



Telecom Regulatory Authority of India
Consultation Paper
on
Interconnection and Tariff Issues related to HITS Services

New Delhi

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Preface

The Ministry of Information and Broadcasting, Government of India has recently issued the policy guidelines for grant of permission to establish and operate “Headend In The Sky (HITS)” Broadcasting service from India.

These policy guidelines are expected to create impetus for promoting digitalization and addressability by utilizing the much of the land based transmission system. This mode of delivery has the advantage of spreading digitalization with minimal capital outlay throughout the country at one go because of the country-wide footprint of HITS.

Consequent to the issue of HITS policy, TRAI has received a reference No. 9/2/2005-BP&L Vol. III dated December 10, 2009 from the Ministry of Information and Broadcasting wherein TRAI has been requested to revisit the Interconnection regulations and issue tariff orders for promotion of HITS services.

Accordingly, TRAI issues this consultation paper with an objective to provide regulatory framework for HITS services on Interconnection and tariff issues. The issues which have been raised in this consultation paper are for the purpose of discussion. As is the practice, views of the Authority will be finalized after receiving comments of the stakeholders.

It is hoped that stakeholders will benefit us with their detailed views before 26th April, 2010. Comments will be posted on TRAI’s website as and when they are received. Counter comments, if any, to the comments received may be sent to TRAI by 3rd May 2010. The comments may please be furnished to Secretary, TRAI preferably in electronic form. (Email: traicable@yahoo.co.in or bcs@traigov.in). The fax numbers of TRAI are 011-23220442/ 011-23213294.

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Chairman, TRAI

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Chapter 1

Introduction

- 1.1 The Government has announced the guidelines for providing Headend-In-The-Sky (HITS) Broadcasting Services in India on 26th November 2009. Copy of the policy guidelines is available at Annexure-I. Ministry of Information and Broadcasting vide reference no. 9/2/2005-BP&L Vol. III dated 10th December 2009 has requested TRAI to revisit the interconnection regulations, tariff orders and quality of service regulations etc. so that the benefits of the policy can be fully achieved. Copy of the reference is at Annexure-II.
- 1.2 Earlier in 2003, the Ministry of Information and Broadcasting granted permission for HITS operations to two entities, namely M/s Dish TV India Ltd. (erstwhile ASC Enterprises Ltd.) and M/s Noida Software Technology Park Limited (NSTPL).
- 1.3 TRAI in its Recommendations on “Digitalisation of Cable Television” dated September 14, 2005 stated the need of policy framework for HITS. Ministry of Information and Broadcasting vide reference no. 9/2/2005-BP&L dated May15, 2007 requested TRAI for its recommendations on the HITS policy. Accordingly, TRAI issued a consultation paper on HITS (08/2007) dated July 24, 2007 and the recommendations on HITS dated October 17, 2007 were sent to the Ministry after due consultation with the stakeholders.
- 1.4 The key recommendations were on: modes of operations, usage of C and Ku-band, delivery of services, eligibility criteria, entry fee, minimum networth, annual fee, spectrum fee, performance bank guarantee etc.
- 1.5 In 2008, the Ministry vide reference no. 9/2/2005-BP&L dated January 21, 2008 referred back to TRAI certain Recommendations on HITS for reconsideration on some specific policy issues. These issues included permission for HITS operations both in C-band and Ku-band, restrictions regarding Uplinking,

minimum networth requirement as a qualifying condition for applying for a HITS license and terms and conditions that should apply to existing permission holders. This reference was responded by TRAI in two parts. The first part of the response vide reference no. 14-2/2007-B&CS dated February 5, 2008 contains TRAI remarks on the views expressed by the Government on stated specific issues. The second part of the response vide reference no. 14-2/2007-B&CS dated February 15, 2008 contains TRAI recommendations on existing permission holders. The HITS policy guidelines dated 26th November 2009 incorporate TRAI recommendations in this regard.

- 1.6 TRAI Interconnection Regulations recognise HITS as one of the addressable modes of delivery. However, certain clauses in the Telecommunications (Broadcasting and Cable Services) Interconnection Regulations require amendments to operationalise HITS. In relation to tariff issue, no tariff dispensation is presently available for HITS services.
- 1.7 The present consultation paper intends to seek the views of the stakeholders on issues relating to amendments to the Interconnection Regulations and tariff dispensation for HITS services in India. After an introduction in this chapter, Chapter 2 relates to attributes of HITS operational platform in consonance with policy guidelines. It also presents the extant regulatory provisions as applicable to HITS service platform. Chapter 3 contains the discussions on Interconnection and tariff aspects that need consultation with the stakeholders. Chapter 4 summarises the issues posed for consultation. Relevant annexures have been compiled for ready reference as a part of this consultation paper.

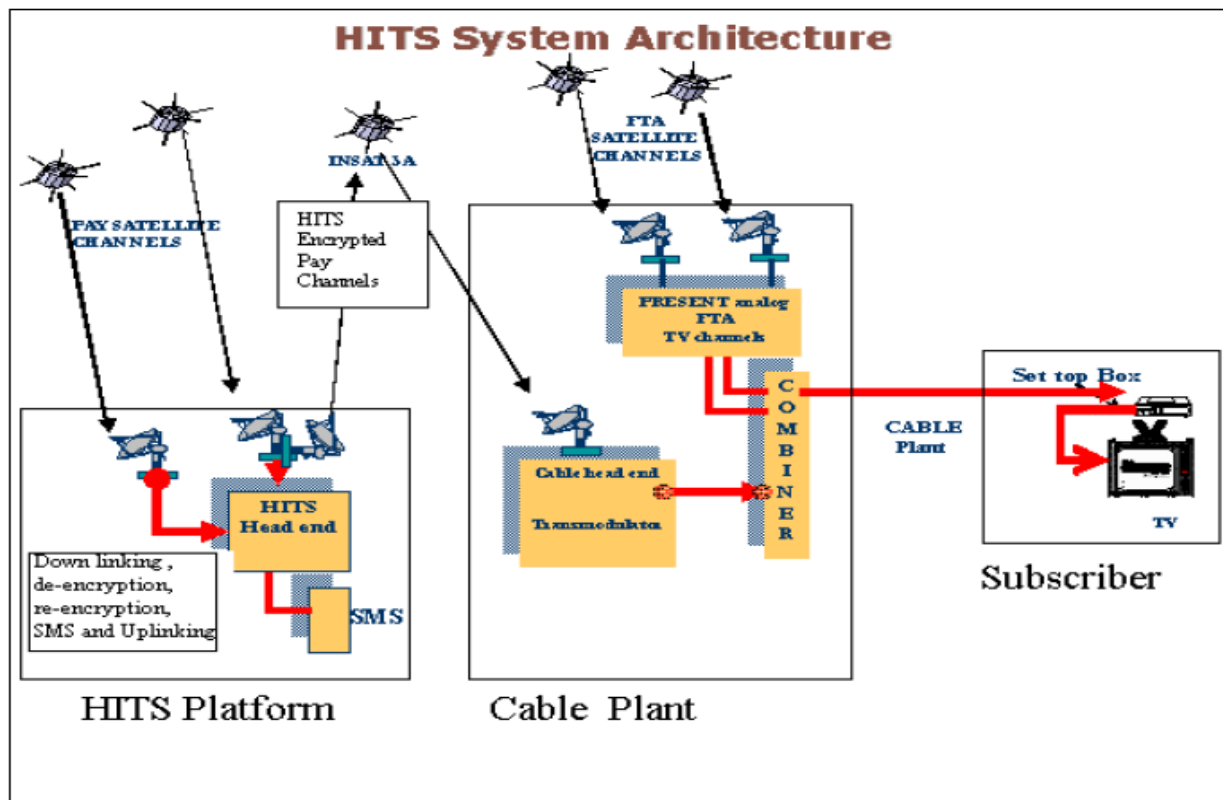
Chapter2

HITS and the Extant Regulations

- 2.1 Headend In The Sky (HITS) Broadcasting Service refers to the multichannel downlinking and distribution of television programme in C-Band or Ku-Band, wherein all the pay channels are downlinked at a central facility (Hub/Teleport) and again uplinked to a satellite after encryption of channels. At the cable headend these encrypted pay channels are downlinked using a single satellite antenna, transmodulated and sent to subscribers by using a land based transmission systems comprising of infrastructure of cable/optical fibres network.
- 2.2 Some key guidelines for providing HITS broadcasting service in India as per the policy, relevant to this consultation are as follows:
- (i) HITS operator shall carry only those channels that have been registered by the Ministry of Information and Broadcasting for being viewed within the territory of India.
 - (ii) HITS operator shall ensure that each of the channels carried by it follows the Programme Code and Advertisement Code.
 - (iii) HITS operator shall provide access to various content providers/channels on a non-discriminatory basis.
 - (iv) HITS operator shall not enter into any exclusive contract for distribution of channels.
 - (v) The government shall have the right to notify the number and names of TV channel or channels of Prasar Bharati or any other television channel for compulsory carriage.
 - (vi) HITS operator can uplink in 'C' band or 'Ku' band only.

- (vii) The HITS operator is required to provide signals directly from his satellite only to the registered MSOs/cable operators and under no circumstances should the HITS operator provide signals directly from his satellite to the consumer. However, he will not be barred from providing signals through his own cable network, if any, to consumers also after first downlinking the signals to his terrestrial receiving station. The signals are to be provided only through QAM set top box.
- (viii) HITS operator is required to provide commercial interoperability with respect to its set top boxes so that if the subscribers decide to switch over to any other service provider or platform they should be able to do so at least cost. Commercial interoperability here would mean that in addition to offering the receiver set on an outright purchase basis, subscriber should also have the option to purchase it on a hire-purchase basis or rental basis with a provision to return the set top box on such terms and conditions as may be laid down by regulations issued by TRAI.
- (ix) The addressability provided to every subscriber should be capable of blocking any unwanted channel or group of channels by the permission holder.
- (x) HITS operator shall ensure subscriber's interests through a Subscriber Management System (SMS) for any efficient responsive and accurate billing and collection system.
- (xi) All content provided by the HITS service provider to the subscribers, irrespective of its source, shall pass through the encryption and digital addressable system located within the earth-station situated on Indian soil.

