

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

**ISSUES FOR**

**CONSULTATION**

- 1. Are the figures in Annexure B3 representative for the different genres of broadcasters? If not, what according to you are the correct representative figures? When providing representative figures, please provide figures for the genre, and not of your company.**

The revenue generated @ Rs 165/- subscriber per per month for 50% cable homes works out to nearly 7900 crores annually. Revenue in annex B-3 is lower than that figure. Hence these figures are suspect. Comments on genre are difficult because of prevailing practices of bundling and non-availability of SMS based authentic MIS on customer choices. .

- 2. Are the figures in Annexure B5 representative for aggregators? If not, what according to you are the correct representative figures? When providing representative figures, please provide figures for the category, and not of your company.**

Aggregator provides bundling and negotiation services for subscription revenue on behalf of the broadcasters. This term was non-existent in earlier glossary of TRAI on Cable Matters. In practice, this category is a part of the Broadcasters and are NOT recognized by Cable TV operators. Further not all broadcasters distribute through aggregators Most broadcasters undertake distribution on a standalone basis.  
No comments can therefore be offered.

- 3. Are the figures in Annexure B7 representative for the national MSOs? If not, what according to you are the correct representative figures? When providing representative figures, please provide figures for the category, and not of your company.**

Appear to be in line with MSO Alliance.

- 4. Are the figures in Annexure B7 representative for the regional MSOs? If not, what according to you are the correct representative figures? When providing representative figures, please provide figures for the category, and not of your company.**

Payments to Broadcasters may be lower.

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

5. **Are the figures in Annexure B9 representative for the LCOs with > 500 subscribers? If not, what according to you are the correct representative figures? When providing representative figures, please provide figures for the category, and not of your company.**

Payments to MSO may be lower

6. **Are the figures in Annexure B9 representative for the LCOs with < 500 subscribers? If not, what according to you are the correct representative figures? When providing representative figures, please provide figures for the category, and not of your company.**

Payment to MSOs may be lower.

7. **What according to you is the average analog monthly cable bill in your state or at an all India level?**

Rs 125/- : lowest Rs 50/- Highest Rs 200/- , Hence average Rs 125/-

8. **Is the market for cable services in non-CAS characterized by the following issues:**

**(i) Under-reporting of the analog cable subscriber base**

Subscriber base is the total number of subscribers receiving signal from a Headend i.e. combined total of those without set top box plus those with set top box i.e. digital. At present very few set top boxes are addressable, because most of these have been seeded just to increase channel capacity Unless addressability is brought in this talk of analog and digital base ie futile. Hence under reporting continues to remain the same. In any case Broadcasters do not recognize such digital subscribers without addressability

**(ii) Lack of transparency in business and transaction models**

No ! Cable services in non CAS areas are fed from a Headend Service Provider on fiber till node in LCO area, wherefrom the content is delivered over coaxial cable to subscriber. LCOs pay a fixed/negotiated rate to Headend Service Provider, varying from a fixed amount of Rs1000/- to Rs 25/- per declared subscriber, generally NOT exceeding 100.

**(iii) Differential pricing at the retail level**

Partially, yes

**(iv) Incidence of carriage and placement fee**

Only at the level of Headend Setrvice Provider

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

**(v) Incidence of state and region based monopolies**

Only by Headend Service Provider's influence and counter competition.

**(vi) Frequent disputes and lack of collaboration among stakeholders**

End viewer as a stakeholder is a non-entity. Disputes are only between LCO&Headend Service Provider or Headend Service Provider & Broadcaster.

**9. Are these issues adversely impacting efficiency in the market and leading to market failure?**

No ! End viewer is happy with the value derived for a few channels watched. They are neither aware of QoS nor are demanding clear video and audio on all channels. DTH is available as an option. However, while DTH operators declare new activations but never disclose de- activations. Further no data is available as to how many subscribers in cable lit areas have switched over to DTH by disconnecting cable service altogether.

