# Fostering video and triple play in India

*- Balancing between over-regulation and a free for all.*

**My suggestions**
**Sekhar A K**
**A Cable Industry expert**
**Phone 080 25358351**

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I see the current convergence of video, data and voice as an opportunity for providing integrated and interactive broadband access to people, to enable them to be informed, entertained and connected.

Today, world-class telecommunications operators build world-class networks to offer services to as many people as possible, faster and cheaper than the competition. The digital revolution and the advent of packetized transport have also allowed networks to become service agnostic, and thus can be made to work in a 'multi-service' environment. Furthermore, the services proposed in these new networks can be integrated together synergistically, whereby new services, which did not use to exist, now emerge. A small example of this is a telephone caller ID displayed on the television set when the telephone in that house rings.

From the point of view of the operator, the advantages of a multi-service network are many:

- It allows multiple revenue sources (increases revenue generation while limiting additional Capex).
- It keeps customers happy – reduces costly churn (a large component of operating costs).
- It creates new kinds of services, and becomes the service differentiator.

There are roughly six main types of technologies can be used in a multi-service network:

- Cable HFC.
- Satellite DBS (DTH).
- Telecom FTTx.
- Mobile wireless.
- Fixed wireless.
- POTS Copper.

These technologies differ in the amount of bandwidth, mobility and interactivity they offer. However, I believe that when the focus is on bandwidth, as required with video services, cable and FTTx, with their fiber-rich architectures, will most probably transport the bulk of fixed access services, simply because of the physical bandwidth capacity offered by fiber and coaxial cables.

India is now being challenged to produce a legislation that enables the creation and development of these multi-service networks, including ones that distribute video. I believe the focus of such legislation should be in the clarification and definition of video licenses similar to what is already in place with telephony.

- ***Regulating franchises and putting in place a licensing regime.***

The concept and scope of the Unified License has to be extended from voice to video. Any company interested in distributing video should be able to purchase a license in one or more licensed areas, so that one entity could offer multiple services at once, like combining telephony, with video or data, irrespective of the underlying network and technology used.

The difficulty in this task is of course regulating and establishing licensed areas for video, especially since cable operators, who have been the traditional distributors of such services, will resist such a change from an unregulated environment to a licensed one.

It is because of a lack of a license regime that the current state of cable TV in India can only be described as chaotic. There are too many small cable operators that do not add value to the content distribution chain. Cable TV, like all telecommunication sectors, needs to reach a critical mass to cover for the large fixed costs it must endure. Small cable operators do not have the financial strength to clean their plant, buy equipment, make content deals and offer interactive TV or the convergent services. Bigger entities, like Multiple System Operators (MSOs) can.

Unfortunately, too few Multiple System Operators own the last mile and that too in pockets. Licensing agreements are often in place with franchisees, but these agreements are as often broken at will. Switching back and forth between MSO by cable operators is too prevalent. MSOs and other content distributors need to buy the last mile, acquire smaller cable operators, invest money in the plants and upgrade them to world-class standards.

Mandating set-tops would help improve cable TV's currently inefficient environment. However, I believe that first and foremost a new licensing regime needs to be designed. Not unlike the wireless world, licenses and franchises should be created with agreements between video distributors and the Government body (preferably Central) for a certain long period of time, such as 10 years. Licenses should require a non-negligible money deposit. Licenses should cover fairly large territories, at the least the size of a medium town. Licenses should require poorer areas to be bundled with richer ones. Thus a license covering Mumbai might require the video distributor to also take responsibility for developing poorer areas in India. Licenses should not exclude competition. However, defining who and how many players are allowed in a franchise is important.

Incidentally, most cable operators in the US and Europe are regulated under a similar arrangement. In the US, for example, a 'Local Franchising Authority' (LFA) delivers licenses (the LFA is managed by a city or a county, which is a sub-division of a state such as 'New Jersey' or 'California'). The LFA has authority over rights of way and most matters that deal with how the cable operator interacts with the city or county. Customer complaints can be sent to the LFA, for instance. The Federal Communications Commission (FCC) has oversight on Federal matters that relate to Communications, such as for example its 2002 ruling that data services are cross-states in nature, and no state or local franchising authority should impose fees on cable modem services.

One should note, I do not advocate India adopts a local franchising authority, as a central entity might be more appropriate in establishing a homogeneous level of requirements and services across the Nation like in Telephony services

- ***The first steps to create a Digital Video License ( DVL)***

The introduction of a licensing regime for video, which would stipulate and authorize how multiple players could offer video services, will be undoubtedly a very challenging task, especially with the smaller Cable TV operators. However, the list here below covers some of the basic steps that might be required towards the creation of video circles:

- First and foremost, there should be a countrywide mandate that all video distribution be in a digital format two years from now. Television sets should not be mandated to have digital inputs, but all wireline and wireless distribution of video signals should be entirely managed digitally. The only possible exception to this provision could be granted to terrestrial broadcast TV, which may be given a longer timeline to convert to digital, like 5 years.