2.3 A schematic model of the HITS operations platform is as under:



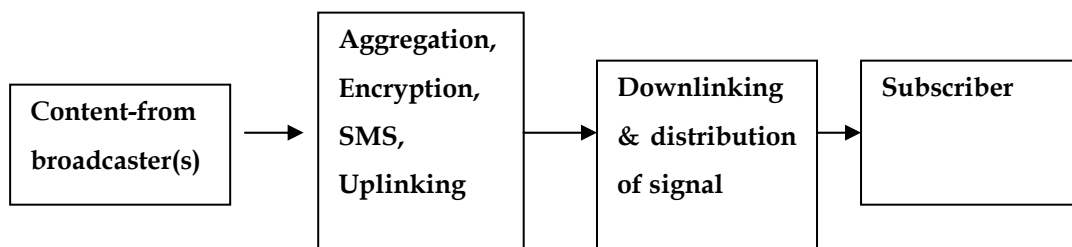
2.4 One of the essential components of HITS platform is the satellite based digital headend. This digital headend involves aggregation of Pay TV channels downlinked from various satellites and channels mandated by Government to carry (must carry channels), their compression and encryption to form a digitalised program stream which is simultaneously downlinked by various registered cable operators across the country and are then retransmitted to subscribers through cable network. The subscribers use QAM set top box to decrypt and view the channels.

2.5 Depending upon the business model, the Free-to-Air (FTA) channels can be incorporated at the level of HITS operator or at the level of cable operator. In case FTA channels are bundled alongwith the Pay TV channels at HITS operator's facility, the subscriber would require the set top box even if he/she opts for viewing only FTA channels. However, if the FTA channels are

introduced in analog mode by cable operator then the subscriber can have FTA channels without the set top box as is the case in the notified CAS areas.

2.6 The policy provides for multiple modes of operation for a HITS platform. In one of the modes of operation (say Mode 1), the HITS operator takes signal directly from different broadcasters. After aggregation of content from multiple sources, this content is encrypted and uplinked to a satellite on C-band or Ku-band. The uplinked signal is then downlinked by the cable operators using an antenna. The downlinked signal is then transmodulated and carried through existing cable networks to the premises of subscribers. This content is available for viewing at the level of subscriber through a QAM set top box. The channels that are made available through this set top box are reflected as subscribed channels in the Subscriber Management System (SMS). The SMS is maintained at HITS operator's earth station within India. This mode of working is depicted below: (Mode 1)

Broadcasters--->-----HITS-Operator->-MSO/Cable Operator->--Subscriber



2.7 As per HITS policy, HITS operator is not allowed to transmit the signal directly upto the subscriber. However, in case, the HITS operator owns his own cable network upto the level of subscriber, then HITS operator is allowed to carry the content right upto the subscriber premises with a condition that the uplinked signal shall be first downlinked before re-transmission through cable network.

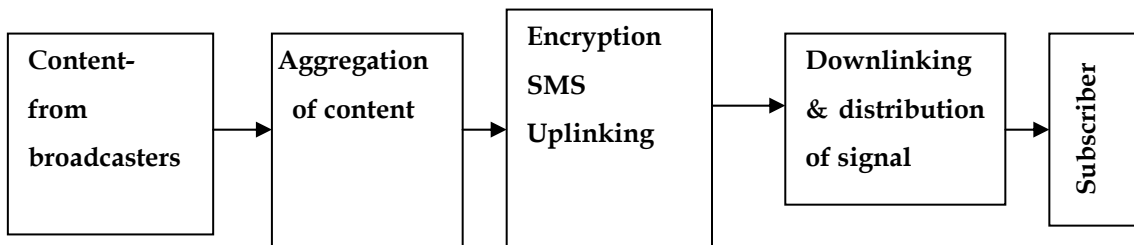
2.8 In the second mode (Mode 2) of HITS operations, the HITS operator only provides carriage support to MSO as an infrastructure provider. The content is sourced from different broadcasters directly by the MSO. This content is then carried by

the digital headend of the HITS operator. The infrastructure support through digital headend includes:

- i. transponder space on satellite,
- ii. earth station facilities including SMS
- iii. provision for simulcrypting/ multicrypting of channels aggregated by different MSOs

This mode of working is depicted below: (Mode 2)

Broadcasters-→ ---- MSO-----→-HITS operator-→Cable-operator---→Subscriber



2.9 In the third mode (Mode 3), HITS operator has the freedom to use his satellite’s transponder capacity both for transmitting his own aggregated content, as well as to provide passive infrastructure to other MSOs for Uplinking/ downlinking their aggregated content. Accordingly, serving chains in Mode 1 and Mode 2 may coexist for a HITS operator in Mode 3. This is a hybrid mode.

2.10 To enable HITS operator to get content from broadcaster(s), Ministry of Information and Broadcasting has modified the relevant clause of the Downlinking Guidelines on December 15, 2009 which is as under (modification underlined):

“ 5.6 The applicant company shall provide Satellite TV channel signal reception decoders only to MSOs/Cable Operators registered under the Cable Television Networks(Regulation) Act1995 or to a DTH operator registered

under the DTH guidelines issued by the Government of India or to an Internet Protocol Television (IPTV) Service Provider duly permitted under their existing Telecom License or authorized by Department of Telecommunications or to a HITS operator duly permitted under the policy guidelines for HITS operators issued by Ministry of Information and Broadcasting, Government of India to provide such service."

- 2.11 HITS operations are being governed by existing Interconnection Regulations. To operationalise HITS based services, the relevant provisions of the Interconnection Regulations which require amendments are listed below:
- i. Definition of HITS operator and an MSO;
 - ii. Provision for dealing with registration of HITS operator/ MSO in the notified CAS areas;
 - iii. In addition, provision for making the Mode 2 and Mode 3 HITS operator responsible for providing data related to SMS including accounting data and audit trail to the broadcasters.

The relevant provisions and amendments of the Interconnection Regulations are elaborated in the subsequent chapter.

- 2.12 As on date, there is no tariff dispensation available for HITS services except that in one of the Petitions i.e. Petition No. 206-C of 2008 in the case of M/s Dish TV India *vs* Star-DEN Media Services, Hon'ble TDSAT Order dated 21.10.2008 has stated that as an interim measure, M/s Star-Den will supply its channels on bouquet/ *a la carte* basis, at DTH RIO terms and rates filed by M/s Star-DEN with TRAI. The issues relating to HITS tariff dispensation are discussed in the subsequent chapter.

Chapter3

Issues for Consultation

- 3.1 The various issues for consultation have been grouped into two parts. The first part contains the issues relating to Interconnection Regulations and the second part contains issues relating to Tariff dispensation for HITS services.

Part- A. Interconnection Issues:

- 3.2 The definitions of HITS operator and MSO given in the Interconnection Regulations are required to be amended to bring them at par with the HITS policy guidelines. As per the Telecommunication (Broadcasting and Cable Services) Interconnection Regulation 2004 (13 of 2004), the present definition of HITS operator is as under;

“headend in the sky operator” means any person permitted by the central government to distribute multi channels TV programmes in C band by using a satellite system to the intermediaries like cable operators and not directly to subscribers.”

This definition of 2004 recognises HITS operation in C band only while HITS policy dated November 26, 2009 permits HITS operation either in C-band or Ku-band. Another aspect of serving subscribers through HITS platform is that HITS operator can also serve the subscribers through its own cable network, if any, after first downlinking the signals to its terrestrial receiving station. The proposed definition after incorporating amendment may read as under: (proposed amendment underlined)

“headend in the sky operator” means any person permitted by the central government to distribute multi channels TV programmes in C band or Ku band by using a satellite system to the intermediaries like cable operators or its own cable network (after first downlinking the signals at its terrestrial receiving station) and not directly to subscribers.”

3.3 Similarly, the present definition of Multi system operator (MSO) is as under:

“multi system operator” means any person who receives broadcasting service from a broadcaster and/or their authorized agencies and re-transmits the same to consumers and/or re-transmits the same to one or more cable operators and includes his/her authorised distribution agencies.”

This definition of MSO does not include HITS operator as an entity (i) from which MSO can receive the channels in mode 1 and (ii) to which the MSO can deliver the channels for re-transmission in modes 2 and 3. There is a need to amend the given definition to enable MSO to tie up with HITS operator. The proposed definition of Multi System Operator (MSO) is as under: (proposed amendment underlined)

“multi system operator” means any person who receives broadcasting service from a broadcaster and/or their authorized agencies or from a HITS operator and re-transmits the same to consumers and/or re-transmits the same to one or more cable operators and includes his/her authorised distribution agencies.

Provided that for the purpose of re-transmitting the signal, multi system operator can also use the infrastructure facilities of HITS operator.”

3.4 The Cable Television Network Rules 1994 as amended do not recognise HITS operator as an MSO in the notified CAS areas. As per these rules, an MSO wishing to operate in these areas is required to obtain permission from Ministry of Information and Broadcasting to operate as a service provider under Rule 11(3). The evaluation criteria for grant of permission include factors such as its operational area, commercial arrangements with broadcasters and cable operators, security clearance etc. Relevant extract of the Cable Television Network Rules 1994 (Rule 11) is reproduced in Annexure -III.

- 3.5 The license for HITS services allows the service provider to offer services all over India. The eligibility criteria and other terms and conditions of the HITS license are more elaborate than the criteria for grant of permission for distribution of signals in CAS areas. So HITS operator who has been granted permission to operate on pan India basis should not require additional permission from Ministry of Information and Broadcasting for distributing signals in the CAS areas. For the sake of clarity, this point may have to be clarified in the HITS license or separately through a notification by the Ministry of Information and Broadcasting.
- 3.6 There are multiple modes of HITS operations as discussed in the preceding chapter. Three modes of operations have been identified- Mode 1, Mode 2 and Mode 3. In Mode 1 of operation, the HITS operator contracts with different broadcasters for buying content, aggregates the same at an earth station and then uplinks with its own encryption to a satellite hired by him. The uplinked channels are then permitted to be downlinked by the cable operators using a dish antenna for onward distribution through last mile cable network to the subscribers. In this model, the HITS operator works like a conventional MSO. HITS operator executes written agreement with broadcasters for supply of content as per the prescribed terms and conditions of the Reference Interconnect Offer which have been mandated through the Interconnection Regulations (as amended). So any issue related to payments to broadcasters, generation of reports in terms of subscriber base against the given channel(s), reconciliation of figures, auditing of the addressable platform etc are adequately addressed through the existing provisions of the Interconnection Regulations.
- 3.7 However, when the HITS operator operates in Mode 2 or Mode 3 i.e. as the passive infrastructure provider the situation is different. The HITS operator merely provides infrastructure facilities to one or more MSOs desirous of uplinking TV channels to his HITS satellite. HITS operator in this model does not contract with the broadcaster for content. He only enters into contracts with one or more MSOs desirous of using his infrastructure facility. Broadcaster and

MSO/cable operators execute a mutual agreement for supply of content as per broadcaster's Reference Interconnect Offer (RIO). The broadcaster's RIO includes the essential technical and commercial conditions as prescribed in the Schedule III & IV of the Interconnection Regulations (Fifth Amendment) dated March 17, 2009. Copy of the Schedule III & IV of the Interconnect Regulations is at Annexure IV. These schedules are applicable to all addressable platforms of distribution including HITS. As mentioned in the Note at the end of the Schedule III, the expression 'DTH operator' appearing in the schedule is to be replaced by the appropriate nomenclature connoting the addressable platform (in this case HITS) for which the RIO is to be issued by the broadcaster.