**10. Which of the following methodology should be followed to regulate the wholesale tariff in the non-CAS areas and why?**

- i) Revenue share**
- ii) Retail minus**
- iii) Cost Plus**

Recommended cost plus because that would lead to a convincing and mutually agreed base between Headend Service Provider and LCO.

**iv) Any other method/approach you would like to suggest**

Since neither TRAI nor MIB have any field force to fathom the last mile domain, consider fixing a charge for FTA at say Rs 85/- per month +Bundles of 10 channels each varying at Rs 20/- per bouquet with a ceiling of a maximum of Rs 275/-, excluding all taxes and VAS if any. This should be subject to delivery of clear video and audio on all channels of basic tier, if necessary through BECIL's audit of Headend Service provider's delivery levels at LCO's node and C/N measurements, conforming to IS 13420 – part I (revised), at the subscriber's TV set. If required BECIL should open regional offices to serve over 100 million cable viewers.

**11. If the revenue share model is used to regulate the wholesale tariff, what should be the prescribed share of each stakeholder? Please provide supporting data.**

Akin to norms for CAS notified areas bounded by suggestion to para 10(iv).

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

12. **If the cost plus model is used to regulate the wholesale tariff, should it be genre wise or channel wise?**

It should be channel wise indexed from MIS for CAS notified areas to determine the indicative demand rating NOT TAM

13. **Can forbearance be an option to regulate wholesale tariff? If yes, how to ensure that (i) broadcasters do not increase the price of popular channels arbitrarily and (ii) the consumers do not have to pay a higher price.**

Yes! Provided Broadcasters disclose their basis for pricing the channel and reasonable profit. Once the basis is disclosed, increases should be got approved by TRAI. Provision needed to ensure that increases cannot be imposed without approval of TRAI.

14. **What is your view on the proposal that the broadcasters recover the content cost from the advertisement revenue and carriage cost from subscription revenue? If the broadcaster is to receive both, advertisement and subscription revenue, what according to you should be the ratio between the two? Please indicate this ratio at the genre levels.**

PAY TV broadcasters may NOT accept this proposal because that equates them with FTA satellite casters. Carriage cost comprises of two parts ; **first** as paid for transponder leasing as a part of transportation cost in the air, **second** a bartered/negotiated price/ demanded price charged by Headend Service Provider for positioning the content at channel frequencies which have clear visibility in viewer's premises. This is a technical issue peculiar to coaxial networks wherein amplifier gaps and cascades violate the parameters laid down in IS 13420. Since a sizeable portion of content cost is subsidized by advertising revenue promised by broadcasters to advertisers, in terms of eye ball contact figures for reach of the advertisement , they bargain for content placement below 550 MHz on spectrum maps and pay preferential location fee.

Since both, advertisement and subscription revenue inflows are being accepted for PAY TV broadcasters, 'a-la-carte' provision must be made for the end user, implying addressability through SMS. Under such revised premises, ratio could be 30% subscription and 70% advertisement.

15. **What is your view on continuing with the existing system of tariff regulation based on freezing of a-la-carte and bouquet rates as on 1.12.2007; and the rate of new channels based on the similarity principle at wholesale level? You may also suggest modifications, if any, including the periodicity and basis of increase in tariff ceilings.**

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

In retrospect, Cable Act amendment to provide for conditional access was due to arbitrary and unconvincing PAY TV rate hikes by Broadcasters between 1999 and 2002, their defiance to submit basis for pricing of channels and intimation of the same for implementation of 2002 amendment of Cable Act. After the intervention of the Hon'ble High Court of Delhi also the same situation prevailed till later part of 2006. Then TRAI fixed the price at Rs 5/- for CAS notified areas and froze rates for non-cas areas in Dec 2007. Even as on date, the same situation prevails. Perhaps this is so because India has'nt got a Broadcasting Act and Cabled broadcasts have not been categorized as broadcasts. Hence, as 'fait-accompli' existing arrangement could continue. One possible method of arriving at the transportation cost could be treating annua transponder rent as Rs 2.0 crores, divided by 12 number of channels for C-Band and 24 channels for KU band to arrive at per channel cost of transportation in satellite segment. If such a figure works out to say Rs X/- per channel and take up of the channel is worked out at 25% of 80 million subscribers, i.e. 20 million, distributed transportation cost per channel per year and per month can be calculated. Next is cost of content. For each genre cost of content divided by number of episodes divided by 20 million can be worked out. On this cost 40% profit can be accepted.