- Furthermore, the packaging (or bundling) of convergent services including video and telephony through the same network should also require the video portion of the service to be entirely distributed digitally.

- Cable operators, which are currently distributing video services, should be able to continue to do so until two years from now. Video distributors which are also currently distributing data services (via cable modems) will be required to drop the analog video services two years from now, but may be allowed to continue offering data going forward.

- The intended consequence of these rules is to push cable operators and other video content distributors to concentrate around players which have the financial and organizational means to digitize content, clean or build networks, and install set-tops when and where necessary.

- Concurrent to the digitization mandate described above, a Licensing Authority, which may or may not be the same already providing the Basic Service License should be put in place.

- This Licensing Authority would then define a clear set of rules and fees that anybody wanting to distribute digital video content should strictly follow. DTH rules should be grand-fathered in, while wireline and non-DTH wireless video should be covered by the rules stated herein, which should be universal, simple and define all of the areas (or circles) that would-be content distributors could bid on.

- Digital video circles would be large and economically varied territories, mixing both wealthy and less privilege areas. The bidding process should command a non-negligible entry fee, while obtaining the license should be based on the offered revenue share with the Government of India and plans to develop underserved and under-privilege sections of the video circle.

- Furthermore, as part of the rules for obtaining a video franchise, the prospective digital video distributor should agree to certain technical requirements and be required to adhere to broad operational visions, such as quality of service. How the distributors obtain these results should be left to their best judgment.

- The bidding process should start in 6 months and winners should be announced no later than one year from now. Hence, current cable operators would be given enough time to decide whether to stay in the video delivery business and consolidate amongst themselves, be integrated within a new video distributor, or sell their networks to whomever will be the video circle winner in the area where their network footprint resides.

- Digital Video circles should be exclusively licensed for a minimum period of 10 years. Additionally, no entity should be able to control more than 30% of the <u>potential</u> digital video subscribers nation-wide during that time. So for instance, if one circle alone covers 30% of the potential digital video subscribers, then no other circle should be granted to the owner of that circle.

- Overbuilding should be allowed after 7 years, and the rule of maximum subscription ownership may be extended beyond 30%. Two caveats should be added here: the first would be that over builders should be required to develop the entire digital video circle, and not only rich pockets within it. The second would be that over builders should be required to pay 50% of the revenue share proportion the incumbent digital video provider is paying to the Government for the first two years, and 100% thereafter.

- Once the digital video provider of a circle has been announced, current cable operators which are not part of it but which have their network footprint in it will have to make a choice. Either the operators will sell within three months their networks to the digital video provider, for a fee I describe below, or will keep their network for a further time period, up-to three years. The caveat being however that these operators will only be able to offer analog video services at a price determined by the Franchise Authority.

- Irrespective of the video situation, cable operators who currently have implemented data services via cable modems should be allowed to continue offering these services, as long as no revenues are generated through the sale of video-over-IP, which should be considered a form of digital video, covered by the Digital Video License.

- Digital video providers should be required to 'buy out' current cable operators who want to get out of the video delivery business in the first three months after winning a video circle. The sales price of the cable network should be no more than the expected profits (not revenues) the operators would likely make in video during the three years before the digital requirement becomes fully effective. The Licensing Authority should establish a standard for what that average number should be, but Rs 2500 per subscriber would not be an unreasonable amount to ask newcomers for these cable systems. The price tag for a city like Mumbai, with about three million subscribers would therefore be shy of $190 million, which would take close to three years to break-even with no increase in video services.

- Should some of the cable operators not want to sell their business to the digital video provider, in order to remain in the analog video delivery for the last three years during which such technology is allowed, or because the operators want to continue being data service distributors (cable modems), then the video circle owner should be free to build his own network, without any interferences from the local operators. ( This is the key point)

- In fact, in order to avoid any such predictable interference, it would be wise for the digital video provider to share some of the digital revenues with local operators, especially if the digital provider is building its own, new network. This could take the form of a one-time share for each new digital subscriber remaining with the service more than six months. The amount should be left for the digital provider to determine, but I recommend something like Rs100 per subscriber.

- In four years, only the rightful owners of a digital video circle should be able to offer (digital) video and add convergent, integrated services like data and telephony to it. Their competition would then come from (1) DTH with one-way video only providers, (2) data only operators, or (3) from telephony only service operators. However, should any of these competitors want to enter the video space, a Digital Video License should be required.

- The Licensing Authority should have a policing arm that works with the Police and Court authorities to stop unauthorized video distribution.

