arrangements amongst service providers of sharing their revenue derived from providing telecommunication services. TRAI had been regulating revenue share arrangements between various service providers.

10.3 It will be difficult to arrive at the revenue share formula between broadcaster and cable operators as cost of programmes being broadcasted are not standard and therefore a revenue share formula based on cost cannot be applied. However it is possible to determine the carriage cost of each channel by MSO/LCO and instead of revenue share formula cost based carriage charge can be estimated. The split of revenue share between MSO and LCO can be done on the basis of capital employed and operating expenditure by MSOs and LCOs.

10.4 Comments of stakeholders on revenue share arrangements

- Revenue sharing is a commercial negotiation/transaction. This is best left to individual channels to negotiate with their trade partners.
- Pay channels charges should be shared in the following manner:
 - pay channel broadcasters – 30-40%;
 - distributors i.e., MSOs/ICOs and their franchisees – to share the rest of 60-70% in the ratio of 50:50.
- Sharing of Pay channel charges should be in line with the international norms. Pay channel charges are shared in the following ratios:
 - Pay channel broadcasters –30-40%
 - MSOs– 30-35%
 - Last Mile cable operators – 30-35%

10.5 In view of the above, comments are requested on the following:

Q: Do you think that revenue-sharing concept should be introduced in broadcasting and cable service sector? If so, what should be the basis to determine revenue share? Should revenue share concept be introduced for MSO and LCOs only where cost estimation is possible?

Q: Should carriage charge of a channel by MSO/ LCO be decided through a regulation or left for mutual negotiated prices?

Chapter 4: Issues concerning Advertisement Time and Schedule

Introduction

1.1 The TV business, in most countries, is constructed around one of the three revenue models:

- **Free to Air Channel:** These are basic channels solely depending on revenue generated from advertisements. This model is also used as a launch-strategy to gain popularity and gather audience, with an intention to go “Pay” in future. On the other hand niche channels generally prefer to steer clear of this approach, as they cannot attain the high level of viewer-ship and advertising revenue that general entertainment and news channels enjoy.
- **Pay Channels-** A pay channel depends on dual revenue stream, relying on subscription and advertising revenue. Parallels are drawn between these channels and the print media, which depend on a mixture of subscription and advertisements.
- **Premium Channels-** A premium channel depends on subscription revenue, generally charges a price over and above what a regular Pay Channel might charge. A premium channel is expected to have a unique programming and the content becomes the unique sales point.

1.2 In India all channels either fall in first category or the second category. For pay channels, though advertising remains the main revenue stream but subscription fee is also increasing over these years and as per estimates present ratio of subscription revenue to the advertisement revenue for these pay channels is 30: 70. While advertisement revenue is vital for viability of channels it needs to be ensured that advertisements do not obtrude on viewing pleasure. This raises the issue of whether timing and scheduling of advertisements needs to be regulated. This chapter discusses the issues relating to regulation of duration of advertisement time on Pay and Free to Air channels.

2 Comments received in response to consultation note on issues relating to advertisements

- Advertising is crucial to sustainability of television broadcasters. Advertising revenue allows the broadcaster to reinvest in its programming which in turn draws more viewers to the channel. As more services enter the market there is increased competition for viewership and channel positioning. Advertising revenue allows the broadcaster to continue making investments in its channel that are necessary to remain competitive and viable and as such advertising time need not be regulated.
- There is no need to regulate advertising time on channels, as these are self-regulated. A broadcaster that puts sizeable amount of advertisements on their channels will be punished by losing viewers and therefore its value to the cable operator that carries its signal and to the advertisers.
- A sports channel has to make huge investment in acquisition of sports broadcasting rights often running to several hundred of crores of rupees and critically requires both the revenue streams in order to survive. Moreover by the nature of sport, the advertising time on the sports channel is self regulated for natural breaks for e.g. between overs in a cricket match or lunch/tea breaks. Sports channels generally do not cut into live coverage to showcase advertisements.
- Due to reported high programming, transmission and other associated costs all pay television channels of India are heavily dependent on advertising revenues. Restriction on advertising times could take away the cross subsidy that advertising revenues provide to the subscription rate, and rapid rise in subscription would be essential to balance the loss caused by restricting advertising sales.

- TRAI may like to adopt a 6-minute time limit per 30 minutes of programming as a ceiling with a three-year implementation horizon. The limit should be enforced when the subscriber declarations have gone up to 90% or above.
- Time of advertisement on pay channels should be inversely proportional to the subscription fee for that channel. Higher the subscription fee less should be the advertisement time.
- Free to Air channels services are entirely dependent upon advertising revenue for meeting the cost of production and transmission. Hence advertisements have a legitimate place in such channels. The regulation on advertising time on these channels will have a direct bearing on the revenues of these channels.
- Regional entertainment channels have high production and transmission cost but do not command the same level of per minute advertising revenue as other entertainment channels which have national presence. The regulation on advertisement time will have direct bearing on viability of regional channels.
- There should be either complete ban or at least there should be a restriction on the duration of advertisements, especially on pay channels. There is no justification for encroaching upon viewing time paid for by the subscriber for content of choice and interest. At times overstretching of advertisement time irritates the viewers.
- There should be complete prohibition of advertisement on pay channels and broadcasters should be free to charge any level of subscription fees.

3 Internationally Practiced Regulations on Advertisement Timing and Scheduling

We take a look at the regulatory system prevailing in a number of other countries.

3.1 Australia

Broadcasting Services Act, 1992 (Section 101. Special Conditions Relating To Advertising)

- i. Each subscription television broadcastings license is subject to the condition that the licensee will not, before 1 July 1997, broadcast advertisements or sponsorship announcements.
- ii. For the purposes of this section a person is not taken to broadcast an advertisement if:
 - a. the person broadcasts matter of an advertising character as an accidental or incidental accompaniment to the broadcasting of other matter; and
 - b. the person does not receive payment or other valuable consideration for broadcasting the advertising matter.
- iii. For the purposes of this section, a person is not taken to the broadcast an advertisement if the person broadcasts matter that promotes subscription television broadcasting services being provided by that or another person.

3.2 Canada

Pay Television Regulations 1992, Sections 3(2)(d), (e) and (f)

- i. no licensee shall distribute programming that contains any commercial message;

- ii. other than filler programming, except as otherwise provided in a condition of its license, that is produced by the licensee after the date of publication in the Canada Gazette of the initial decision of the Commission granting a license to the licensee; or
- iii. other than filler programming, except as otherwise provided in a condition of its license, that is produced by a person related to the licensee after later of
 - (a) the date of publication in the Canada Gazette of the initial decision of the Commission granting a license to the licensee, and
 - (b) the day on which the person became related to the licensee.