3.8 The terms and conditions of the agreement between broadcaster and MSO/cable operators thus includes essential conditions in relation to license fee i.e. payments claimed by broadcaster on the basis of subscriber count, its computation and payment terms, reconciliation of accounts, auditing requirements, anti-piracy measures etc. Compliance of number of these conditions would require data from the Subscriber Management System which is maintained by the HITS operator, who is not directly a party in the agreement between the Broadcaster and the MSO.

3.9 As mentioned above, in this mode, MSOs also execute an agreement with HITS operator for carriage of their content. To ensure effective compliance of the conditions in the interconnect regulations the two agreements i.e between (i) Broadcaster and MSO, and (ii) MSO and HITS operator, have to be effectively interlinked through back-to-back clauses.

3.10 In view of above the issues for consultation are:

- (i) **Are the proposed amendments to the Interconnect Regulations to implement HITS policy in order?**
- (ii) **What further amendments are required to implement HITS policy?**

Part- B: Tariff Issues

- 3.11 The tariff dispensation for distribution of signals includes determination of wholesale price i.e. the rate charged by the broadcaster from the distributor(s) and the retail price i.e. the price at which the TV channels are made available for viewing to the subscriber.
- 3.12 The content supplied by broadcaster(s) is distributed to subscribers through different distribution platforms. These significant platforms include cable services in notified CAS and non-CAS areas, Direct to Home (DTH) services and HITS services.
- 3.13 The channels supplied by broadcasters are of two categories i.e. Free-to-Air (FTA) or Pay TV channel. The revenue streams of the broadcasters are subscription revenue and advertisement revenue. FTA channels rely on advertisement revenue as their primary source while pay TV channels have dual source of advertisement and subscription revenues. In addressable modes of distribution such as CAS, HITS, DTH, the subscription fee paid to broadcasters by the distributor against supply of signal is based on the number of subscribers who have subscribed to view that channel.
- 3.14 As per the clause 13.2B.3 of the Fifth Amendment dated 17th March 2009 and clauses 13.2A.11 and 13.2A.12 of the Fourth Amendment dated 3rd September 2007 of the Interconnection Regulations, the broadcasters have to provide their channels on a-la-carte basis to the distributors of channels including HITS operators. The rates of pay channel on a-la-carte basis and rates of bouquets shall be subjected to the following condition, namely:-
- (a) The sum of the a-la-carte rates of the pay channels forming part of such a bouquet shall in no case exceed one and half times of the rate of that bouquet of which such pay channels are a part; and

- (b) The a-la-carte rates of each channel, forming part of such a bouquet, shall in no case exceed three times the average rate of a pay channel of that bouquet of which such pay channel is a part of.
- 3.15 The broadcaster gives its channels to the distributor in a-la-carte mode and/or bouquet form i.e. group of channels. When the channels are given a-la-carte it thrives on its own strength i.e. popular channel is charged at a premium whereas when channels are offered as bouquet then one or more popular channels are clubbed with other not-so-popular channels and the bouquet so formed is given at a discounted price as compared to the sum of ala carte rates of individual channels. Offering bouquet at a discounted price becomes a means to drive not-so-popular channels by the broadcasters.
- 3.16 HITS being one of the modes of distribution of channels, it has features common with other modes of distribution. So before discussing the tariff for HITS services it may be worthwhile to briefly look at the existing tariff structure for other supply chains such as CAS, Non-CAS and DTH.
- 3.17 Ministry of Information and Broadcasting on July 31, 2006 notified that the entire Chennai and certain parts of Delhi, Kolkata and Mumbai as the notified CAS areas.
- 3.18 Cable operations in the notified CAS areas involve three entities - broadcaster, MSO and cable operator. The broadcasters supply both FTA and Pay TV channels to MSO. The MSO aggregates the channels from different broadcasters and gives it to cable operators for further transmission to subscriber through set top box. The set top box at subscriber premises is provided by MSO or cable operator. The signal encrypted by MSO is decrypted by this set top box which is installed at premises of subscriber. The cable operator may add other FTA and local ground based channels in analog mode.
- 3.19 The pay channel tariff ceiling in the notified CAS areas at present is Rs.5.35 per channel per subscriber per month (excluding taxes). The same was arrived at

based on the information provided by the stakeholders during the process of consultation, data from interconnection agreements between broadcasters and MSOs, data from CAS areas in Chennai etc. In addition the other important consideration was to ensure that at least to start with, viewership preferences and the household budget for entertainment should not be drastically altered. The MRP in CAS areas was so determined as to enable the subscribers to watch the channels to which they have been accustomed without any price shock. It was to be kept at an affordable level and the subscriber to be made to realize the advantages of making choice through a process of awareness building. Keeping all these considerations in mind and the need to have a uniform ceiling in all the major four cities, the Authority had decided that the maximum price for a individual channel would be Rs.5/- per subscriber per month per pay channel (exclusive of applicable taxes). This ceiling of Rs.5.00/- per pay channel per month was increased to Rs.5.35/- w.e.f. 1st January 2009 by allowing an inflation linked increase of 7% vide Telecom (Broadcasting and Cable) services (3rd)(CAS area) Tariff (3rd Amendment) Order, 2008 (No.5 of 2008) dated 26th December, 2008.

- 3.20 TRAI in its Telecommunication (Broadcasting and Cable Services) Interconnection (Second Amendment) Regulation, 2006 (9 of 2006) dated August 24, 2006 provides for revenue share arrangements amongst service providers in the notified CAS areas. It is 45:30:25 in respect of broadcaster, MSO and cable operator. The share of broadcaster was kept at 45% which was the lower of the arrangement in Chennai. A higher percentage was given to the MSO since the cable operator was not to share the revenue from the basic service tier with the MSO. This basic tier comprise of at least thirty FTA channels at monthly subscription rate of Rs.82/- (excluding taxes). Earlier, the cable operator could keep the charges collected against basic service tier. As per Hon'ble TDSAT Order dated 12th May 2009, in the case of M/s WWIL vs TRAI, it shall be shared between the MSOs and the LCOs as per mutual agreements.

- 3.21 The cable services in non-CAS areas involve the same chain of service providers- broadcasters, MSO and cable operators. However, the TV channels are carried in analog mode without addressability. The absence of conditional access and subscriber management system in non-CAS cable operations leads to subjective estimates about the number of subscribers served through the cable networks.
- 3.22 The tariff dispensation for cable services in non-CAS areas have been prescribed in the second Tariff Order dated October 1, 2004 (as amended). As per this wholesale tariff rates have been frozen based on historical pricing and retail tariff relates to upper ceilings based on number of channels provided to the subscriber and category of habitation of the subscriber. In case of voluntary CAS in non-CAS areas, the same tariff order provides for forbearance at retail price level on a condition that the content is carried through an addressable system. TRAI has recently issued a Consultation Paper on Tariff issues related to cable services in non-CAS areas dated March 25, 2010.
- 3.23 Direct to Home (DTH) service platform is another addressable mode of delivery of content. The DTH services are operated on pan India basis and the supply chain includes only two entities: Broadcaster(s) and DTH operator(s). The channels sourced from broadcasters are aggregated, compressed, encrypted and Uplinked to satellite transponders in Ku-band by DTH operator. At the subscriber premises the channels are downlinked using dish antenna and set top box. DTH operator also manages the Subscriber Management System (SMS) and makes available set top boxes to subscribers.
- 3.24 Presently, broadcasters supply channels to DTH operator at 50% of the rates in the non-CAS areas, those channels which are part of basic package of DTH service providers. The rates for channels that are not part of basic package are to be negotiated between the broadcaster and the DTH service provider. The retail price in case of DTH services is currently under forbearance. The tariff dispensation for DTH services both wholesale and retail is also under the consultation process. Two consultation papers have been issued in this regard.

The main consultation paper, "Tariff Issues relating to DTH services" has been issued on March 6, 2009 and the supplementary consultation paper has also been issued on December 24, 2009.

- 3.25 Having discussed the tariff dispensation for different platforms for supply of cable and satellite TV services, we shall now look at the tariff related issues for HITS services. We will start by looking at the revenue streams of the stakeholders in the HITS supply chain. Main revenue streams for the HITS operator are share of subscription revenue and carriage fee.
- 3.26 The incidence of carriage and placement fee is a recent phenomenon in the MSO business. In any satellite based system the availability of transponder capacity puts a constraint on the number of channels that can be carried. Since there are large number of channels present in the market, this could lead to a situation of demand-supply mismatch. In such a scenario, the HITS operator may charge carriage and placement fee for channels to be carried on their networks. The argument in favour of control of carriage fee could be that the rapid increase in the carriage fee leads to high cost of entry for new/small channels. The argument against control of carriage fee could be that it is dependent upon multiple parameters which differs in each transaction.
- 3.27 The broadcaster's business model in HITS supply chain is based on advertisement revenue and pay channel subscription revenue, while he may have to pay carriage and placement fee to the HITS operator for carrying some of his channels on the platform. Here the cable operator collects subscription fee from the subscribers and retains a part of it. In addition the cable operator may get some revenue from the subscriber for the FTA and the ground based local channels provided by him.
- 3.28 Distribution of channels using HITS platform has many attributes of CAS cable system as well as that of DTH platform. Supply chain in HITS is similar to CAS system with the difference that the signal from HITS operator to MSO/cable operator is carried through satellite in HITS as against fibre/cables in CAS

system. The business model of CAS cable system is based on revenue share across the supply chain and the share arrangement for the pay channel subscription is 45:30:25 in respect of broadcaster, MSO and cable operator.