Another view is based upon TRAI's computation in Annexure B9. Cost of content is reflected as Rs 40/- per month. If we take total number of PAY channels as 130 and presume that only 30% are carried by the LCO, i.e only 40 channels are carried and all are pay channels, then the cost appropriates at Re 1/- per month per channel. Next let us assume that LCO has only 100 connections. He would, @ 20% declared connectivity (100 out of 500) pay Rs 20/- per month to Headend Service Provider for content. There are about 5000 Headends feeding 60000 LCOs. Hence revenue accruing per year would be  $60000 \times 2000 \times 12 = \text{Rs}144\text{Crores}$ , rounded to Rs 150 crores, at the most absurd bottom line. This strikingly tallies with annexure B-6 in this consultation paper. Hence there appears to be a case for fixing the MRP at Rs 3/- per subscriber per month for channels uplinked from India and Rs 1.50/- per channel per month for channels uplinked from foreign soils for non-CAS \ CAS areas. However, if non- CAS area becomes addressable, with SMS, then Rs 4/- per channel per subscriber per month would appear to be reasonable in bundled environment and perhaps Rs 5/-per channel per month in 'a-la- carte environment. The LCO will still remain the most benefited.

The crux of the problem shall remain with disclosure of basis for pricing pay channels by the broadcasters. But another fact of life is that no member in cable TV distribution chain is running in loss, otherwise they would NOT remain in business.

- 16. Which of the following methodologies should be followed to regulate the retail tariff in non-CAS areas and why?**

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

**i) Cost Plus**

**ii) Consultative approach**

**iii) Affordability linked**

**iv) Any other method/approach you would like to suggest**

**Cost plus** implies accurate determination of costs. Broadcasters have not, till date disclosed the basis for costing their channels. Hence cost plus cannot be applied to inter-connect offer between Broadcaster and Headend Service Provider.

**Consultative approach** applies to licensed cable networks. In India, cable networks are merely registered and there is no provision for cancellation of registration due to statutory non-compliance. Hence this approach also cannot be applied.

**Affordability** linking also does NOT seem to be authentic since statistics for Cable TV expenses is not reliably available.

One method, therefore, could be to start with bundled rates for content prevailing as on date. The genre- can be indexed as FTA-0, Religion-1, Kids-2, Movies- Regional 2.5, Movies English 3, Movies Hindi 4, News Regional 4, News Hindi-5, News English-6, News Business -7, Entertainment Regional 7.25, Entertainment English-7.75, Entertainment Hindi-8 and Sports -9. Total of genre indices add to 63.5. Take up any existing broadcaster bundle, note the names of channels, assign genre index, total up the index. Divide this sum of indices by 63.5 for rationalization of applicable index appropriation number.. Divide this bundle price by 63.5 to arrive at price index unit. Then proportionately affix index to bundled content and multiply by indexed price. For example, if the bundle is priced at Rs 63.50, index price will be Re 1/- each, then FTA price will be zero. Sports price will be Rs 9/- and so on. Further if bundle price is Rs 100/- the multiplier would be 100 divided by 63.5 and so on.

Prices once fixed should be frozen for at least two years and then reviewed periodically.

**17. In case the affordability linked approach is to be used for retail tariff then should the tariff ceilings be prescribed (i) single at national level or (ii) different ceilings at State level or (iii) A tiered ceiling (3 tiers) as discussed in paragraph 5.3.23 or (iv) Any other**

Affordability can neither be urban or rural or specific to states. It has to be consumable commodity based. If Mineral water is to be consumed, it costs Rs 12/- or so for 750 ml across the nation. People who want it buy it pay

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

that price without demur, whether in urban or rural segment. In the absence of authentic and researched data, on Cable TV subscriptions, this method would NOT meet the ends of justice. Still, if this is the approach in the TRAI's mindset, then it should be single at National Level.