“*Commercial message*” means an advertisement intended to sell or promote goods, services, natural resources or activities, and includes an advertisements that mentions or displays in a resources or activities, but does not include any

- (a) public service announcement,
- (b) advertisement for a program distributed by a licensee,
- (c) identification of a pay television programming undertaking,
- (d) production credit, or
- (e) advertisement that
 - (i) is contained in the live feed of programming that is of the category set out in column I of sub item 6(6) of Schedule I and that is acquired by a licensee,
 - (ii) is broadcast during the same period, and originates in the same stadium, arena or other venue, as the event itself, and

(iii) is distributed by the licensee without compensation;
(*message publicitaire*)

“*filler programming*” means programming, in no case longer than 30 minutes in duration, the purpose of which is to fill in the time between the presentation of the major programs distributed by the licensee, and includes material that promotes the programs or services provided by the licensee; (material d’intermede)

3.3 European Union

Council Directive of 3 October, 1989, Articles 11 and 18

1. Advertising and teleshopping spots shall be inserted between programmes. Provided the conditions set out in paragraphs 2 to 5 are fulfilled, advertising and teleshopping spots may also be inserted during programmes in such a way that the integrity and value of the programme, taking into account natural breaks in and the duration and nature of the programme, and the rights of the rights holders are not prejudiced.
2. In programmes consisting of autonomous parts, or in sports programmes and similarly structured events and performances containing intervals, advertising and teleshopping spots shall only be inserted between the parts or in the intervals.
3. The transmission of audiovisual works such as feature films and films made for television (excluding series, serials, light entertainment programmes and documentaries), provided their scheduled duration is more than 45 minutes, may be interrupted once for each period of 45 minutes. A further interruption shall be allowed if their scheduled

duration is at least 20 minutes longer than two or more complete periods of 45 minutes.

4. Where programmes, other than those covered by paragraph 2, are interrupted by advertising or teleshopping spots, a period of at least 20 minutes should elapse between each successive advertising break within the programme.
5. Advertising and teleshopping shall not be inserted in any broadcast of a religious service. News, current affairs programmes, documentaries, religious programmes and children's programmes, when their scheduled duration is less than 30 minutes, shall not be interrupted by advertising or by teleshopping. If their scheduled duration is 30 minutes or longer, the provisions of the previous paragraphs shall apply.

Article 18

1. The proportion of transmission time devoted to teleshopping spots, advertising spots and other forms of advertising with the exception of teleshopping windows within the meaning of Article 18a, shall not exceed 20% of the daily transmission time. The transmission time for advertising spots shall not exceed 15% of the daily transmission time.
2. The proportion of advertising spots and teleshopping spots within a given clock hour shall not exceed 20%.
3. For the purpose of the Article, advertising does not include:-
announcements made by the broadcaster in connection with its own programmes and ancillary products directly derived from those programmes; --- public service announcements and charity appeals broadcast free of charge.

3.4 Finland

Act on Television and Radio Operations (744/1998)

Same as applicable to European Union.

3.5 Germany

German Broadcast Advertising Law, 1991

The total amount of advertising on the public television channels may not be more than 20 minutes per day on workdays- as an average over the year (Sect.15 RfStV). No advertising may be transmitted after 8.00 p.m. or on Sundays or public holidays. On the third channels of the public broadcasters, there is no advertising. The total amount of advertising on public radio stations may not exceed 90 minutes on workdays.

The total amount of advertising on the private channels may not exceed 20% of daily transmission time. The amount of spot advertising may not be more than 15% during that time (Sect 27 RfStV). Radioshopping and teleshopping shall not exceed one hour per day (within the permitted daily maximum transmission time of 20%).

The EU Television Directive (Art 18) limits the amount of permitted advertising to no more than 15% of the daily transmission time or 20% within a given one-hour period. (Under certain circumstances, the amount can be increased to 20% per day). Teleshopping may not exceed one hour per day.

Insertion of advertising

For the insertion of advertising, there are different regulations for the public and private broadcasters. The provisions that apply to the private broadcasters are in line with the provisions in the EU Television Directive.

The following regulations apply to all broadcasters:

Advertisements must be shown in blocks, in other words grouped together. Spot that are transmitted on their own must remain the exception.

Advertisements must generally be inserted between programmes. They must be clearly separated from the programmes Broadcast advertising must be readily recognizable as such and clearly separated from the other programme parts by visual or acoustic means. Children's programmes or religious services may not be interrupted by advertising.

Television programmes transmitted by public broadcasters, which are for longer than 45 minutes may contain one interruption for advertising. In the case of programmes that contain breaks, the advertising may only be inserted in such breaks. Apart from sports events, it may be also be shown between autonomous parts. (Sect.13 RfStV). Advertising interruptions of documentary and news programmes are only permissible if their duration does exceed 45 minutes. (Point 2.4 of the ARD and ZDF Guidelines).

According to the provisions of the EU Television Directive and those of the private broadcasters, advertising interruptions of documentary and news programmes are only permissible if the duration of the programmes exceeds 30 minutes. In programmes, which contain breaks, advertisements may only be inserted into the breaks or between autonomous parts. In the case of other programmes, the interval between two successive interruptions within one programme must be at least 20 minutes. The transmission of films can be interrupted once for every complete period of 45 minutes. A further interruption

is allowed if their duration is at least 20 minutes longer than two or more complete periods of 45 minutes.

3.6 Italy

Advertising and teleshopping must be kept completely separate from other parts of the programme and identifiable as such by the insertion on the screen, at the beginning and at the end of the message, of specific signs such as “advertising” or “teleshopping”. AGCOM must ensure that existing codes of conduct will adopt an identical signal for all channels during programmes destined to minors. Advertisements, including teleshopping and sponsorship, cannot be shown by the host of the programme within the context of the programme itself. Hidden and misleading advertisements are forbidden.

In the programme consisting of autonomous parts, or in similarly structured events and performances containing breaks, advertising and teleshopping messages shall only be inserted between the parts or during the breaks.

A period of at least 20 minutes must elapse between each successive advertising break within the programme.

In case of broadcasting of spot events, advertisement and teleshopping may be inserted during the breaks for seen by the official regulation of the sport being broad casted, or during its pauses insofar as the advertisements message does not interrupt the sport action.

Cartoon programmes cannot be interrupted by advertisement or teleshopping. The provision does not apply to cartoons destined to adults nor does it apply to full-length cartoons.

3.7 Philippines

Cable TV Act, 1999, Section 12

Advertisements - Cable television may include advertisements and other similar paid segments for which the cable television operator may charge and collect reasonable fees: Provided, that such paid segments shall not exceed ten (10) minutes per hour of program : Provided, further, that said advertisements and similar paid segments shall be exhibited or shown at the start and / or at the end of program: Provided, finally, that no foreign program provider or distributor shall be allowed to solicit and sell commercial positions and advertising time in their programming for products and services directed solely at and within the Philippines and insert such advertisements in the regional satellite feed of such foreign programmers and distributors to be received by the cable television operator.

3.8 United States of America

Children Television Act, 1990

Regulations implemented pursuant to the Children's Television Act of 1990 restrict the amount of commercial matter that cable operators may cablecast on programs originally produced and broadcast primarily for children 12 years old and younger. Cable operators may transmit no more than 10.5 minutes of commercial matter per hour during children's programming on weekends and no more than 12 minutes of commercial matter per hour on weekdays. Cable systems must maintain records available for public inspection which document compliance with the rule.

