

NEW CONSUMER FOR THE NEW ECONOMY

WORKSHOP

7th February 2020

India Habitat Centre, New Delhi

Audio Transcript of Lt. Col. V.C. Khare Keynote Address

The workshop covered a lecture by Lt. Col. VC Khare (Please see Section II below for his bio) on Media and Entertainment Sector, particularly Broadcast Industry.

I. Audio Transcript:

There are lot of lawyers here in the audience, please take a note! It's a very tall order in time and I am supposed to take you through more than 100 years of what has happened and my intimate experience with the consumers and the service providers. There is no broadcasting law yet. Broadcasting law is yet to be enacted after so many years of independence. Has anybody heard of Indian Broadcasting act? No, because it has not been legislated so far.

All broadcasting started here under the government aegis and nobody questioned them because they were Sarkar. Starting from British rule to the Indian governance and it was ignorance magnified, amplified and fortified.

Coming to this, I will briefly take you over to history of Indian broadcasting. The history of Indian broadcasting, which goes back to 1924. In 1924 in Madras, an organisation was set up by a private individual (Madras Broadcaster). He started giving information in local language to people with a very powerful transmitter which was available only within a very short range that time. Due to financial constraints, it crashed in 1927.

Thereafter, in 1927, two broadcasters started the broadcast service in Mumbai and Calcutta, with slightly better transmission and receiving equipment. This also failed in 1930. In 1932, the then government introduced the Indian Broadcasting Service which was later christened as All India Radio (AIR).

Now I will take you systematically over it because at the end of it I am very sure you will be able to see the gaps which I have seen.

So, what is broadcast?

I think now in this Digital India, everybody is using broadcast. But has anybody ever defined that to you or have you read what is broadcast? I will read it out to you. *Broadcasting is*

distribution of audio or and video content to dispersed audience, listeners and viewers via electronic means typically using electromagnetic spectrum in one to many syndrome.

So Broadcasting, what does it involve : I have a content, I throw it in the air over the medium, you require a compatible equipment to receive it, I do not know in my range of transmission who all are receiving, I'm blind to it. My monologue whatever I wanted good bad or indifferent I pushed it in the air, you receive it, don't revive it. I'm not bothered.

Before 1920, communication was under Indian Telegraph Act, 1885. Now, what is the difference between broadcast and telecom? Broadcast is one source to many, telecom is one to one. I pick up my telephone, it is registered in the exchange goes to another number and the circuit is engaged on one to one basis. There is no concern for content in telecom. It's just a pipe, you're connected to a pipe, speak at one end listen to at the other end. Content is what you and me talk at a time. It is of no concern to the service provider whether I'm talking sense or non-sense.

So please bear this in mind, telecom till today and in all times to come even in digital India will remain one to one, it's the philosophy, you cannot change it. Broadcast will remain one to many. All this carried on till AIR was formed.

The first overseas broadcast was made in 1939 on short wave, till then it was all medium wave and medium wave had its limitations. Nothing could go across the shore. Then we came to 1947, now even today as far as AIR or akashwani is concerned including FM, they are dealing only into audio transmissions. There is no video with Akashwani; it is with Doordarshan under Prasar Bharti and now n number of private broadcasters.

Now at this point, I would also like to clarify two miscommunications which are prevailing. If you read the only Act which is there that is Cable TV and Network Regulations Act. There is no word like channel. It talks about programme. But, what happened was that when cable TV started over the cable, the video content was also on analogue and in analogue system one channel was meant for carrying one programme. So it got synonymised, Channel and programme got synonymised. Till today it is loose talking when we say channel.

Now what is a programme? Programme is anything, feature films, news, lifestyle whatever you can produce as content. So there is programme and there is a channel. Now, the spectrum which is being used for delivery of video at home, it is 47 MHZ to 862 MHZ. So channel is like a lane. When it is going in the lane at a time, technically 7 MHZ is the width of that lane into this place up to 299 MHZ. From 301 MHZ to 862 MHZ, The channel width is 8 MHZ.