3.29 One of the views could be to apply, in principle, this revenue share model to HITS platform. However, the relative percentage share could be different in HITS platform. It is because of the following attributes of HITS services:

- (i) HITS being a satellite based service with nationwide footprint is easily accessible across the length and breadth of the country giving digital signals to the subscriber served through the cable operator. Also the quality and reliability of signals is likely to be better. Moreover, the HITS operator has got the responsibility of making available the set top box to the subscribers. These may prompt HITS operator to claim more revenue share as compared to corresponding MSO's share in CAS areas.
- (ii) On the other hand, cable operators has the subscriber base which provide the ready market for the HITS operator, thus, promising a low risk proposition to HITS operator for its investment. In case the HITS operator is using Ku band the reliability may not be very good during rains. Thus, cable operator may claim more revenue share as compared to corresponding cable operator's share in CAS areas.

3.30 The other view could be that the tariff for HITS operations in non-CAS areas should be on the lines of the tariff model prevailing for DTH services. As far as HITS and DTH services are concerned both are digital satellite based addressable services with all India presence. Both the systems involve content aggregation, compression, encryption, digital modulation and uplinking/downlinking through satellite. The difference in the supply chain is that DTH operator's signal reaches directly upto the subscriber whereas in HITS, an additional distribution entity i.e. cable operator carries the signal from HITS operator to the subscriber.

3.31 As mentioned earlier, Hon'ble TDSAT vide its Order dated October 10, 2008 in Petition No. 206-C of 2008 has stated that as an interim measure, M/s Star-DEN will supply its channels on bouquet/ *a la carte* basis, at DTH RIO terms and rates filed by M/s Star-DEN with TRAI. One of the stakeholder has mentioned that some of the broadcasters are supplying signals to HITS operator at the same rate as that for DTH operator. However, the stakeholder goes on to say that HITS operator should get content at lower price compared to DTH operator as in the case of HITS there is one more entity i.e. the cable operator, in the supply chain. Further, this may enable HITS services to compete effectively with the other addressable services and bring-in early roll out of digitalisation of TV services largely transforming the existing analog connections to digital addressable system. This will also enable MSO/Cable operators to give additional value added services on cable thus achieving a larger goal of quick digital transformation of existing analog cable network. So this stakeholder suggested view is that HITS operator be entitled to receive content at discounted price for its catalytic role in the digitalization process of non CAS areas.

3.32 From broadcasters perspective the counter view could be that as compared to DTH setup, the HITS operator does not have the burden of maintaining the operational field staff for upkeep of its services as this aspect is taken care off by the respective cable operators. Thus the HITS operator saves on operational expenses, and so should share a part of its revenue with the cable operator (the additional entity in the supply chain) without affecting the revenue share of the broadcaster.

3.33 In view of above the issues for consultation are:

1. **Can the tariff model for HITS services be based on CAS model ? If yes,**
 - a. **What should be the revenue shares of Broadcaster, HITS operator, and Cable operator?**
 - b. **What should be the retail tariff (i.e. tariff for subscribers) for pay channels**

- c. **Should there be any minimum tariff for the subscribers? If so, how much should it be and what should be the basic service provided under this?**
2. **Can the tariff model for HITS services be based on DTH and/or Non-CAS model? If yes,**
 - a. **Should the wholesale tariff (i.e. Broadcaster to HITS operator) be a percentage of the wholesale tariff in non-CAS areas? If yes, what should be the percentage and why?**
 - b. **How should the retail tariff in this model be regulated? Should it be affordability linked as in Non-CAS or forbearance as in DTH or any other method?**
3. **Would you like to suggest any other model to regulate the tariff for HITS service? If yes, please give details.**
4. **Should the carriage and placement fee be regulated? If yes, how should it be regulated?**
5. **Should the quantum of carriage and placement fee be linked to some parameters? If so, what are these parameters and how can they be linked?**
6. **Can a cap be placed on the quantum of carriage and placement fee? If so, how should the cap be fixed?**

Chapter 4

Summary of Issues for Consultation

The issues for consultation are:

Note: 1) Please support your comments with detailed reasoning

1. **Are the proposed amendments to the Interconnect Regulations to implement HITS policy in order?**
2. **What further amendments are required to implement HITS policy?**
3. **Can the tariff model for HITS services be based on CAS model? If yes¹,**
 - 3.1 **What should be the revenue shares of Broadcaster, HITS operator, and Cable operator?**
 - 3.2 **What should be the retail tariff (i.e. tariff for subscribers) for pay channels?**
 - 3.3 **Should there be any minimum tariff for the subscribers? If so, how much should it be and what should be the basic service provided under this?**
4. **Can the tariff model for HITS services be based on DTH and /or Non-CAS model? If yes¹,**
 - 4.1 **Should the wholesale tariff (i.e. Broadcaster to HITS operator) be a percentage of the wholesale tariff in non-CAS areas? If yes, what should be the percentage and why?**
 - 4.2 **How should the retail tariff in this model be regulated? Should it be affordability linked as in Non-CAS or forbearance as in DTH or any other method?**

¹ In the model where HITS operator is only a passive infrastructure provider, HITS operator will get replaced with 'MSO who is using HITS platform for distribution of signals.'

5. **Would you like to suggest any other model to regulate the tariff for HITS service? If yes, please give details.**
6. **Should the carriage and placement fee be regulated? If yes, how should it be regulated?**
7. **Should the quantum of carriage and placement fee be linked to some parameters? If so, what are these parameters and how can they be linked?**
8. **Can a cap be placed on the quantum of carriage and placement fee? If so, how should the cap be fixed?**
9. **Stakeholders are free to raise any other issue that they feel is relevant to the consultation and give their comments thereon.**

**GUIDELINES FOR PROVIDING HEADEND-IN-THE-SKY (HITS)
BROADCASTING SERVICE IN INDIA**

INTRODUCTION:

The Ministry of Information and Broadcasting, Government of India has formulated the policy guidelines for grant of Permission to establish and operate "Headend in the Sky (HITS)" broadcasting service from India.

Companies desirous of establishing and operating Headend in the Sky (HITS) Service platform shall be required to obtain Permission from the Ministry of Information and Broadcasting in accordance with the terms and conditions prescribed under these guidelines.

Headend-in-the-Sky (HITS) Broadcasting Service, refers to the multichannel downlinking and distribution of television programme in **C-Band or Ku Band**, wherein all the pay channels are downlinked at a central facility (Hub/ Teleport) and again uplinked to a satellite after encryption of channels. At the cable headend these encrypted pay channels are downlinked using a single satellite antenna, transmodulated and sent to the subscribers by using a land based transmission system comprising of infrastructure of cable/optical fibres network.

After obtaining a HITS license from the Ministry of Information & Broadcasting, the HITS operator can himself contract with different broadcasters for buying the content, aggregating the same at an earth station and then uplinking with his own encryption to a satellite hired by him. The uplinked channels can then be downlinked by the cable operators using a dish antenna for onward distribution through last mile conventional cable network to the TV homes. In this model, the HITS operator works like a conventional MSO, except that virtually the head-end is in the sky, instead of being located on ground.

The HITS operator can also decide to merely provide passive infrastructure facilities like transponder space on satellite, earth station facilities and the provision for simulcrypting/multicrypting of channels aggregated by different MSOs with different encryption systems to one or more MSOs or to a consortium of cable operators /MSOs desirous of uplinking TV channels to his HITS satellite for downlinking and further transmission to the TV homes by the cable operators across the country. The HITS operator in this case need not contract with the broadcasters for content. He only enters into contracts with one or more MSOs or consortium of cable

operators desirous of uplinking their aggregated channels from HITS earth station(s) to the HITS satellite.

The HITS operator has the freedom to use his satellite's transponder capacity both for transmitting his own aggregated content, as well as to provide passive infrastructure to other MSOs for uplinking/downlinking their aggregated content.

The permission of the existing two permission holders who have been given permission to provide HITS services in the year 2003 will continue for the remaining period of permission and operationalisation of HITS services may be done by them as per terms and conditions laid down in these guidelines.

1. ELIGIBILITY CRITERIA

1.1 The applicant seeking permission for providing HITS services shall be a Company registered in India under the Companies Act, 1956.

1.2 The Company should have a minimum Net worth of Rs Ten crores. The Net Worth shall be calculated as per the proforma specified and shall be certified by the Statutory Auditor of the company.

1.3 The total direct and indirect foreign investment including portfolio and foreign direct investments into the company shall not exceed 74% at the time of application and during the currency of permission.. The methodology of calculation of the direct and indirect foreign investments would be as per the extant policy of the Government. The company will be required to disclose the status of such foreign holding and certify that the foreign investment is within the ceiling of 74% on yearly basis.

1.4 FDI upto 49 per cent will be on automatic route. The approval of the Foreign Investment Promotion Board (FIPB) shall be required for FDI in the company/Indian promoters/investment companies including their holding companies if it has a bearing on the overall ceiling of 74 per cent.

1.5 The company shall make full disclosure, at the time of application, of Shareholders Agreements, Loan Agreements and such other Agreements that are finalized or are proposed to be entered into. Any subsequent changes in these would be disclosed to the Ministry of Information and Broadcasting, within 15 days of any changes, having a bearing on the foregoing Agreements.

1.6 Broadcasting Company(ies) and/or DTH licensee company(ies) will not be allowed to collectively hold or own more than 20% of the total paid up equity in the company at any time during the permission period. Simultaneously, the HITS permission holder should not hold or own more than 20% equity share in a broadcasting company and/or DTH licensee company. Further, any entity or person holding more than 20% equity in a HITS permission holder company shall not hold more than 20% equity in any other Broadcasting Company(ies) and/or DTH licensee

and vice-versa. This restriction, however, will not apply to financial institutional investors. However, there would not be any restriction on equity holdings between a HITS permission holder company and a MSO/cable operator company.

1.7 While determining the shareholding of a Company or entity or person as per para 1.6 above, both its direct and indirect shareholding will be taken into account. The principle and methodology to determine the level of indirect holding shall be the same as has been adopted in Press Note 2 of 2009 dated 13.2.09 of the Department of Industrial Policy and Promotion under the Ministry of Commerce and Industry for determination of indirect foreign investment.