**18. In case of retail tariff ceiling, should a ratio between pay and FTA channels or a minimum number of FTA/pay channels be prescribed? If so, what should be the ratio/number?**

The answer to this question requires empathetic understanding of networking in Cable networking. Since a large number of networks are operating on 47-862 MHz spectrum, the capacity for 7 or 8 Mz compartmentalization as carrier spectrum width is 60. In the spirit of Cable Act Amendment 2002, 30 channels have to be provided for viewing without an interface like a set top box. Further 4 channels are used for local coverage including movie replays, hopefully with video rights. That leaves a network capacity of  $60-34=26$  channels. On 1:10 compression, 260 digital channels can be transported in MPEG-2 format. The capacity of the network would then be  $260\text{ digital}+34\text{ non-digital (i.e Analog)}=294$  channels. In this example therefore, the ratio between FTA, i.e. 34 channels to pay channels (assuming all 260 to be PAY) would work out 1:7.5. Similarly in 47-862 MHz networks with a capacity of 92 channels the figures will be 34 FTA and 58 ( $92-34=58$ )x 10 i.e 34 to 580 i.e. 1:17. It is suggested that numbers should NOT be insisted upon and ratio only should be indicated.

**19. Should the broadcasters be mandated to offer their channels on a-la-carte basis to MSOs/LCOs? If yes, should the existing system continue or should there be any modification to the existing condition associated with it?**

Broadcasters, through their inter-connect offers, issue addressable satellite receivers (IRDs) to be used in Headends. Since LCOs don't operate Headends, only MSOs (i.e. Headend Service providers) are concerned in this reply. If benefit to the end consumer is the ultimate goal, broadcasters must be mandated to offer PAY TV on 'a-la-carte' basis to MSOs, who in turn, with integrated SMS, offer 'a-la-carte' choice to end viewer. At present mandating should only be resorted to if they can be enforced. Without any field staff with TRAI or with MIB, one wonders how can mandates be enforced

**20. How can it be ensured that the benefit of a-la-carte provisioning is passed on to the subscribers?**

TRAI's recommendations on re-structuring of Cable TV networks should be pursued for acceptance by Ministry of Information and Broadcasting with licensing of LCOs and provisions to revoke licence in

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

default/violation for life. Next, 'a-la-carte' provisions must be enforced at the levels of broadcasters and Headend Service provider. SMS audit by BECIL should be mandated for first time conformity, and later at specified intervals. Once SMS is integrated, pre-paid billing systems should be introduced. That will impart transparency to the service. Perhaps, thereafter need for regulation for fixing rates for content would demise.

21. **Are the MSOs opting for a-la-carte after it was mandated for the broadcasters to offer their channels on a-la-carte basis by the 8th tariff amendment order dated 4.10.2007. If not, why?**

In absence of enforcement audits this question cannot be answered. However, it can be stated that end viewers do not have the option of 'a-la-carte' viewing as yet in Non-CAS areas.

22. **Should the carriage and placement fee be regulated? If yes, how should it be regulated?**

No !

23. **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?**

Yes! it should be linked to equal clarity of sound and picture on all channels at farthest point from the Headend in the network in all directions (generally four). If NOT, then distance , in the network up to which this condition is achieved should be determined. This should be on percentage basis. If for example clarity is existing only in 60% of the network and Broadcaster wishes visibility in that part of spectrum, then rate should be negotiated with the Headend service provider.

24. **Can a cap be placed on the quantum of carriage and placement fee? If so, how should the cap be fixed?**

No ! because this is a marriage of convenience. PAY Broadcaster is resourcing 70% business earnings through advertisements, claiming over 80 million reach for each of their channels. In networks where clarity is available only in 70% of network, this figure of 80 million drops to 56 million. Hence reach and, therefore, advertising revenue would diminish. Hence Broadcaster wants a bearth in 70% visual clarity zone. For this preferential location, Headend Service provider barter a price. However this reach percentage increases when networks operate over 47 - 862 MHz range. But there the Headend Service Provider demands return on his investment in Headend.