Now if you work out in your time, you'll come to a figure of 106 Channels which are permitted in that use. So as the business became lucrative and more variety was provided by the private broadcasters and they saw business opportunities into this, more and more people jumped into this arena and therefore, the channel capacity of 106 got exhausted. And if the MIB is giving you a license to broadcast your channel, it is obligatory for them to create a road to reach the eyeballs.

So what was the option? The option was at that time to increase the capacity. Now many people I've heard talking loose, they say, Channels have been increased. Gentleman channels have not been increased. What is happening is, with digital compression, in the space for 1 channel, if you're MPEG 2 or using MPEG4, we're compressing 10 to 24 programmes per channel. So that is how the carriage capacity of the network has increased, Channels are still 106. Because the channels allotted by the wireless control cannot increase, they require the international telecom union's permission to do that.

So, channel and programme are two different things, there is no word like channel in any of the acts/ rules and yet we talk in terms of more channels, less channels and all those.

Now, starting from 1978, when a gentleman named Ronnie Screwvala, started distribution in 5 star hotels. He would relay video content from one room to many rooms and it'll be billed to you in your room bill.

That is the first instance in India of cable communication. Globally, the first instance was in 1887. That time, in the Opera House where the music used to work, a telecom company allowed you to dial a number and you could hear the music on your handset. So that was the forerunner of cable based communication of content. It was only music, there was no video.

So let's be very clear about things, what is programme, what is channel, what is content and what a medium is. When we talk in terms broadcast in general, as far as the government is concerned, govt. is not into wire line broadcasting, they are into wireless broadcasting with Akashwani and Doordarshan.

Second, there is no pay content from the government, it's all supposed to be, I will not say Free to Air because it's coming also under cable, I will call it Free to Viewer. Broadcaster is not to be paid anything for a consumer to be watching that programme.

This is another distinguishing factor which needs to be remembered particularly by the lawyers because you are going to contest this. So what are the popular genres? We have music, sports, spoken words i.e. news, dramas, current affairs, lifestyle and by and large there are 9 genres including the kids and religious programmes. I'll come to you why this is relevant to recall these genres.

From 1978 onwards, this concept of relaying video content from one source got established. Many of you will recall at that time that other than cinema, one of the very popular sources of feature film entertainment was VCR displays, there were video parlours operating who could rent you a TV set and a VCR for a period 3 hours and charge you some money.

This was contested by Motion pictures producers association saying that it has given a dent to their box office. They started paying the police and organising raids because there was no law at that time and getting such VCRs who were playing these cassettes ceased on two issues. One is there was no law and the second was the person who was operating that system didn't have the video rights from the producers of the country. So it was made into a copyrights issue.

And at the same time while all this was happening cable TV was proliferating across the country. So much so that in 1993, Rashtrapati Bhawan also had a connection and MIB had 2 dishes on top and they had a connection.

On 1st October 1994, STAR (Satellite Television Asia Region) was going to introduce Star Movies. Late Mr. Jaypal Reddy was the I&B Minister, he said on one hand we are raiding these individual operators from showing movies and on the other hand there is an organised body which is coming in and showing these channels.

So the question arose that a platform had been generated, you've laid the railway track, which rail travels on that is not in your concern. It was totally created by private investment and till today in the domestic video delivery there is not one paisa of taxpayers money. It is totally these entrepreneurs who did it, hats off to them in about 6 year time they had connected 20 million homes whereas in hundred years Telecom had only 3 million homes. I am recalling with you what had happened. So it was decided that since it has already spread like a virus why not regulate.

Question was who will regulate, what you will regulate, how will you regulate. Incidentally I am the author of Cable Act Ordinance 1994. Wrote this Act in 4 nights. The basic inputs are mine. So the moment cable ordinance was promulgated, the occupation which till then was not legal because is not backed by a statute became legal all night.