3.9 United Kingdom

Broadcasting Act 1990, Section 9(8)

1. Directions under this section may be, to any degree, either general or specific and qualified or unqualified; and directions under subsection (7) may, in particular, relate to :-
 - a. the maximum amount of time to be given to advertisements in any hour or other period,
 - b. the minimum interval which must elapse between any two periods given over to advertisements and the number of such periods to be allowed in any programme or in any hour or day.
 - c. the exclusion of advertisements from a specified part of a licensed service, and may make different provision for different parts of the day, different days of the week, different types of programmes or for other differing circumstances.

4 In view of the above, comments are requested on the following:

Q: Should advertisement time on pay channels and Free To Air Channels be regulated?

Q: Should advertisements be allowed on pay channels? If so, what should be the maximum permitted time for advertisement in every half an hour on Pay Channels?

Q: What should be the maximum permitted time for advertisement in every half an hour on Free to Air Channels?

Q: What should be the regulatory system to enforce compliance?

Q: Should there be special rules for advertisements for sports channels/ programmes or special events?

Chapter 5: Competition in Television Broadcasting and Distribution Services

Introduction

- 1.1 Competition in the market leads to lower prices and improvement of services to attract customers. Competition also serves the public interest by inducing suppliers to become more efficient and to offer greater choice of products and services at lower prices. Several distribution technologies are competing with cable television operators in the provisions of audio-visual services. In many countries the penetration rate of DTH is much higher than the cable services and consumers have the choice to select between competing technologies. Since competition from different platforms to deliver TV channels would be an important means of achieving the desired objectives, we also need to consider policies that would promote competition within the cable industry.

- 1.2 The Indian Cable Television industry is marked by strong monopoly in the provision of cable service; over the past years, these monopolies have become even stronger as vertical integration has taken place through acquisition of MSO/cable operators by upstream operators. The creation of vertical monopolies may result in anticompetitive practices like discrimination in treatment of competitors while carrying signals or providing signals. The regulation of monopoly is widely recognized as one of the most important regulatory objective, in order to protect the consumer as well as to encourage competition.

- 1.3 As already seen in Chapter 1, the only DTH and the only HITS operator in the country have not received signals from some of the broadcasters. In the case of HITS the matter is involved in litigation. Carriage of popular channels by operators is essential for competing in the market. As such, success of competition in the distribution chain largely depends on non-discriminatory treatment of carriage of TV channels, and there may be a need to examine the situation of contents/signals of TV channels provided at more favourable terms to

affiliates than to competitors. It also raises the regulatory issue of “must provide” to all seekers of the broadcasting signals.

- 1.4 Broadcasters may also face similar problems when MSOs/LCOs, DTH operators or service providers of other platforms refuse to carry signals to the subscriber’s premises. This chapter discusses the issues related to interconnection, which includes inter alia, the principle of non-discrimination.

2 Interconnection

- 2.1 The Telecom Regulatory Authority of India (TRAI) on 3rd February 2004 issued The Register Of Interconnect Agreements (First Amendment) Regulations 2004 in order to include the Broadcasting and Cable Services also within scope of the expression “Telecommunication Service”. Accordingly the definition of interconnection was revised as:

"Interconnection" means the commercial and technical arrangements under which service providers connect including through electro-magnetic signals, their equipment, networks and services to enable their customers to have access to the customers, services and/or networks of other service providers.

- 2.2 The technical and commercial agreements between Broadcaster, including their authorized distribution companies, Multi-system Operators and Local Cable Operators are covered by the definition of interconnection.

- 2.3 Under the TRAI Act, the Authority has to discharge the following functions for effective interconnection between service providers:

- *Section 11(1)(b)(iii)*- Ensure technical compatibility and effective interconnection between different service providers.

- *Section 11(1)(b)(iv)*- regulate arrangements amongst service providers of sharing their revenue derived from providing telecommunication services. (It has been discussed separately in Chapter 2).
- *Section 11 1(b)(vii)*- maintain register of interconnect agreements and of all such other matters as may be provided in the regulation
- *Section 11 1(b)(viii)*- keep register maintained under clause (vii) open for inspection to any member of the public on payment of such fee and compliance of such other requirement as may be provided in the regulation.

2.4 TRAI issued The Register of Interconnect Agreement Regulation 1999, which was amended on 11.2.2004 to widen its scope to include broadcasting and cable services in its ambit. Now all agreements between Multi System Operators and Broadcasters are to be registered with TRAI. A copy of this regulation is at Annexure II.

2.5 TRAI issued the Telecommunication Interconnection (charges and revenue sharing) Regulation 2001, which essentially aims to provide non-discriminatory interconnection. This principles mentioned in these regulations are mentioned below:

- *Clause 3 (iii)*: no service provider shall discriminate between service providers in the matter of levying of charges for interconnection.

Provided that a different charge may be levied if justified on the basis of substantial difference in cost incurred for providing that particular interconnection agreement.

- Clause (v): In the absence of a mutual agreement between the interconnection provider(s) the seeker(s). In respect of charges for the elements of the network used to provide interconnection, charges for the elements of the network used to provide interconnection will be as specified by the Authority from time to time. In the event mutual agreement is not arrived at in respect of the interconnection sought and / or charges therefore, within 30 days from the date of such request, both the parties will approach TRAI with the details of their network element costs and traffic particulars for a determination in the matter. Pending such a determination the existing arrangement, if any, will continue.
- *Clause (v)(a)*: The existing charging arrangements, if any, between the interconnection seekers and interconnection providers shall hold good until charged with the concurrence of the Authority, or on the basis of a regulatory determination.

3 Comments received on Issues relating to the Interconnection

- Other than allowing multiple operators in a specific area, alternate broadcast modes-DTH, Multimedia Digital Services, Broadband must be allowed to provide competition and options to the subscribers, leading to lower rates and improved services.
- Clear rules should be formulated on access to program content equally to all providers by broadcasters at similar/competitive rates without any discrimination. Denial of content would create virtual monopolies and eliminate competition in the market.
- Inter-broadcaster competition may mean that one broadcaster will deny signals to a DTH system owned by competing broadcaster. If forced by law to do so, they could use other methods to ensure that inter-operability becomes commercially unfeasible. In this scenario, the only solution seems to be to pass laws that forbid the broadcasters from any ownership of companies

responsible for carrying of signals to subscribers, whether via cable or through DTH/Telephone lines.

- ‘Must provide’ clause to be introduced to ensure that broadcasters do not refuse CAS/Non CAS agreements to MSOs/cable operators. This practice may also result in forcible shifting of consumers from cable services to alternate technologies like DTH/IPTV.
- Discriminatory policies like refusing Integrated Receiver Decoder (IRD) leading to content denial to several cable operators is prevalent. Broadcasters have stakes in cable television networks or a Multi System Operation and favour a particular cable operator or a MSO, which affects the other cable operators since cost of a favoured cable Operator/MSO is subsidized by the broadcasters which affects other cable operators.
- Contracts between Broadcasters and MSOs/LCOs should be standardized and all norms of Indian Contract Act should be followed.

4 International Experience

In most of the countries competition law or policy is applied to regulate the anti-competitive practices in the market.

United States of America

Provisions against creation of vertical monopolies and cross holdings

- 4.1 The Federal Communication Commission (hereafter referred as Commission) rules restrict the ability of television broadcast stations, national television networks, Multichannel Multipoint Distribution Service (MMDS), and SMATV systems to own or control interests in cable systems. These rules also restrict the ownership interest of cable operators and their ability to own or control video programming services.