2. NUMBER OF PERMISSIONS:

There will be no restrictions on the total number of HITS permissions and these will be issued to any company which fulfils the eligibility criteria & necessary terms and conditions and subject to the security and technical clearances by the appropriate authorities of the Government.

3. PERIOD OF PERMISSION

3.1 Permission for providing the HITS Service will be valid for a period of Ten years from the date of issue of wireless operational license (WOL) by the Wireless Planning and Coordination Wing of the Ministry of Communications and Information Technology.

3.2 The permission may be terminated earlier as provided in paras 10 and 13..

3.3 The permission granted to the company shall be non-transferable except with specific and prior approval of the Government.

4. NON REFUNDABLE ENTRY FEES AND OTHER FEES

4.1 The applicant will be required to pay a non-refundable entry fee of Rs.10 crores.

4.2 No annual fee will be required to be paid.

4.3 The company/permission holder shall also in addition pay the license fee and royalty for the spectrum used as prescribed by Wireless Planning & Coordination Authority (WPC), under the Department of Telecommunications.

5. BANK GUARANTEE

5.1 The applicant company shall, within one month of the issuance of SACFA clearance by WPC, submit to the Ministry of I & B, a Bank Guarantee from any

Scheduled Bank in the format notified, for an amount of Rs.40 crores valid for a period of three years.

5.2 The HITS permission holder should commence uplinking/downlinking operations within a period of one year from the date of issuance of SACFA clearance by the WPC after obtaining Wireless Operational License failing which half of the bank guarantee would be forfeited.

5.3 If the operator does not start the service within two years from the date of issuance of SACFA clearance by the WPC, the full performance bank guarantee will be forfeited and action for revocation of the permission will also be considered on completion of two years from the date of issuance of SACFA clearance by the WPC.

5.4 If the HITS permission holder fulfils the roll out obligation within one year of issuance of SACFA clearance by the WPC, then full amount of performance bank guarantee will be refunded. If the HITS permission holder meets the roll out obligation after one year but within two year of the issuance of SACFA clearance by the WPC, then half of performance bank guarantee will be refunded.

6. BASIC CONDITIONS AND OBLIGATIONS

6.1 The majority of Directors on the Board of the Company shall be Indian Citizens. The Company, Directors, Managing Director, Chief Executive Officer(CEO), and Chief Financial Officer (CFO) will be required to be security cleared from the Ministry of Home Affairs. The company shall give without fail intimation to Ministry of I & B regarding change in the directorship, key executives or foreign direct investment in the company, within 15 days of such a change taking place.

6.2 No permission holder shall carry or include in his HITS Service any television broadcast or channel which has not been registered by the Ministry of Information and Broadcasting for being viewed within the territory of India. Notwithstanding any agreement entered into between the permission holder and broadcaster(s)/ TV channel owner(s), the permission holder shall stop from carrying/ including in its HITS service, TV channels, whenever such registration/permission is withdrawn

6.3 The permission holder shall not carry any channels broadcast of which is prohibited by the Ministry of Information & Broadcasting.

6.4 The company shall not carry the channels of a broadcaster against whom the competent authority or any regulatory body, tribunal or court have found the following: -

(i) It has refused access on a non-discriminatory basis to another broadcasting service provider contrary to the rules, regulations etc. governing the broadcasting services in India

(ii) It has violated the provisions of any law relating to competition including the Competition Act.

[Explanation: It shall be the sole responsibility of the permission holder to ascertain before carrying any channels on its network whether any television channel broadcaster has been found to be in violation of the above conditions or not. In respect of TV channels already being carried on the platform, the permission holder shall ascertain from every source including the Government, TRAI, Tribunal or a Court whether concerned broadcaster or the channel is in violation of the above conditions. If any violation so comes to its notice, the permission holder shall forthwith discontinue carrying the television channels of such broadcaster.]

6.5 The permission holder shall ensure that each of the channels carried by it follows the Programme Code and Advertisement Code as laid down under the Cable Television Networks (Regulation) Act, 1995 and the Rules framed thereunder or any other code made applicable.

6.6 The permission holder shall invariably ensure that the subscribers of the service do not have access to any pornographic channel or to secret/ anti-national messaging and the like through the HITS platform. If the permission holder fails to do so , the permission granted shall be revoked and the company shall be disqualified to hold any such Permission in future for a period of five years, apart from liability for punishment under other applicable laws.

6.7 The permission holder shall ensure that its facilities are not used for transmitting any objectionable content, messages or communication inconsistent with the laws of India. If the permission holder fails to do so, the permission granted shall be revoked and the company shall be disqualified to hold any such Permission in future for a period of five years, apart from liability for punishment under other applicable laws.

6.8 The permission holder shall provide access to various content providers/channels on a non discriminatory basis.

6.9 The permission holder shall not enter into any exclusive contract for distribution of TV Channels.

6.10 The permission holder shall comply with the terms and conditions of Wireless Operational License to be issued by the WPC Wing, Ministry of Communications & IT.

6.11 The Company shall ensure its continued eligibility as applicable throughout the period of permission and adhere to all the terms and conditions of the permission, failing which the company shall be liable for penalty as specified in Para 14.2 below.

6.12 The government shall have the right to notify the number and names of television channel or channels of Prasar Bharati or any other television channel for

compulsory carriage by the HITS provider in his service and the manner of reception and retransmission of such channels.

6.13 The Permission Holder shall carry other television channels of Prasar Bharati on the most favorable financial terms offered to any other channel.

7. MANDATORY SHARING OF CERTAIN BROADCAST SIGNALS WITH PRASAR BHARATI

7.1 The permission holder shall ensure that channels carried by and telecasting sporting events have ensured compliance with the provisions of Sports Broadcasting Signals (Mandatory Sharing with Prasar Bharti) Act, 2007.

8. TECHNICAL STANDARDS AND OTHER OBLIGATIONS

8.1 The applicant company shall furnish technical details such as Nomenclature, make, model, name and address of the manufacturers of the equipments/instruments to be used for broadcasting, distribution and reception system, the Block schematic diagram and also demonstrate the facilities for monitoring and storing record for 90 days.

8.2 The company can uplink in '**C**' Band or '**Ku**' Band only. Uplinking would be permitted both to Indian as well as foreign satellites. However, where the company does not have a satellite of its own or of its group company, proposals envisaging use of Indian satellites will be accorded preferential treatment. Satellite to be used should have been coordinated with INSAT System.

8.3 The HITS operator is required to provide signals directly from his satellite only to the registered MSOs/cable operators and under no circumstances should the HITS operator provide signals directly from his satellite to the consumer. However, he will not be barred from providing signals, through his own cable network if any, to consumers also after first downlinking the signals to his terrestrial receiving station. The signals are to be provided only through QAM set top box.

8.4 The company is required to provide commercial interoperability with respect to its set top boxes so that if the subscribers decide to switch over to any other service provider or platform they should be able to do so at least cost. Commercial interoperability here would mean that in addition to offering the receiver set on an outright purchase basis, a subscriber should also have the option to purchase it on a hire-purchase basis or rental basis with a provision to return the set top box on such terms and conditions as may be laid down by regulations issued by TRAI.

8.5 The addressability provided to every subscriber should be capable of blocking any unwanted channel or group of channels by the Permission Holder.

8.6 The company shall ensure subscriber's interests through a Subscriber Management System (SMS) for an efficient, responsive and accurate billing and collection system.

8.7 The company shall not use any equipment, which is identified as unlawful/or render network security vulnerable.

8.8 All content provided by the HITS service provider to the subscribers, irrespective of its source, shall pass through the encryption and digital addressable system located within the earth-station situated on Indian soil.

9. MONITORING AND PUBLIC COMPLAINTS

9.1 The company at its own cost shall,

(i) Preserve the recordings of broadcast material for a period of three months from the date of broadcast and produce the same to the Government or its authorized representative, as and when required and

(ii) On demand by the Government or its authorized representative, provide the necessary equipment, services and facilities at designated place(s) for continuous monitoring of the broadcasting service by or under supervision of the Government or its authorized representative.

9.2 The company shall submit such information with respect to its services as may be required by the Government or its authorized representative, in the format as may be required, from time to time.

10. INSPECTION

10.1 The Government of India, Ministry of Information & Broadcasting or its authorized representative shall have the right to inspect the broadcasting facilities. No prior permission/intimation shall be required to exercise the right of Government or its authorized representative to carry out the inspection. The company will, if required by the Government or its authorized representative, provide necessary facilities for continuous monitoring for any particular aspect of the companies activities and operations.

10.2 The Government of India, Ministry of Information & Broadcasting or its authorized representative will ordinarily carry out the inspection after reasonable notice except in circumstances where giving such a notice will defeat the very purpose of the inspection.

11. NATIONAL SECURITY AND OTHER CONDITIONS

11.1 The Government of India, Ministry of Information & Broadcasting shall have the right to take over the entire services and networks of the permission holder or

revoke/terminate/suspend the permission of the company or to prohibit broadcasting of any or all of the channels for a specified period in the interest of national security or in the interest of emergency or war or low intensity conflict without giving prior notice to the company. The company shall immediately comply with any directives issued in this regard failing which the permission granted shall be revoked and the company disqualified to hold any such Permission in future for a period of five years.

Provided that any taking over or suspension of licence, issuance of a directive as described above shall neither be a ground for extension of licence period nor any compensation.

11.2 The company shall not use any equipment, which is identified as unlawful and/or render network security vulnerable.

11.3 Permission holder shall be required to obtain security clearance of all foreign personnel likely to be deployed for more than 60 days in a year by way of appointment, contract, and consultancy or in any other capacity for installation, maintenance, operation or any other services prior to their deployment.

11.4 The permission shall be subject to permission holder remaining security cleared throughout the currency of permission. In case the security clearance is withdrawn the permission granted is liable to be terminated forthwith.

11.5 In the event of security clearance of any of the persons associated with the permission holder or foreign personnel is denied or withdrawn for any reasons whatsoever, the permission holder will ensure that the concerned person resigns or his services terminated forthwith after receiving such directives from the Government failing which the permission granted shall be revoked and the company shall be disqualified to hold any such Permission in future for a period of five years.

12. VALUE ADDED SERVICES

12.1 The permission holder shall be able to use his network for providing other value-added services which otherwise do not require any specific license or permission. Services which require a specific license or permission from the competent authority can only be provided after obtaining such permission. However the permission holder is required to give prior information of all value added services to be carried by it to the Ministry of Information and Broadcasting.