- ***Putting in place tough piracy legislation.***

Piracy in India is rampant, and revenues that are rightfully due to cable operators, MSOs and programmers are not collected or are wasted away along an inefficient collection process. India is not alone in Asia-Pacific with piracy issues, as China estimates that 40% of cable TV viewers are not paying subscriptions when they should.

Apart from state owned broadcast channels, most other programming is not part of people's inalienable rights. Video content is 'goods and services'. It costs money to create. Content should therefore have a value and people should pay for it. Fighting piracy and copyrights violations should be a top priority.

In retrospective, it is a shame it took the US such a long time to put in place tough penal sanctions against piracy (which until 10 years ago was considered to be a past-time by pirates). Operators as well as programmers lost money, and that money was not used to bring more and better content to people. Only individual pirates became better off with that weak legislation.

- ***Taking down duties.***

The major impediment to the introduction of set-tops in India before the CAS Bill has been the overburden of imports duties, which have rendered any video business model unviable. The concessional duty for set-top imports should continue for at least two years after the video circles have been created.

If India wants state of the arts networks and services, it will have to anticipate importing a lot of the required equipment at first. Like any other type of infrastructure equipment, set-tops and all other video distribution devices should have little duties. It is only with time that local vendors will reach the know-how and economies of scale to be competitive in a world-wide market place. An inexpensive labour structure should greatly help India quickly become a world producer of video and networking equipment. It is also only with time that big companies will be able to establish local production in India.

- ***Avoiding price controls.***

Equipment, network maintenance and programming represent capital expenditures, fixed and variable costs that video content providers need to cover with cable subscriptions and other advertisement revenues. Providers, who have to deploy a lot of capital equipment and use lots of labour, should recover the ever-increasing costs of creating or buying original content.

Moreover, all the players in the video content distribution chain (from movie studios to content distributors in newly created video circles) should have an incentive to be part of it. Content providers and distributors should be able to make money, proportionally to the risks taken, while users have the incentive to receive more quality and personalized programming and content.

In summary, video services are not free. They cost many people money to make them happen. Price controls should therefore be minimal. I understand that the GDP per capita in India is not yet comparable to that of the US, hence it is ludicrous to require video subscribers to pay exorbitant monthly rates. However, the way to resolve the issue is not to establish tough price controls on video. In fact, if anything, India has been spoiled with too cheap video content, and this under-valuation has most certainly kept stronger telecommunication players from entering the video distribution business. Simply too little money was to be made there. *Cable operators have not grown or consolidated yet for exactly this reason.*

The Government (or the License Authority) should recommend that operators implement service tiers, and that people pay according to the tiers and packages purchased. Most cable operators in the world are adopting the layering of services, with a basic tier that includes must-carry channels such as national broadcast stations. Premium tiers (there can be more than one) can carry increasingly more specialized programming, organized by genre or interest. PPV, IPPV and VOD events could also be sold (at rates similar to going to the movie theatre - Rs 50 for example). High-speed Internet access (over-the-TV and / or PC) as well as telephony or gaming could yet be additional services (through the purchase of an appropriate service licence).

It is important to note I do not recommend that every video channel be a la carte. In fact, I believe a tier system is a far better alternative, as it provides the opportunity to mix popular with less known channels – maybe because they are start-up programs that need exposure before they are known. On the other hand, when talking about PPV and VOD, a stricter personalization of the viewing experience is highly desirable to draw-in the higher services fees these services will probably command.

Finally, it is also interesting to know that in the US, the Local Franchising Authorities do check that the yearly rate of increase in subscription fees are not significantly higher than the annual rate of inflation. However, the LFA does not generally mandate what the fee for a new service should be.

- ***Technological decisions should be left to the cable operators to make.***

There are many and varied tough technological choices that a video content distributor must make. As long that a certain quality of service is provided, and that the video is in a digital format, everything from the access control or plant type must closely match the operator's know-how, capital and size for a viable business model to emerge.

Only video operators can make these choices, depending on the assumptions in their business models, which will in part determine a possible profitability (or lack thereof).

- ***Conclusion***

In conclusion, I believe the Government needs to help the cable TV industry organize itself into clear and well-defined franchises where the right capital expenditures can be taken, driven by meaningful business models. The Government also needs to create a type of Franchising Authority to oversee these franchises and manage subscriber complaints, as well as a bureau to drive an overall communications vision, similar to the FCC in the US.

The Government should also let video circle operators make their own decisions with respect to technological (type of digital set-top etc.), business (rental vs. sell of set-tops, amount of refund if the set-top is returned etc.) and operational choices (periodicity of channel changes etc.), as long as certain broad technical and operational guidelines are met by the video circle franchisees.

In short, I believe the market place and competition can take care of many of these issues once large players have been organized and committed to the delivery of digital video and subsequent triple play services.