Cable/Telephone Cross-Ownership Restrictions

4.2 Pursuant to the 1984 Act, the Commission's rules placed restrictions on telephone companies providing cable television service. In general, telephone companies were prohibited from providing video programming directly to subscribers within their telephone service areas. However, telephone companies were allowed to provide cable television service in rural areas (defined as places of fewer than 2500 persons), or where the telephone company was able to show that cable service could not exist unless provided by the telephone company. Waivers could also be granted for good cause.

4.3 The 1996 Act established various options for local exchange carriers to provide video programming to subscribers. They are: common carrier transport, wireless ("MMDS"), cable, and open video systems. The Commission has structured a streamlined regulatory format for open video systems that allows open video system operators to offer their own programming and affords independent programmers the ability to reach subscribers directly. By encouraging entry into the video programming distribution market, the open video system framework will provide competitors to cable operators, direct broadcast satellite systems and wireless cable providers. Open video systems will advance competition in two areas of the video market, distribution and carriage. In the latter, open video systems will afford broad capability for video programming providers to reach subscribers directly, independent of the open video system operator.

Cable/MMDS Cross-Ownership

4.4 Commission rules and the Communications Act provisions generally preclude common ownership of a cable television system and a Multichannel Multipoint Distribution Service ("MMDS") system that serves the same area. However, following the passage of the 1996 Act, this restriction does not apply to cable systems subject to effective competition in the relevant franchise area.

- 4.5 With MMDS, often referred to as "wireless cable," an omnidirectional microwave signal is sent from a central transmission tower to receiving microwave antennas. The signals involve "line of sight" transmission and, as a result, the signals are subject to degradation when obstructed. On the other hand, absent obstacles, the signals can travel up to 70 miles, providing television pictures comparable to those received through cable television. The microwave signal is a high frequency signal which is converted for television use by a converter located on the subscriber's receiving antenna.

Vertical Ownership Restrictions

- 4.6 To prevent vertically integrated cable systems from unduly favoring their affiliated programmers over non-affiliated program providers, the Commission imposes a 40% limit on the number of channels that can be occupied by video programmers affiliated with the particular cable system. In this context, vertical integration refers to common ownership of both cable systems and program networks, channels, services or production companies. For purposes of determining common ownership, all interests of 5% or greater are recognized unless there is no possibility of such interests exerting control or influence over the cable system.

National Subscriber Limits

- 4.7 Section 613 of the Communications Act requires the Commission to prescribe rules establishing reasonable limits on the number of cable subscribers served by an individual cable operator through its ownership or control of local cable systems. In 1993, the Commission adopted rules prohibiting any person from reaching, through owned or controlled cable systems, more than 30% of all homes passed nationwide by cable. In 1999, the Commission amended this rule to prohibit any person from serving, through owned or controlled cable systems, more than 30% of all multiple video programming distribution ("MVPD") subscribers nationwide. The Commission concluded that actual subscriber numbers, rather than cable homes passed, more accurately reflected the market

power of a multiple system operator ("MSO"). In addition, given that DBS and other non-cable providers have a growing impact on the market, the Commission decided to take into account the number of all MVPD subscribers, rather than cable subscribers alone. For cable operators, the 30% limit includes only those cable subscribers that any one MSO serves through incumbent cable franchises. An "incumbent cable franchise" is one that was in existence on October 20, 1999, and includes all subsequent owners of the franchise. In determining the 30% limit, the MSO must include all subscribers served by the incumbent cable franchise, regardless of when the subscriber actually purchased cable service. By limiting the horizontal concentration of the cable industry, the Commission seeks to prevent the concentration of local cable systems into the hands of only a few large operators and to limit the ability of multiple system operators to exercise undue influence in the program acquisition market.

Philippines

- 4.8 In Philippines, New anti-exclusivity laws have been introduced. A memorandum circular was issued in Oct 2003 by the Nation Telecommunications Commission. Article 2 of this states “as a general rule, exclusive contracts between cable and satellite operators and program content providers are presumed to be anti-competitive and contrary to sound public policy. Except as otherwise provided under these guidelines, exclusive contracts and arrangements are prohibited”.

Taiwan

- 4.9 As part of the proposed Three-In-One Bill, the Government Information Office has proposed breaking up monopoly of cable operators in each of the 51 franchises in which they operate and opening up each of these franchises to new competition.

5 In view of the above, comments are requested on the following:

Q: Do you think denial of signal of TV Channels to cable/DTH operators and denial of carriage of channels by MSOs /LCOs /DTH operators is anti competitive?

Q: Should TRAI make it mandatory for the broadcaster to have an open access of their contents on non-discriminatory basis to all platforms including Cable TV, DTH and Broadband? If so, should TRAI issue regulation on interconnection norms to ensure effective and interconnection between various service providers of Broadcasting and Cable Services?

Q: Should 'must carry' of a channel be made mandatory for all cable TV, DTH and Broadband services providers? If so, on what conditions?

Chapter 6: Quality of Service and Customer Service Guidelines

After announcement of the Telecommunication (Broadcasting and Cable) Services Tariff Order 2004, one of the functions of TRAI relates to laying down the standards of quality of service to be provided by the cable operators/Multi Service Operators/ Broadcasters and for ensuring the quality of service and conduct of periodic survey of such service provided by the Cable Operators/ Multi Service Operators/Broadcasters so as to protect the interests of the consumers of Broadcasting and Cable Services. In this chapter, quality of service norms for Cable Services/DTH have been discussed.

2. The technical standards for quality of service, in case of distribution, have already been laid down by the Bureau of India Standards, under the Cable Television Networks (Regulation) Act, 1995. The Clause 9 of this Act reads as under:

“9. Use of standard equipment in cable television network. – No cable operator shall, on and from the date of the expiry of a period of three years from the date of the establishment and publication of the Indian Standard by the Bureau of Indian Standards in accordance with the provisions of the Bureau of Indian Standard Act, 1986(63 of 1986), use any equipment in his cable television network unless such equipment conforms to the said Indian Standard.

[Provided that the equipment required for the purposes of section 4A shall be installed by cable operator in his cable television network within six months from the date, specified in the notifications issued under sub-section (1) of that section, in accordance with the provisions of the said Act for said purposes.]

COMMENTS

On and from the date of expiry of a period of 3 years from the date of establishment and publication of the Indian Standard by the BIS, every cable operator shall be under a statutory obligation to use any equipment in his cable television work, which must conform to the said Indian Standard.”

3. Bureau of Indian Standards has specified following Indian Standard for Cabled Distribution Systems for Television and Sound Signals:

- i) Methods of Measurement and System Performance
- ii) Safety Requirements
- iii) Active Coaxial Wideband Distribution Components
- iv) Passive Coaxial Wideband Distribution Components
- v) Headend
- vi) Electromagnetic Compatibility of Systems
- vii) System Performance of Return Path
- viii) Interfaces of Cabled Distribution Systems for Digitally Modulated Signals
- ix) Code of Practice for Installation of Single and Community Antenna Systems for Reception of Sound and Television Broadcasting
- x) C-Band Parabolic Dish Antenna
- xi) Satellite Signal Distribution on Cabled Distribution System
- xii) Digital Set Top Box – Specification
- xiii) Analog Set Top Box- Specification

4. Though the Bureau of India Standards has prescribed technical standards, other quality issues relating to handling of consumer complaints, billing etc. have not been addressed. These issues are briefly discussed below:

- (i) Service interruption: Watching cable television remains problematic in India with frequent channel blackouts/service interruptions i.e. picture or sound on one or more channels been lost.
- (ii) Billing Practices: There is no standard billing guidelines with regard to bill period, method of bill delivery and collection, normal period given to consumers for payment of bill after the bill is issued.