13. PROVISIONS WITH RESPECT TO EXISTING PERMISSION HOLDERS:

13.1 Notwithstanding anything contained in the terms and conditions of permission issued earlier, these Guidelines will also be applicable to the existing permission holders.

13.1.1 The existing permission holders will be allowed to operationalise their services only after they give an undertaking supported by its Board resolution to Ministry of Information and Broadcasting to ensure compliance with all the provisions contained in the Guidelines within a period of three months from the issuance of these Guidelines which period may, at the discretion of the Government, be extended to a maximum of six months.

13.1.2 Existing permission holder will within a period of one month of the issuance of these Guidelines also submit a detailed plan for ensuring compliance to the provisions contained in guidelines. The existing permission holder will also have to deposit the non-refundable entry fee of Rs. 10 crores and submit proof of such deposition.

13.1.3 If compliance to provisions of 13.1.1 and 13.1.2 is not ensured by the existing permission holder within the stipulated time period the permission given earlier shall stand withdrawn.

13.1.4 The period of permission shall be ten years from the date of issuance of permission by Government of India as per para 13.1.1 and 13.1.2.

14. TERMINATION OF PERMISSION

14.1 Consequences of violation of terms and conditions of the Permission

14.1.1 Subject to the provisions contained in paras 6.6, 6.7, 11.1, 11.4, 11.5 and 14.2 in the event of the company violating any of the terms and conditions of Permission, the Government shall have the right to impose the following penalties:

(a) In the event of first violation, suspension of the Permission and prohibition of broadcast up to a period of 30 days.

(b) In the event of second violation, suspension of the Permission and prohibition of broadcast up to a period of 90 days.

(c) In the event of third violation, revocation of the Permission and prohibition of broadcast up to the remaining period of the Permission.

(d) In the event of the failure of the Permission Holder to comply with the penalties imposed within the prescribed time, revocation of Permission and disqualification to hold any fresh Permission in future for a period of five years.

14.1.2 In the event of suspension/revocation of Permission, the Government shall not be responsible for any investment by the Permission Holder on the service or by any other party on the strength of his permission.

14.1.3 Any suspension/revocation mentioned under this para shall be imposed only after giving a written notice to the company identifying the violation, providing opportunity to rectify it, if its nature so permits or otherwise show cause, within a period of 15 days and non-satisfaction from such rectification and/or cause so shown shall render the company liable for the proposed suspension/revocation.

14.2 Termination for Non eligibility

14.2.1 The Government may, at any time, terminate this Agreement and the Permission, without compensation to the Permission Holder in case the company fails to meet the eligibility criteria as laid down in these Guidelines or its security clearance is withdrawn or liquidation proceedings are initiated or becomes bankrupt or otherwise insolvent or applies for being adjudicated insolvent / bankrupt, provided that such termination shall not prejudice or affect any right of action which has accrued or will accrue thereafter to the Government.

14.3 Termination for convenience

14.3.1 The company may surrender the Permission, by giving an advance notice of one month to the Government as well as to all concerned/affected parties. It is clarified that the Company will not be entitled to claim any refund of the non-refundable Entry Fee already paid to the Government.

15. WPC WING'S PERMISSION

15.1 As aforementioned, a separate specific license i.e. Wireless Operational License (WOL), shall be obtained by the applicant company from the WPC Wing of Ministry of Communications &IT, permitting utilization of appropriate frequencies/band for the establishment, maintenance and operation of the HITS platform/facility under usual terms and conditions of such license. The Grant of such License shall be governed by the rules, procedures and guidelines and shall be subject to compliance with all requirements of the WPC wing.

15.2 For this purpose, an application shall be made to the "Wireless Advisor to the Government of India, WPC Wing, Department of Telecommunications, Ministry of Communications &IT," in the prescribed application form.

15.3 License fee/royalty as prescribed by WPC from time to time, shall have to be paid by the company towards grant of License for usage of frequency spectrum.

15.4 The company shall not cause harmful interference to other authorized users of radio spectrum. WPC Wing will have the sole discretion to take practicable and necessary steps for elimination of harmful interference, if any, to other licensed users.

15.5 The Wireless Planning and Coordination Wing, Ministry of Communications & IT shall have the right to inspect from time to time the installation from technical angles to check conformity with Wireless Operational License conditions.

16. PROCEDURE FOR APPLICATION AND GRANT OF PERMISSION:

16.1 All applicant companies shall apply to the Secretary, Ministry of Information & Broadcasting, in triplicate, in the prescribed proforma alongwith a processing fee of Rupees One Lakh

16.2 On the basis of information furnished in the application form, if the applicant is found eligible for setting up of HITS service in India, the application will be subjected to security clearance of the company, Board of Directors, Managing Director, CEO and CFO in consultation with the Ministry of Home Affairs and for clearance of satellite use with the Department of Space.

16.3 After these clearances are obtained, the applicant would be required to pay a Non-Refundable Entry Fee of Rs.10 Crores to the Ministry of Information and Broadcasting.

16.4 After such payment of entry-fee, the applicant would be informed of intent of Min. of I & B to issue permission and requested to approach WPC for SACFA clearance.

16.5 After obtaining SACFA clearance, within one month of the same, the company will have to submit a Bank guarantee in desired format from any Scheduled Bank to the Ministry of Information and Broadcasting for an amount of Rs.40 crores valid for a period of three years.

16.6 After submission of this Bank Guarantee, the applicant would be required to sign a Grant of Permission Agreement with the Ministry of Information and Broadcasting as per prescribed proforma .

16.7 Thereafter the Ministry of Information and Broadcasting will issue permission to the applicant to provide HITS services in the country in accordance with the terms and conditions of the GOPA.

16.8 After signing of such agreement with the Ministry of Information and Broadcasting, the applicant will have to apply to the Wireless Planning & Coordination (WPC) Wing of the Ministry of Communications for seeking Wireless Operational License for establishment, maintenance and operation of HITS services.

16.9 All kinds of fees and other dues payable to the Government shall be deposited in the form of Demand Draft in favor of PAY & ACCOUNTS OFFICER, MINISTRY OF INFORMATION & BROADCASTING payable at New Delhi.

17. DISPUTES WITH OTHER PARTIES

17.1 In the event of any dispute between the company and any party other than the Government (including in relation to the Permission and/or Broadcasting services, etc) due to any reason whatsoever, it shall be the sole liability of the company to resolve such dispute amicably or otherwise with the other party and the Government shall have no liability whatsoever in this regard. Further, the company shall undertake to fully indemnify and keep the Government harmless in respect of any action, claim, suit, proceeding, damage or notice to/against the Government for any act of omission or commission on the part of the company, its agents, employees, representatives or servants.

Provided that if any such third party dispute arises on account of non-observance or breach of any rules or regulations or any other terms and conditions of permission by the company as provided, the Government shall also have the right to take any action against the company as provided herein.

18. DISPUTE RESOLUTION AND JURISDICTION

18.1 In the event of any question, dispute or differences arising between the Central Government and the company with respect to permissions issued under these Guidelines, the same shall be resolved before Telecom Disputes Settlement and Administrative Tribunal as per the provisions of Telecom Regulatory Authority of India Act, 1997.

18.2 The courts at New Delhi shall have the jurisdiction over all disputes.

19. MISCELLANEOUS

19.1 The grant of Permission/registration shall be subject to the condition that as and when any regulatory authority to regulate and monitor the Broadcast Services in the country is constituted, the company shall adhere to the norms, rules and regulations laid down by such authority.

19.2 The Permission/registration shall be governed by the provisions of the Telecom Regulatory Authority of India Act, 1997, Indian Telegraph Act, 1885 and Indian Wireless Telegraphy Act, 1933 as amended from time to time and any other law as applicable to broadcasting facilities/services which has or may come into force.

19.3 The Government, Ministry of Information and Broadcasting shall have the right to modify at any time the provisions of these guidelines and/or the terms and conditions of permission, if in the opinion of the Government it is necessary or expedient to do so in public interest or in the interest of the security of the State. The decision of the Government shall be final and binding in this regard.

रघु मन्नन
सचिव
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GOVERNMENT OF INDIA
MINISTRY OF INFORMATION & BROADCASTING
NEW DELHI-110115

D.O.No.9/2/2005-BP&L Vol.III

10th December, 2009


Dear Shri Sarma,

In pursuance of the Union Cabinet decision dated 12.11.2009 the Ministry has issued an order on 26.11.2009 (copy enclosed) to make the HITS policy functional. The detailed policy guidelines are available on the website (www.mib.nic.in) of the Ministry.

2. In view of HITS policy coming into force, TRAI is requested to revisit the interconnection regulations, tariff orders and quality of service regulations etc. in order to take a view if there is any amendment required in the interest of the service so that the benefits of the policy can be fully achieved.

With kind regards,

Yours sincerely,


(Raghu Menon)

Shri J.S. Sarma,
Chairman
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan
Jawahar Lal Nehru Marg (Old Minto Road)
New Delhi.

THE CABLE TELEVISION NETWORKS RULES, 1994

(29th September, 1994) (as amended upto 31.7.2007).

2. Definitions - In these rules unless the context otherwise requires:-

(a) "Authority" means the Telecom Regulatory Authority of India established under sub-section (1) of section 3 of the Telecom Regulatory Authority of India Act;

(aa) "Broadcaster" means any person including an individual, group of persons, public or body corporate, firm or any organization or body who/which is providing programming services and includes his/her authorized distribution agencies;

(aaa) "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 networks;

(b) "cable service" means the transmission by cables of programmes including re-transmission by cables of any broadcast television signals;

(c) "cable television network" means any system consisting of a set of closed transmission paths and associated signals generation, control and distribution equipment, designed to provide cable service for reception by multiple subscribers;

(d) "company" means a company defined in section 3 of the Companies Act, 1956;

(e) "form" means form appended to these rules;

(eee) "Notified area" means any area notified by the Central Government under section 4 (A) of the Act;

(f) "person " means -

(i) an individual who is a citizen of India;

(ii) an association of individuals or body of individuals, whether incorporated or not, whose members are citizens of India;

(iii) a company in which not less fifty-one percent of the paid-up share capital is held by the citizens of India :

(g) “programme” means any television broadcast and includes;

(i) exhibition of films, features, dramas, advertisements and serials through video cassette recorders or video cassette players;

(ii) any audio or visual or audio-visual live performance or presentation; and the expression “programming service” shall be construed accordingly;

(h) “registering authority” means the registering authority notified under clause (h) of section 2 of the Cable Television Networks (Regulation) Ordinance 1994;

(i) “subscriber” means a person who receives the signal of cable television network at a place indicated by him to the cable operator, without further transmitting it to any other person.