25. **Is there a need for a separate definition of commercial subscriber in the tariff order?**

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

Yes !

Commercial subscriber should be one who does not receive the signal from LCO for viewing by a definite rate for viewing, different from what is prescribed for a cable TV subscriber. TRAI has distinguished between two groups of commercial subscribers as follows: the first group of commercial subscribers to be under forbearance regime and the other group (all other commercial subscribers that were not included in the first group) to be treated the same as ordinary subscribers. The first group of commercial subscribers (that fell in the forbearance regime) included the following:

- Hotels with rating of 3 stars and above
- Heritage hotels (as defined by the Department of Tourism, Government of India)
- Any hotel, motel, inn or commercial establishment providing board & lodging and having 50 or more rooms.

Any commercial subscriber not falling in the categories mentioned above would be subject to the same charges as ordinary subscribers that have been frozen at the rates prevalent as on 26.12.03 (as per the tariff order of 1.10.2004). Further, any commercial subscriber that falls in the categories of 3- star and above hotels, heritage hotels and any hotel/motel/inn which has 50 rooms or above, which also has the facility of getting direct broadcasting services, the average channel price of its bouquet

- The sum of the individual maximum retail prices of the channels shall not be more than 150% of the maximum price of the bouquet

Hence at present, commercial subscribers are charged 3 to 5 times the rate for ordinary cable TV subscribers in addition to what they pay to LCO subscription, must be delivered signals in total conformity with IS13420. Further, commercial broadcaster This is now easily possible by using dedicated fibers for commercial

**30. What according to you would be an appropriate date for analog switch off? Please also give the key milestones with time lines.**

Feasible date could be 2 years for Metros, 3 years for State Capitals, 4 years for Urban population and 5 years for rural and remote areas.

The mile stones could be :-

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

- (a) Amendment to cable act that in areas notified through the milestones, set top boxes would be required for viewing content on cable TV networks
  - (b) Notify that Headend service providers can after informing the MIB, invest in hardware for digitization of content delivery and that MIB will not backout on these stands, like CAS implementation across the country.
  - (c) Introduce licensing for Cable TV service providers as recommended by TRAI for re-structuring of Cable TV networks.
  - (d) Insist on certification of SMS by BECIL for each one of these networks on the lines of TRAI Regulation No 4 of 2009. Such audits reportedly counsel and assist in enabling SMS implementation as dictated in Broadcasters information infra-structure to Cable TV networks so that they can lay cables underground on condition of restoration of surface to normal level like in case of TELCOs.
  - (e) Rationalize import duty rates and taxation. Cabled Broadcast should not be allowed discrimination as distinct from telecom networks.
  - (f) Provide for all taxes on Cable TV to flow into Consolidated Fund of India to be re-appropriated to States in proportion of their proven involvement in achievement of milestones stated above.
  - (g) Consider subsidies to Headend Service Providers attempting SMS with 'a-la-carte' choice and billing in their networks.
  - (h) Consider special incentives to Headends converting their feeder networks to bi-directionality for convergent services to Stop decrying Cable TV networking Services as inferior to DTH and IPTV.
  - (i) Upgrade Cable TV services to Broadband Service Networks.
31. **What is the order of investment required for achieving digitization with addressability, at various stakeholder levels (MSOs, LCOs and Customers)?**  
Estimates are as under :-
- (a) MSOs – Rs 3-4 lacs per channel, depending on grade of hardware
  - (b) LCOs - Rs 500/- to Rs 750/- per subscriber
  - (c) Customer- Rs 1200/- to Rs 5000/- depending upon features of the Set Top Box.
32. **Is there a need to prescribe the technology/standards for digitization, if so, what should be the standard and why?**

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

Digitisation standards for Headend parameters are spelt out in DVB-C norms. For distribution, standards exist with BIS. Cable Act provides for conformity to standards. These provisions are of no use because of lack of will to enforce.