- (iii) Consumer Complaints- Consumer at times may not get fast redressal of the complaints.
- (iv) Information to subscribers: Information to subscribers with regard to products and services offer, prices and options of programming services and conditions of subscription to programming and others are limited.
- (v) Frequent change of order of channels by MSO/LCO

5. Following comments were received on the quality issues relating to the Cable Service:

- TRAI should prescribe that the respective expert bodies should lay down standards for:
 - i) Subscriber Management Systems
 - ii) Call Centers for complaints and redressal of consumers' grievance
 - iii) Picture quality of transmission (audio/video output) (already exists in form of BIS specification)
 - iv) Cable quality used by cable operators
 - v) Encryption system
 - vi) No. of channels being retransmitted by cable operator.
- Service standards should be formulated and enforced through appropriate monitoring mechanisms. Failure to meet with those standards should result in suspension of license/registration and or penalties, which act as a sufficient deterrent for shoddy services.
- TRAI should evolve QOS parameters based on international norms for the broadcaster and the MSOs to start. As the industry matures further, QOS norms for the last mile could be evolved.

6. Case Studies on International Practices on Quality of Service and Customer Service Guidelines

6.1 A study of International Practices on Quality of Service and Customer Service indicates that there exist detailed and strict guidelines on providing quality of service to the customers in several countries. Some of these are laid down through regulations and others are voluntarily developed and adopted by the Cable Television Association itself for providing high quality service to their customers.

6.2 The guidelines adopted by the FCC of USA provide the minimum levels of service, which should be provided by a cable operator. The guideline address issues such as the installations, billing practices, disconnection of service, refund, customer complaints, communications with customers, information to be provided to customers etc.

6.3 The Pakistani Regulation on quality of service specifies the code of conduct for the operators. Detailed guidelines have been prescribed with regard to service reliability, maintenance of record, billing procedure, change in television channels etc. Similarly, the procedures for handling customers' complaints have also been laid down in detail including setting up of Customer Service Centers. The Regulation also prescribes fine for violation of these Standards by a Cable operator, which may extend to Rs.10, 000/- for each violation.

6.4 In Canada, it is observed that The Canadian Cable Television Association (CCTA) have voluntarily developed and adopted the CABLE TELEVISION CUSTOMER SERVICE STANDARDS to ensure high quality service to their customers.

- 6.5 The Canadian cable television industry has accepted the responsibility for developing industry standards, codes and guidelines related to specific issues of concern to its customers and the public. They established the Cable Television Standards Foundation (CTSF) to oversee the implementation of standards and to monitor the industry's compliance with those standards. The Foundation appoints a Cable Television Standards Council to receive, review and respond to complaints from customers about any aspect of service provided by member cable companies.
- 6.6 Case Studies on Quality of Service and Customer Service Guidelines laid down through regulation in the USA and Pakistan and other norms voluntarily developed and adopted by Canadian Cable Television Association may be seen at Annexure III.
7. In view of the above, comments are requested on the following issues:

Q: Do you think TRAI should set Quality Standards based Quality of Service and Customer Service Guidelines for cable TV Services? If so, what should be the standards for the following quality concerns?

- *Norms for complaint registration and handling of complaints.*
- *Time period for redressal of complaints.*
- *billing period, method of bill delivery and bill payment period.*
- *Methodology to inform subscriber if the order of channels is to be changed.*
- *Technical Standards for cable Network.*
- *Compensation for interruptions.*

Q: Do you think the Quality Standards should be based on the International practices or should it be different keeping in mind the limited scale of operations by the LCOs?

Chapter 7: Issues for consideration

2. Conditional Access System

- a) Should CAS be introduced to view pay channels? If yes, should it be mandated by law or voluntarily introduced by Service providers so that they are able to get subscription revenues, which may otherwise be lost in the distribution chain?
- b) If CAS is to be mandated, what safeguards need to be built in to protect the consumer and improve implementation?
- c) If CAS is to be introduced voluntarily, how should it be done and who would take initiative to introduce it?
- d) Should operators provide subsidies on Set top Boxes (STBs)? If so who should bear the cost of this subsidy? Is there need to regulate the commercial arrangement between players to share the burden of subsidy?
- e) Should it be compulsory for service providers to rent STBs?
- f) Should prices of Set Top Boxes be regulated? If so should it be regulated just for rental of STBs or even for sale of STBs?
- g) Should prices of Basic analogue/digital STBs capable only of decrypting of signals be regulated or prices of even those STBs having additional features need to be regulated?
- h) In case it is decided to regulate hire purchase or rental of STBs, what should be maximum permissible limit of refundable security deposit and how should rent be determined?
- i) Should interoperability of STBs be mandatory for Cable TV Systems? If not, on what conditions should STBs be returned to the Cable Operator?
- j) What should be the quality of service norms for:
 - (i) Maximum time to repair/replace the STB;
 - (ii) Maximum time for refund of security deposit on return of STB;
 - (iii) Period of warranty of STBs.

- k) How would answers to these questions be different if the CAS is introduced on a mandatory basis or voluntary basis?

3. Price Issues on Cable Services

- a) Should pay channels be subject to price regulation? If yes, what should be the methodology for determining prices?
- b) Should the type of price regulation depend on the extent of competition in the market? If yes, then what should be the link between the price regulation and the extent of competition?
- c) What is adequate competition? Should one use a thumb rule that three or more operators in the market or entry of services through alternate technologies like DTH or IPTV and acquiring a specified level of market share is sufficient to result in adequate competition?
- d) Should bundling of pay channels into a bouquet and discounts thereon be allowed?
- e) If bundling of pay channels is allowed, should the ceiling rate on individual pay channels in relation to a bouquet price be specified? If so, what should be the ceiling rate of an individual channel?
- f) Do you think the price of Rs.72 per month for Basic tier Service requires any review? Should these charges be made applicable in whole of country or applied only where CAS has been implemented?
- g) Do you agree that charges payable on additional TV set in a house is limited to installation payment equivalent to cost of 20 meters of drop cable? If no, should prices be revised after revising the subscriber base by taking into account number of additional TV in a household?
- h) Do you think there should be additional charge of pay channels on additional TV in a household? If yes, should it be the same as the first TV or discounts be offered on additional TV?
- i) Should there be uniform rates of cable service?