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11. Grant of permission to multi-system operators to provide cable services with addressable systems in the notified areas. —

(1) No multi-system operator shall provide cable television network services with addressable systems in any one or more notified areas without a valid permission from the Central Government under sub-rule 3 of rule 11.

(2) Every multi-system operator who desires to provide cable television network services with addressable systems in any of the notified areas, shall, within thirty days of the issue of the notifications under section 4 A of the Act by the Central Government, apply for permission to the Ministry of Information & Broadcasting in Form 6 annexed to these Rules, along with processing fee of rupees ten thousand.

(3) The Ministry of Information & Broadcasting in the Government of India shall, within thirty days of the receipt of the application, grant, or refuse, permission to the applicant to provide addressable systems in the notified areas after considering its suitability or otherwise on the basis of information given in respect of its existing operational area, actual number of subscribers and addresses of its local cable operators in each of the notified areas, commercial arrangements with the broadcasters and local cable operators, if any, financial strength, management capability, security clearance and preparedness to supply and maintain adequate number of set top boxes for its subscribers, installation of its subscriber management system and compliance with all other quality of service standards as may be specified by the Authority.

(4) The Central Government may lay down such terms and conditions of permission under sub-rule (3) as may be deemed necessary and desirable to ensure compliance with the provisions of this Act as well as the regulations, directions and orders made by the Authority.

(5) No multi-system operator shall continue to provide any cable television network services in the notified areas after the date notified therein, without obtaining prior permission from the Central Government.

(6) In the event of a multi-system operator who fails or refuses to enter into an interconnection agreement with a broadcaster of a pay channel or an adequate number of local cable operators in the notified areas or who violate of the terms and conditions of the permission granted to it under sub-rule (3), within the time limit as prescribed by the Authority, the Authority may, so as to protect the interests of the subscribers, take interim measures to ensure supply of signals.

(7) In the event of a violation by a multi-system operator of one or more of the terms and conditions of the permission granted under sub-rule (3), the Central Government may suspend or revoke such permission for such period and for such notified areas as deems fit: Provided that no such order of suspension or revocation shall be made without giving a reasonable opportunity to the multi-system operator to explain its position.

**THE TELECOMMUNICATION (BROADCASTING AND CABLE SERVICES)
INTERCONNECTION (FIFTH AMENDMENT) REGULATIONS, 2009**

Dated: 17th March, 2009

Schedule III

**Terms and conditions which should compulsorily form part of
Reference Interconnect Offers for interconnection for the
direct to home platform and for other addressable platforms**

Licence Fee	<p>For each month or part thereof during the Term of the agreement, the DTH operator shall pay to _____ (name of the Broadcaster) the Monthly Licence Fee which shall be the Rate multiplied by the Monthly Average Subscriber Level.</p> <p>The a-la-carte and bouquet "Rate" per Subscriber is set out in Annexure to this RIO. The rates mentioned in the Annexure to this RIO, as referred to above, are exclusive of all taxes and levies.</p> <p>The "Monthly Average Subscriber Level" is equal to the sum of the number of subscribers on the first and last day of the month in question divided by two.</p> <p>For the purpose of calculation of the Monthly License Fee payable to _____ (name of the Broadcaster), "Subscriber" means, for any calendar month, each Set Top Box, which is availing the Channel(s) of _____ (name of the Broadcaster)</p>
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through the DTH operator.

Calculation of License Fee:

I. In case a DTH operator avails one or more Bouquet(s) of _____ (name of the Broadcaster):

(a) If the DTH operator is providing the Bouquet(s) as a whole to its DTH subscribers, the Monthly License Fee for such Bouquet(s) shall be equal to the Bouquet rate as set out in the Annexure multiplied by the number of monthly average number of subscribers availing the Bouquet(s).

(b) if the DTH operator does not offer such opted bouquet(s) as a whole to its direct to home subscriber but offers only certain channels comprised in such bouquet or packages the channels comprised in such opted bouquet in a manner resulting in different subscriber base for different channels comprised in such opted bouquet, then the payment to _____ (name of the Broadcaster) for such entire opted bouquet by the DTH operator, shall be calculated on the basis of subscriber base for the channel which has highest subscriber base amongst the channels comprised in the bouquet.

II In case a DTH operator avails one or more or all channels of _____ (name of the Broadcaster) on ala carte rate basis:

(a) If the DTH operator is providing the channels on ala carte basis to its DTH subscribers, the Monthly License Fee for such ala carte channels shall be equal to the ala carte rate as set out in the Annexure multiplied by the number of monthly average number of subscribers availing the channels on ala carte basis.

(b) if the DTH operator does not offer such opted ala carte

	<p>channel(s) as ala carte to its direct to home subscriber but offers the ala carte channel (s) in packages, then the payment to _____ (name of the Broadcaster) for each of the ala carte channels, shall be calculated on the basis of subscriber base of the package in which such opted ala carte channel has been placed.</p> <p>III In case a DTH operator avails one or more channels on ala carte rate basis and also opts for different Bouquet(s) not comprising of channels opted on ala carte basis of _____ (name of the Broadcaster):</p> <p>(a) For bouquet(s), the monthly license fee shall be calculated on the basis of sub clause I above.</p> <p>(b) For ala carte channels, the monthly license fee shall be calculated on the basis of sub clause II above.</p> <p>Payment of the License Fee shall be subject to deduction of any withholding tax/ TDS in accordance with the provisions of the Indian Income Tax Act, 1961, as amended from time to time.</p>
<p>Payment Terms</p>	<p>The Monthly Licence Fee shall be paid monthly in arrears within fifteen (15) days of receipt of invoice raised on the basis of report of the DTH operator by _____ (name of the Broadcaster) without any deduction except deduction of withholding tax/TDS as provided in this RIO.</p> <p>Within seven days of end of each month, the DTH operator shall provide opening, closing and average number of subscribers for that month, based on which _____ (name of the Broadcaster) shall raise an invoice on the DTH operator. In case the DTH operator fails to send the report within the said period of seven days, _____ (name of the Broadcaster) shall have the right to raise a provisional invoice and the DTH operator shall be under obligation to pay the license fee on the</p>

basis of such provisional invoice in accordance with the terms of this clause. However the provisional invoice shall be for an amount not more than the monthly license fee payable by the DTH operator for the immediately preceding month. On receipt of the report from the DTH operator, the parties would conduct reconciliation between the provisional invoice raised by _____ (name of the Broadcaster) and the report sent by the DTH operator.

The DTH operator shall be required to make payments by the Due Date in accordance with the terms hereof, and any failure to do so on the part of the DTH operator shall constitute a material breach hereunder. Late payments shall also attract interest calculated from the date payment was due until the date payment is made in full at a pro rata monthly rate of ____%. The imposition and collection of interest on late payments does not constitute a waiver of the DTH operator's obligation to pay the License Fee by the Due Date, and _____ (name of the Broadcaster) shall retain all of its other rights and remedies under the Agreement.

All Licence Fee payments hereunder are exclusive of all applicable indirect taxes including all and any service taxes, VAT, works contract taxes, customs duties, excise duties, entertainment taxes and other such taxes. All such taxes shall be at DTH operator's cost and will be charged at the prevailing rates by _____ (name of the Broadcaster) to the DTH operator.

If payment of the Licence Fee is subject to deduction of any withholding tax/TDS in accordance with the provisions of the Indian Income Tax Act 1961, as amended, the DTH operator shall provide tax withholding certificates to _____ (name of the Broadcaster) within such period as has been specified in the Income Tax Act/ Rules/ Notifications/ Circulars issued

	thereunder.
Delivery and Security	<p>All _____ (name of the Broadcaster) Channels must be delivered by DTH operator to subscribers in a securely encrypted manner and without any alteration.</p> <p>The uplink specifications, satellite capacity and infrastructure allocated by DTH operator in respect of the broadcast signal of the _____'s (name of the Broadcaster) Channels by DTH operator to its subscribers shall be no worse than that of the broadcast signal of any other channel within the same genre on its DTH platform.</p>
Anti- Piracy	<p>In order to prevent theft, piracy, unauthorized retransmissions, redistribution or exhibition, copying or duplication of any Channel, in whole or in part, (hereinafter collectively referred to as "Piracy"), the DTH operator shall, prior to the commencement of the Term of the agreement and at all times during such Term, employ, maintain, and enforce fully effective conditional access delivery and content protection and security systems, and related physical security and operational procedures (hereinafter collectively referred to as the "Security Systems") as may be specified (security specifications), in a non-discriminatory manner in writing, from time to time, by the _____ (name of the Broadcaster).</p> <p>To ensure the DTH operator's ongoing compliance with the security requirements set out in the Agreement, _____ (name of the Broadcaster) may require technical audits ("Technical Audit(s)") conducted by an independent security technology auditor ("Technical Auditor"), approved by _____ (name of the Broadcaster) in writing no more than twice per year during the Term, at _____ (name of the Broadcaster)'s cost and expense. If the results of any Technical Audit are not found to be satisfactory by either the DTH operator or _____ (name of</p>

the Broadcaster), then _____ (name of the Broadcaster) shall work with the DTH Operator in resolving this issue in the next fourteen (14) business days. If a solution is not reached at by then, _____ (name of Broadcaster) may, in its sole discretion, suspend the DTH operator's right to distribute the Channels or take other actions as provided under the Agreement, until such systems, procedures and security measures have been corrected to _____ (name of the Broadcaster)'s satisfaction. DTH operator shall bear the cost and expense of any subsequent Technical Audit to verify that the systems, procedures and security measures have been corrected by the DTH operator to _____ (name of the Broadcaster)'s satisfaction.

DTH operator shall deploy finger printing mechanisms to detect any piracy, violation of copyright and unauthorized viewing of the Channels, distributed / transmitted through its Platform at least every 10 minutes on 24 x 7 x 365(6) basis.