**33. What could be the possible incentives that can be offered to various stakeholders to implement digitization with addressability in the shortest possible time or make a sustainable transition?**

- (a) Entertainment and Service Tax holidays for two years.
- (b) Exempt import duty on hardware for digitization of Headends.
- (c) Rebate on PAY TV subscriptions to subsidize expenses on SMS as content protection to PAY TV.
- (d) Budgetary grants to BECIL for audit and certification of Networks.

**34. What is your view on the structure of license where MSOs are licensed and LCOs are franchises or agents of MSOs?**

At present also LCOs are like franchises of MSO on the consumer interface. This arrangement is responsible for image tarnishing before subscriber. Headend service providers and LCOs should be licensed separately with clear provisions for cancellation of licenses and punishment in case of non-performance or violations of terms and conditions.

**35. What would be the best disclosure scheme that can ensure transparency at all levels?**

Mandating digitization with SMS based addressability, a-la-carte choice to viewer, subject to statutory periodic audits.

**36. Should there be a 'basic service' (group of channels) available to all subscribers? What should constitute the 'basic service' that is available to all subscribers?**

30 channels of FTA (to include DD-1, DD-2, LOK SABHA, DD Regional)

**37. Do you think there is a need for a communication programme to educate LCOs and customers on digitization and addressability to ensure effective participation? If so, what do you suggest?**

Yes! but not in form of lectures in hotel or shamiana enclosures. Headend Service Providers should upgrade their Headends and then get specifications of IS13420 implemented in LCO segment of Network. While checking EoL (End of Line) specifications at customer premises, users could be educated. Auditors should get confirmation from users on selective basis.

**38. Stakeholders are free to raise any other issue that they feel is relevant to the consultation and give their comments thereon.**

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

At a level of revered expertise like TRAI, connotational overtones need corrections. There is nothing like analog cable and digital cable. Both optical fiber and coaxial cable are transparent to analog as well as digital content carried in an envelope called carrier. Therefore, digitization too is applicable to Headends and tailends (Set Top Box) only and the term is not applicable to fiber or coaxial cable network.

Broadcast Television transportation over the air or wireline is different from TELCOS transmission of data and voice. Hence their regulation too has to differ in letter and spirit. It must be realised that Telco and Broadcast regulations are asynchronous and any effort to regulate wireline broadcasting, with a telco lense based upon data and voice delivery precedence, without implications of content, in converging technologies would be difficult.

For convergence of technologies the convergence of minds in Broadcasting and TELCO management styles is also required.

Broadcast Engineering is NOT taught in any Engineering College. Even Prasarbharti technocrats have learnt it hands on, without a formal accreditation. Wireline broadcasting is tougher than wireless broadcasting. Training need to be imparted to 24000 technicians reportedly employed in Cable TV, 25000 Shift Engineers in Headends and over 5000 Headend Managers. Perhaps then quality may improve.

Broadcasters demand features on addressability in their Inter Connect Offers which are not covered under the Indian Standards. For Example BIS only states that finger printing is desirable. But Broadcasters want it in different colours, frequency and variable coordinates. This is clearly dictatorial because system cost is to Headend Service Provider's Account. In some cases they force Headend Service Providers to use AV output from their IRDs, though ASI outputs are available, adding costs for the Headend Service Provider. Such practices are monopolistic and tantamount to exploitation. Advantage is taken of the fact that TRAI and MIB do not have field force for enforcement. Even when reported action is seldom taken.

TRAI should consider enrolling/empanelling experienced, matured and impartial persons from Broadcasting and Wireline Broadcasting disciplines to provide consultancy and continuity in National interest.

**Comments on TRAI Consultation Paper No 5/2010**  
**On**  
**Tariff Issues related to Cable TV Services in Non-CAS Areas**  
**By**  
**Lt Col (Retd) VC Khare, Cable TV Industry Observer**

\*\*\*\*\*