- j) What should be the periodicity of revision of rates for basic tier and Pay channels?
- k) Should there be a restriction imposed on the quantum of jump of revision of periodic subscription fee for pay channels?
- l) Should price regulation be done centrally or should it be done by the local authorities/state governments?
- m) Should price regulation be different under a mandatory CAS regime and a voluntary CAS regime and if so what would be the difference?
- n) Do you think that revenue-sharing concept should be introduced in broadcasting and cable service sector? If so, what should be the basis to determine revenue share? Should revenue share concept be introduced for MSO and LCOs only where cost estimation is possible?
- o) Should carriage charge of a channel by MSO/ LCO be decided through a regulation or left for mutual negotiated prices?

4. Issues concerning Advertisement Time and Schedule

- a) Should advertisement time on pay channels and other Free To Air Channels be regulated?
- b) Should advertisements be allowed on pay channels? If so, what should be the maximum permitted time for advertisement in every half an hour on Pay Channels?
- c) What should be the maximum permitted time for advertisement in every half an hour on Free to Air Channels?
- d) What should be the regulatory system to enforce compliance?
- e) Should there be special rules for advertisements for sports channels/ programmes or special events?

5. Competition in Cable Services

- a) Do you think denial of signal of TV Channels to cable/DTH operators and denial of carriage of channels by MSOs /LCOs /DTH operators is anti competitive?
- b) Should TRAI make it mandatory for the broadcaster to have an open access of their contents on non-discriminatory basis to all platforms including Cable TV, DTH and Broadband? If so, should TRAI issue regulation on interconnection norms to ensure effective and interconnection between various service providers of Broadcasting and Cable Services?
- c) Should 'must carry' of a channel be made mandatory for all Cable TV, DTH and Broadband services providers? If so, on what conditions?

6. Quality of Service and Customer Service Guidelines

- a) Do you think TRAI should set Quality Standards based Quality of Service and Customer Service Guidelines for cable TV Services? If so, what should be the standards for the following quality concerns?
 - Norms for complaint registration and handling of complaints.
 - Time period for redressal of complaints.
 - billing period, method of bill delivery and bill payment period.
 - Methodology to inform subscriber if the order of channels is to be changed.
 - Technical Standards for cable Network.
 - Compensation for interruptions
- b) Do you think the Quality Standards should be based on the International practices or should it be different keeping in mind the limited scale of operations by the LCOs?

**Telecom Regulatory Authority of India
Press Release No. 13/2004
19th February, 2004**

**Clarifications on The Telecommunication (Broadcasting and Cable) Services Tariff
Order 2004**

After announcement of the Telecommunication (Broadcasting and Cable) Services Tariff Order 2004, a number of questions have been raised in regard to the underlying import of the provisions of the aforesaid Order. These are answered below:

Q 1: What is the coverage of The Telecommunication (Broadcasting and Cable) Service Tariff Order 2004 dated 15.01.2004?

Ans: The said order shall cover, throughout the territory of India, both for CAS and non-CAS areas, charges payable by

- a) Cable subscribers to cable operator;
- b) Cable operators to Multi Service Operators/Broadcasters (including their authorized distribution agencies); and
- c) Multi Service Operators to Broadcasters (including their authorized distribution agencies).

Q 2: What is meant by word “charges” mentioned in the Tariff Order?

Ans: ‘Charges’ mean and include the charges/tariff rates payable by one party to the other by virtue of the formal/informal Agreement prevalent on 26th December 2003. The principle applicable in the formal/informal Agreement prevalent on 26th December, 2003, should be applied for determining the scope of the term “charges” For instance,

- if under the Agreement applicable as on 26th December, 2003 specified the total amount as rate or charge per subscriber, multiplied by the subscriber base, the ceiling applies to the per subscriber charge and not to the subscriber base.
- if earlier the amount paid varied on certain limited occasions linked to the likely change in the subscribers base for a specified short period, such a practice could

still continue. However, the charge per subscriber in such cases should not be more than those applicable on 26th December 2003.

Q 3: What about the charges if the cable service provider gives lesser number of channels compared to those shown on 26th December 2003?

Ans: The ceiling charges are specified in terms of the products that they pertained to, namely the channels that were shown on 26th December 2003. Normally, there should not be a reduction in the number of channels shown on 26th December 2003. If, however, due to certain unavoidable reasons, the number of channels is reduced, the charges should also be reduced on a pro-rata basis.

Q 4: What about the situation where the channel or cable service was not available on 26th December, and the channel or cable service is being provided after this date?

Ans: In such cases, the Tariff Order does not provide any specific ceiling, and the formal/informal Agreements regarding such charges could be entered into by the relevant parties. However, in specifying the relevant charges, the charges that the broadcaster/Multi System Operator/Cable Operator might have in place in the contiguous areas/similar channels as on 26th December 2003 should be kept in mind.

Q 5: Will the TRAI intervene, in case the subject matter of dispute between two service providers relates to “the number of subscribers”?

Ans: The remedy in this case would lie in

- a civil court;
- Telecom Disputes Settlement and Appellate Tribunal (TDSAT), under section 14 of the TRAI Act..

Q 6: Whether individual subscribers can file complaints with the TRAI?

Ans: Under the TRAI Act, the TRAI does not deal with complaints from individual subscribers/consumers for whom redressal mechanism is available before a Consumer Disputes Redressal Forum or a Consumer Disputes Redressal Commission or the

National Consumer Redressal Commission established under section 9 of the Consumer Protection Act, 1986 (68 of 1986).

Q 7: What is the remedy available for contravention of The Telecommunication (Broadcasting and Cable) Service Tariff Order 2004?

Ans: In case of any violation of TRAI's Order/Directive/Regulation, if a complaint is filed with TRAI with properly documented evidence, TRAI would, after examining the matter give a direction that the Order be followed. If the Order is still not followed, the TRAI has the option of filing a complaint before the appropriate courts under section 29 and 30 read with section 34 of the TRAI Act.

Q 8: What is the remedy available to the stakeholders in case of a dispute between two or more service providers or between a service provider and a group of consumers?

Ans: In case of a dispute between two or more service providers or between a service provider and a group of consumers, the dispute may be referred to Telecom Disputes Settlement and Appellate Tribunal (TDSAT) under section 14 of the TRAI Act.

For more information please see Section 11, 13 and 14 of the TRAI Act on the TRAI website www.trai.gov.in.

New Delhi 31st August, 1999

[F.No. 409-1/98-TRAI (Comm)]. In exercise of the powers conferred upon it under Section 36 read with clauses (l) and (m) of Sub-section 1 of Section 11 of the Telecom Regulatory Authority of India Act, 1997 in regard to Maintenance of Register of Interconnect Agreements and matters connected therewith, the Telecom Regulatory Authority of India hereby makes the following Regulations.

THE REGISTER OF INTERCONNECT AGREEMENTS
REGULATIONS 1999(2 of 1999)

Section-I

Title, Extent and Commencement

Short title, extent and commencement

1. i) These Regulations shall be called "**The Register of Interconnect Agreements Regulations 1999**".
- ii) These Regulations prescribe the modalities for the maintenance of the Register of Interconnect Agreements between service providers and matters connected therewith.
- i. These Regulations shall be applicable to:
 - a. All service providers who are required to furnish information pertaining to Interconnect Agreements to the Authority as per these Regulations or any other Rule/Regulation/Order issued under the TRAI Act, 1997.
 - b. Interconnect Agreements between all service providers of telecommunication services throughout the territory of India.
 - c. All Interconnect Agreements between service providers whether entered into before or after these Regulations come into effect.
- iv) These Regulations shall come into effect from the **First day of September 1999**.