DTH operator shall not authorize, cause or suffer any portion of any of the Channels to be recorded, duplicated, cablecast, exhibited or otherwise used for any purpose other than for distribution by DTH operator at the time the Channels are made available. If DTH operator becomes aware that any unauthorized third party is recording, duplicating, cablecasting, exhibiting or otherwise using any or all of the Channels for any other purpose, DTH operator shall within ten minutes of so becoming aware of such recording, duplicating, cablecasting, exhibiting or otherwise using any or all of the Channels for any other purpose, notify _____ (name of the Broadcaster) and the DTH operator shall also switch off the concerned Set Top Box to prevent such unauthorized use. However, use of a Set Top Box with Personal Video Recorder/Digital Video Recorder facility which has been

	<p>supplied by the DTH operator shall not be treated as unauthorized use, as long as such Set Top Box is used in accordance with the terms and conditions of the subscription agreement between the DTH operator and the subscriber.</p> <p>If so instructed by Information (as defined below) by _____ (name of the Broadcaster), the DTH operator shall shut off or de-authorize the transmission to any unauthorized subscriber/ subscriber indulging in piracy, within ten minutes from the time it receives such instruction from _____ (name of the Broadcaster). Any communication under this clause shall be considered as valid Information only if (i) the information is sent through e mail in a format as mutually agreed by the parties and (ii) the information is sent by a person(s) who is designated to send such information. However the "information" may even be provided by _____ (name of the Broadcaster) representatives through other means of communications such as telephonic message, fax etc and the said "information" shall later be confirmed by _____ (name of the Broadcaster) through e mail and the DTH operator shall be under obligation to act upon such information.</p>
<p>Reports</p>	<p>DTH operator will maintain at its own expense a subscriber management system ("SMS") which should be fully integrated with the CAS (Conditional Access System).</p> <p>DTH operator shall provide to _____ (name of the Broadcaster) complete and accurate opening and closing subscriber monthly reports for the _____ (name of the Broadcaster) Channels and the tier and/or package containing the _____ (name of the Broadcaster) Channels within seven (7) days from the end of each month in the format provided by _____ (name of the Broadcaster).</p> <p>Such reports shall specify all information required to calculate</p>

	<p>the Monthly Average Subscriber Level (including but not limited to the number of Subscribers for each _____ (name of the Broadcaster) Channel and each package in which a _____ (name of the Broadcaster) Channel is included) and the Licence Fees payable to _____ (name of the Broadcaster) and shall be signed and attested by an officer of the DTH operator of a rank not less than Head of Department/Chief Financial Officer who shall certify that all information in the Report is true and correct.</p>
<p>Audit</p>	<p>_____ (name of the Broadcaster)'s representatives shall have the right, not more than twice in a calendar year, to review and / or audit the subscriber management system, conditional access system, other related systems and records of Subscriber Management System of the DTH operator relating to the Channel(s) provided by the broadcaster for the purpose of verifying the amounts properly payable to _____ (name of the Broadcaster) under the Agreement, the information contained in Subscriber Reports and full compliance with the terms and conditions of the Agreement. If such review and or audit reveals that additional fees are payable to _____ (name of the Broadcaster), the DTH operator shall immediately pay such fees, as increased by the Late Payment Interest Rate. If any fees due for any period exceed the fees reported by the DTH operator to be due for such period by two (2) percent or more, DTH operator shall pay all of _____ (name of the Broadcaster)'s costs incurred in connection with such review and/or audit, and take any necessary actions to avoid such errors in the future.</p> <p>The DTH operator shall remain the sole owner and holder of all customer databases compiled by the DTH operator under the Agreement.</p> <p>DTH operator will maintain at its own expense a subscriber</p>

	<p>management system (“SMS”) capable of, at a minimum:</p> <p>(i) maintaining a computerised customer database capable of recording adequate details of each Subscriber, including name, address, chosen method of payment and billing;</p> <p>(ii) administering subscriptions of Subscribers by producing and distributing contracts for new Subscribers and setting up and maintaining an infrastructure whereby Subscriber contracts are collected and recorded in the SMS database for ongoing administration;</p> <p>(iii) handling all ongoing administrative functions in relation to Subscribers, including, without limitation, billing and collection of subscription payments, credit control, sales enquiries and handling of complaints;</p> <p>(iv) administering payments of any commission fees from time to time payable to the DTH operator’s authorised agents for the sale to Subscribers of programming packages;</p> <p>(v) obtaining and distributing receivers and smartcards, if applicable, to Subscribers, and issue replacement smartcards from time to time in its discretion; and</p> <p>(vi) enable new Subscribers via the SMS over-the-air addressing system and disable defaulting Subscribers from time to time in its discretion.</p>
<p>Term</p>	<p>AS mutually agreed between _____ (name of the Broadcaster) and the DTH operator subject to a minimum of One (1) Year from the date of signing of the Agreement unless terminated earlier in accordance with the Agreement.</p> <p>The Term of the Agreement may be extended on terms and conditions to be mutually agreed and recorded in writing</p>

	between the parties.
Termination	<p>Either Party has a right to terminate this Agreement by a written notice, subject to applicable Law, to the other in the event of: 1. material breach of this Agreement by the other Party which has not been cured within thirty (30) days of being required in writing to do so; 2. the bankruptcy, insolvency or appointment of receiver over the assets of the other Party; 3. The DTH licence or any other material licence necessary for DTH operator to operate its DTH service being revoked at anytime other than due to the fault of DTH operator. _____ (name of the Broadcaster) shall have the right to terminate this Agreement by a written notice to DTH operator if (i) DTH operator breaches any of the Anti Piracy Requirements and fails to cure such breach within ten (10) days of being required in writing to do so; or (ii) _____ (name of the Broadcaster) discontinues the _____ (name of the Broadcaster) Channels with respect to all distributors in the Territory and provides DTH operator with at least ninety (90) days prior written notice.</p> <p>DTH operator shall have the right to terminate this Agreement on written notice to _____ (name of the Broadcaster) if DTH operator discontinues its DTH business and provides at least ninety (90) days prior written notice.</p>
Jurisdiction	The Governing Law shall be the Indian Law and TDSAT, shall have exclusive jurisdiction in respect of any dispute between the parties, arising out of /in connection with or as a result of the Agreement.

Note: The expression “DTH operator” appearing in the Schedule above shall get replaced by the appropriate nomenclature connoting the addressable platform for which the Reference Interconnect Offer is to be issued by the broadcaster.

**Specifications for Set-Top-Boxes (STBs), Conditional Access System (CAS) &
Subscribers Management System (SMS) for implementation of
Digital Addressable Systems**

(A) STB Requirements:

1. All the STBs should have embedded Conditional Access.
2. The STB should be capable of decrypting the Conditional Access inserted by the Headend.
3. The STB should be capable of doing Finger printing. The STB should support both Entitlement Control Message (ECM) & Entitlement Management Message (EMM) based fingerprinting.
4. The STB should be individually addressable from the Headend.
5. The STB should be able to take the messaging from the Headend.
6. The messaging character length should be minimal 120 characters.
7. There should be provision for the global messaging, group messaging and the individual STB messaging.
8. The STB should have forced messaging capability.
9. The STB must be BIS compliant.
10. There should be a system in place to secure content between decryption & decompression within the STB.
11. The STBs should be addressable over the air to facilitate Over The Air (OTA) software upgrade.

(B) Fingerprinting Requirements:

1. The finger printing should not be removable by pressing any key on the remote.
2. The Finger printing should be on the top most layer of the video.
3. The Finger printing should be such that it can identify the unique STB number or the unique Viewing Card (VC) number.
4. The Finger printing should appear on all the screens of the STB, such as Menu, EPG etc.
5. The location of the Finger printing should be changeable from the Headend and should be random on the viewing device.
6. The Finger printing should be able to give the numbers of characters as to identify the unique STB and/ or the VC.
7. The Finger printing should be possible on global as well as on the individual STB basis.
8. The Overt finger printing and On screen display (OSD) messages of the respective broadcasters should be displayed by the MSO/LCO without any alteration with regard to the time, location, duration and frequency.
9. No common interface Customer Premises Equipment (CPE) to be used.
10. The STB should have a provision that OSD is never disabled.

(C) CAS & SMS Requirements:

1. The current version of the conditional access system should not have any history of the hacking.
2. The fingerprinting should not get invalidated by use of any device or software.
3. The STB & VC should be paired from head-end to ensure security.

4. The SMS and CA should be integrated for activation and deactivation process from SMS to be simultaneously done through both the systems. Further, the CA system should be independently capable of generating log of all activations and deactivations.
5. The CA company should be known to have capability of upgrading the CA in case of a known incidence of the hacking.
6. The SMS & CAS should be capable of individually addressing subscribers, on a channel by channel and STB by STB basis.
7. The SMS should be computerized and capable to record the vital information and data concerning the subscribers such as:
 - a. Unique Customer Id
 - b. Subscription Contract no
 - c. Name of the subscriber
 - d. Billing Address
 - e. Installation Address
 - f. Landline no
 - g. Mobile No
 - h. Email id
 - i. Service /Package subscribed to
 - j. Unique STB No
 - k. Unique VC No
8. The SMS should be able to undertake the:
 - a. Viewing and printing historical data in terms of the activations, deactivations etc.
 - b. Location of each and every set top box/VC unit

- c. The SMS should be capable of giving the reporting at any desired time about:
 - i. The total no subscribers authorized
 - ii. The total no of subscribers on the network
 - iii. The total no of subscribers subscribing to a particular service at any particular date.
 - iv. The details of channels opted by subscriber on a-la carte basis.
 - v. The package wise details of the channels in the package.
 - vi. The package wise subscriber numbers.
 - vii. The ageing of the subscriber on the particular channel or package.
 - viii. The history of all the above mentioned data for the period of the last 2 years.
9. The SMS and CAS should be able to handle at least one million concurrent subscribers on the system.
10. Both CA & SMS systems should be of reputed organization and should have been currently in use by other pay television services that have an aggregate of at least one million subscribers in the global pay TV market.
11. The CAS system provider should be able to provide monthly log of the activations on a particular channel or on the particular package.
12. The SMS should be able to generate itemized billing such as content cost, rental of the equipments, taxes etc.
13. The CA & SMS system suppliers should have the technical capability in India to be able to maintain the system on 24x7 basis throughout the year.
14. CAS & SMS should have provision to tag and blacklist VC numbers and STB numbers that have been involved in piracy in the past to ensure that the VC or the STB can not be re-deployed.