Section-II
Definitions

2. In these Regulations, unless the context otherwise requires:
 - i. "**Act**" means the Telecom Regulatory Authority of India Act, 1997.
 - ii. "**Authority**" means the Telecom Regulatory Authority of India.

- iii. **"Fee"** means any charge(s) prescribed by the Authority from time to time for inspection of the Register of Interconnect Agreements, or for copies thereof.
- iv. **"Interconnection"** means the commercial and technical arrangements under which service providers connect ¹[including through electro-magnetic signals], their equipment, networks and services to enable their customers to have access to the customers, services and ¹[/or] networks of other service providers.
- v. **"Register"** means the Register of Interconnect Agreements maintained by the Authority either in the print form as a Register and/ or maintained as a data base in electronic medium or in any other form as the Authority may prescribe from time to time.
- vi. **"Regulations"** mean the Register of Interconnect Agreements Regulations 1999.
- vii. **"Consumer"** means any individual, group, public/ private company, any other organisation or body who is/ are subscriber of any telecom service(s) in the country.
- viii. **"Quality of Service"** means the collective effect of service performance, which determines the degree of satisfaction of a user of the telecom services. The quality of service being characterised by the combined aspects of service support performance, service operability performance, severability performance, service security performance and other factors specific to each service.
- ix. ¹[**"Cable operator"** means any person who provides cable service through a cable television network or otherwise controls or is responsible for the management and operation of a cable television network;]
- x. ¹[**"Cable service"** means the transmission by cables of programmes including re-transmission by cables of any broadcast television signals;]
- xi. ¹[**"Cable television network"** means any system consisting of a set of closed transmission paths and associated signal generation, control and distribution equipment, designed to provide cable services for reception by multiple subscribers;]
- xii. ¹[**"Broadcasting service"** means the dissemination of any form of communication like signs, signals, writing, pictures, images and sounds of all kinds by transmission of electro-magnetic waves through space or through cables intended to be received by the general public either directly or indirectly through the medium of relay stations and all its grammatical variations and cognate expressions shall be constructed accordingly;]
- xiii. ¹[**"Broadcaster"** means any person including an individual, group of persons, public or a body corporate, firm or any organization or body who/which is providing broadcasting service and includes his authorised distribution agencies;]
- xiv. ¹[**"Multi-service operator"** means any person who provides cable service generally through a cable operator and whose service area extends across a state/ district/ city/ town/ area, as the case may be.]
- xv. Words and expressions used in these Regulations and not defined here shall bear the same meaning as assigned to them in the Act.

¹ Inserted by Amendment 'The Register of Interconnect Agreements (First Amendment) Regulations 2004'.

Section-III

Contents of the Register

2. The Register shall be maintained in three parts:
 - i. Part I containing a list of all Interconnect Agreements with the names of interconnecting service providers, service areas of their operation, and the dates of the execution of such Agreements;
 - ii. Part II containing portions of the Interconnect Agreements, which the Authority may direct to be kept confidential;
 - iii. Part III containing the contents of Interconnect Agreements other than those directed by the Authority to be kept confidential. This part shall be open for inspection by the public.

Confidential Portion of the Register:

4. i) The Authority may, on the request of any party to an Interconnect Agreement, direct that any part of such Interconnect Agreement be kept confidential.
- ii) Any request for keeping a part of the Interconnect Agreement confidential must be accompanied by a non-confidential summary of the portion sought to be kept confidential.
- iii) If the Authority is satisfied that there are good grounds for so doing, it may direct that any part of such Interconnect Agreement be kept confidential. The non-confidential summary of such part shall, however, be incorporated in Part III of the Register.
- iv) If the Authority declines the request of any service provider to keep any portion of the Interconnect Agreement confidential, it shall record its reason for doing so and furnish a copy of its order to the service provider concerned. In that event the service provider shall have the right to make a representation and/ or to be heard by the Authority against such order.
- v) The Authority may at any time disseminate confidential information in Part II of the Register if in its opinion the disclosure of the information would be in public interest. Before making such disclosure, the Authority shall afford an opportunity of hearing to service provider at whose request such information had been kept confidential.
- vi) Where a service provider requests that any part of the Interconnect Agreement be kept confidential, such portion of the Agreement shall remain confidential until the matter is determined by the Authority.

Registration of Interconnect Agreements

5. All service providers shall register with the Authority any Interconnect Agreement to which they are parties:
 - a. Where such Agreement had been entered into earlier than these Regulations, within 30 days of the coming into effect of these Regulations; and
 - b. In all other cases within 30 days of the execution or modification of such Agreements.

²[*"Provided that in respect of Broadcasting and Cable Services, the Broadcasters including their authorized distribution agencies and Multi-service Operators will register with the Authority any interconnect agreement to which they are parties"*]

6. All service providers shall furnish to the Authority two copies each of the Interconnect Agreements alongwith modification(s), if any, thereto in print form, duly authenticated, along with a soft copy of it in a floppy/ diskette of 3.5" size in Microsoft Word software and also in such other form as may be prescribed from time to time.
7. The Authority may from time to time prescribe the format(s) for seeking disaggregated information of such parts of the Interconnect Agreements having bearing on inter alia technical standards/ specifications relating to interconnection, quality of service, fault resolving procedures, downtimes, access charges, port charges, revenue sharing arrangements, area of operation and consumer related information such as range of services and the like also to be included in the Register.

Access to the Register

8. The Register shall be open for inspection by any member of the public on payment of prescribed fee and on his fulfilling such other conditions as may be provided for in these Regulations or may be notified by the TRAI from time to time.
9. Any person seeking inspection of the Register shall apply to the Under Secretary (Commercial), TRAI or any other Officer, who may be designated for the purpose by the Authority, detailing therein the information he/ she seeks.
10. The designated officer shall allow inspection of the Register and also make available extracts of the relevant portions of the Register on payment of such fee as may be prescribed from time to time.

² Inserted by Amendment 'The Register of Interconnect Agreements (First Amendment) Regulations 2004'.

11. The Authority may also allow access to the Register through the web-site maintained by the Authority on the same conditions and on payment of such fee as may be prescribed from time to time.

Levy of fees and other charges

12. (i) There shall be levied a fee of Rs. 50 per hour for inspection of the Register.

(ii) A fee of Rs. 20 per page shall be charged for copies of extracts from the Register.

General

13. If any dispute arises with regard to the interpretation of any of the provisions of these Regulations, the decision of the Authority shall be final and binding.

International Experience on Quality of Cable Service

1. United States of America

After the passing of 1992 Cable Act, the FCC in the United States adopted federal guidelines, which provide a standard for improving the quality of customer service rendered by cable operators. These guidelines provide minimum levels of service, which should be provided by a cable operator like:

- **Subscriber Calls to a Cable System:** each cable system must maintain a local, toll-free or collect-call telephone line available 24 hours a day, 7 days a week. The customer service center and bill payment locations must be conveniently located and must be open at least during normal business hours and should include at least one night per week and/or some weekend hours.

A call to a cable system must be answered -- including time the caller is put on hold -- within 30 seconds after the connection is made. If the call is transferred, the transfer time may not exceed 30 seconds. Also, cable system customers may receive a busy signal no more than three percent of the time.

- **Installations, Service Interruptions and Service Calls:** Federal guidelines state that standard installations -- which are those located up to 125 feet from the existing distribution system -- must be performed within seven days after an order has been placed. Except in situations beyond its control, the cable operator must begin working on a service interruption no later than 24 hours after being notified of the problem. A service interruption has occurred if picture or sound on one or more channels has been lost. The cable operator must begin to correct other service problems the next business day after learning of them. Cable operators may schedule appointments for installations and other service calls either at a specific time or, at a maximum, during a

four-hour time block during normal business hours. Cable operators may also schedule service calls outside of normal business hours for the convenience of the customer. No appointment cancellations are permitted after the close of business on the business day prior to the scheduled appointment. If the cable installer or technician is running late and will not meet the specified appointment time, he or she must contact the customer and reschedule the appointment at the convenience of the subscriber. These requirements concerning installations, outages and service calls must ordinarily be met at least 95 percent of the time, measured quarterly, under normal operating conditions.

- **Changes in Rates or Service and Billing Practices:** Thirty days advance written notice (using any reasonable written means) must be given to subscribers and local franchising authorities of any changes in rates of programming services or channel positions, if the change is within the control of the cable operator. Bills must be clear, concise and understandable, with full itemization. Cable operators should respond to written complaints about billing matters within 30 days. Refunds, if any, must be issued no later than either the customer's next billing cycle or 30 days.
- **Information to Customers:** The information about products and services offered; prices and options of programming services and conditions of subscription to programming and other services; installation and service maintenance policies; instructions on how to use the cable service; channel positions of programming carried on the system; and billing and complaint procedures, including the address and telephone number of the local franchising authority's office must be provided to the customer.

2. *Pakistan*

- Quality of Service

(a) Service Reliability

- A Cable Television Operator shall take all necessary steps to avoid interruption of cable service to its subscribers.

(b) Maintenance of Record

- A Cable Television Operator shall maintain a record, which shall be available for inspection by the Authority or its authorized officer with all the relevant information.

(c) New Connection

- Ensure cable service is provided to an applicant within 48 hours after payment of installation fee and completion of all other formalities:

(d) Monthly Billing Procedure

- Bill to be delivered in the first week of the following month.
 - One month advance notice in case of a variation in the monthly charges.
 - Convenient process for collection with proper receipt
 - Representative of Cable Operator should carry proper identification documents along with his photograph.

- Seven days notice for disconnection in case of default by subscriber for two consecutive months after serving the notice of Termination of Service with reasons.

(e) **Procedure for change in Television Channels**

- 48 hours notice, in writing, in case of any change within the eligible television channels.

(f) **Complaints Handling Procedure**

- A Customer Service Center operating 24 hours a day, with adequate and trained staff, within its defined area of service, which is easily accessible to all its subscribers.
- Maintenance of record containing all complaints and submit to the Authority as when required to do so.
- Redressal of complaints within 48 hours or two working days.
- For the purpose of maintenance/repair, a Cable Operator shall ensure that its representative(s) carry proper identification documents along with a photograph.

(g) **Fine for Violation**

- In case of a violation of Standards a fine of Rs.10,000/- may be imposed.

- In case of continuous violation of these Standards, proceeding against the Cable Operator under Section 33 of the PEMRA Ordinance 2002.

CANADA

The members of the Canadian Cable Television Association (CCTA) have voluntarily developed and adopted these Cable Television Customer Service Standards to ensure high quality service to their customers. These are administered by the Cable Television Standards Foundation, and apply to all members of the Foundation. Members report regularly to the Foundation on their performance against the service standards. These are summarized below: members.

Commencement of Service

Each member company will:

- offer a comprehensive array of entertainment and informational video and audio products, from which the customer will be given the maximum opportunity to select those services which he/she wants, consistent with prudent consideration of regulatory, financial and marketing requirements;
- provide the basic service upon payment by the customer as follows:
 - an amount not exceeding the amount of the non-recurring costs to be reasonably incurred by the cable TV operator for the installation or reconnection of the subscriber drop;
 - the fee for basic service for one month;
 - any overdue debt of basic service that the customer owes to the cable company.

Continuation of Service

Each member company will:

- continue to provide the services to a customer as long as the customer pays the service fees for each month the services are received;
- waive the requirement for a deposit on service equipment for customers who have established satisfactory credit information;
- maintain high-quality signals in accordance with the Technical Standards Guidelines established by the CCTA and complete any necessary repairs in a timely and effective manner;
- provide service credits on request to customers who have experienced complete and extended interruption of service;
- inform customers of the hours of operation and telephone numbers for the company's business office and service department (including after hours telephone numbers);
- promptly answer inquiries from customers and the public in a friendly, courteous and knowledgeable manner
- make available convenient methods of payment recognizing that the customers generally pay one month in advance for basic service;
- ensure that, at least once annually, all customers receive an invoice or other appropriate notification, clearly identifying, in plain and easily-understood language, those services that are part of the basic service and those services that are discretionary services, the fee for each service or package of services and for extra-cost equipment, including additional outlets and taxes, and the actions a subscriber needs to take to subscribe to or discontinue the services. The invoice, or other notification, as the case may be, shall show separately non-recurring costs for installations;
- upon request, provide a detailed breakdown of the customer's balance;
- indicate clearly on invoices the address, telephone number and hours of operation for both the business office and the service department;

- inform customers at least 60 days in advance of any increases to the monthly rate for the basic service. For some increases to the basic service the CRTC requires that cable companies provide at least 90 days notice before the increase comes into effect. (Cable systems not subject to rate regulation will inform customers at least 30 days in advance of any increase to the monthly rate for the basic service.);
- inform customers 30 days in advance of any increase to the monthly rate for services other than basic service;
- provide customers with reasonable advance notice of any channel lineup changes when the timing of such changes is within the cable company's control;
- ensure that all cable company employees provide identification, including a photograph, when requesting entrance to customers' premises;
- inform customers of the person within the system to whom complaints may be addressed if any inquiry or request has not been handled to the satisfaction of the customer in the ordinary course of business;
- upon request by a customer, remove his/her name from listings for mail and telephone solicitation.

Termination of Service

Each member company will:

- arrange disconnection of basic service for the customer and refund within 45 days any prepaid funds remaining upon receipt of notice (not to exceed one month), and the return of all company-owned equipment in satisfactory operating condition, excepting normal wear and tear;
- where service is to be disconnected for non-payment of amounts owing, provide written notice to the customer at least five business days in advance of the disconnection, indicating the reason for the disconnection

and the amount owed; the final payment date; the reconnection charge, and a telephone number to call for further information or comment. The five-day notice does not apply to services invoiced on a usage basis (i.e. Pay-Per-View);

- restore service after disconnection upon payment of monies owing on the account, including any applicable administration or reconnection fees;
- where service has been disconnected in error or without justification, restore service on the next working day following discovery of the error, or as soon as practicable thereafter, without payment of a reconnection or administrative charge. Provide customer with appropriate refund or credit for the period during which the service was disconnected.