Then we got in to this new animal called Multi-System Operator, abbreviated as MSO, till today there is no MSO who is really a Multi-System Operator, they should be called SSO Single-System Operator. They had the advantage of a stronger financial muscle, managed by cost accountants and trained salespeople.

So they came in called these cable operators and said look, you don't have money and knowledge to do this. Here we are, now that this has legalised, we will make investment into this.

They made investments into better quality infrastructure. Till 1994 cable operator meant a person who is also running a headend whether it was 2 or 4 channels. They lured this man into this because they didn't have to do the marketing. The consumer was already wired up, they said close down your head, retain your network, we will feed to the location aggregated content and charge you some money. They said we are corporatized, we will give you all the protection from the law and we have a law department, and you don't have to worry about raids and all of them. And these less informed people closed down the headends.

This went on alright because when Cable Act was written. Then Star sports which was working that time given to another organisation, ESPN and ESPN was the first one to start scrambled signal for the headend. Those receiver decoders was nothing else but a set top box at headend level.

I supplied receiver for their decoders to half the population in India. At that time, I was working wiyj Shyam communication. Then another malpractice started from 1997-2002. When late Mrs Sushma Swaraj became I&B minister she said that the number of programs have increased and so have the pay modes.

So first CAS cable amendment came in the year 2002 to be implemented by 15 July 2003. They selected 4 metros Madras, Bombay, Delhi, and Calcutta. In Bombay, Delhi and Calcutta it was to be introduced only into what 40% of the geographical area whereas, in Madras it was 100 %. This did not take-off till 2007.

TRAI became the regulator of broadcast content also, not realising that the total staffing is either bureaucrats or people from the Indian telecom engineering service who have never in their life dealt with video. These gentlemen... they have the mind set of telecom and regulating broadcast. They make rules and regulations in closed conference rooms with hardly a representation from the cable operators or the users etc.

Turning to DAS implementation. The requirement was, subscriber will apply on a form for a service to be provided, the person who comes to sells this service to me will show me a rate card, A-la carte and bouquet both and I will tell him what all I want to see, I will have a copy in which I will mark, which programs I want to see which will be attached to my application form which is known as subscriber application which is supposed to be a business to customer agreement between the headend service provider and the subscriber. This person was supposed to take this form to headend and say here I got a customer, he has given me a cheque for the service and here is what his choice is. When this form is received at the headend, the account department is supposed to allocate subscriber ID to that number by writing on the top right hand corner of the form, the ID. Then the fax copy of this ID goes to the warehouse. In the warehouse, as a store keeper, I am supposed to take out one set top box and one viewing card at a time, take it to a console, program it for what is there in the application, then package with the name of the subscriber into this this and put it on the

delivery desk, from where the Cable Operators representative was supposed to pick it up, take it and install and call the headend to confirm installation. This did not happen.

The so called MSOs give thousands of boxes to the cable operator. Now cable operator all this time was very protective about the connectivity, he did not want to reveal the connectivity. And with addressability if would've implemented it would've revealed the actual connectivity. So what the cable operator did, he started colluding with the MSO. He would say- don't programme the box, the box which is coming to my house is authorised to view all content from headend. Some went boasting to subscribers, 'arey dekho hamara box bagair viewing card ke bhi chalta hai'. So this practice prevailed. The subscriber does not know what DAS is, he does not know who the MSO is, he does not know what the entitlements are because the proper procedure was not followed. And he paid 750-1000 rupees to that cable operator without a receipt and till today the box does not belong to him because the lien has not been transferred.

The box in subscriber house exists in the inventory of the MSO on which he is claiming depreciation in tax. So, the subscriber is at no fault, he is not supposed to read acts and rules. When Rajyavardhan Singh Rathore as I&B minister made a statement in the parliament that up to phase III digitisation is complete, the CAG, said you have said 160 million have been installed but the revenue doesn't match. The MIB always asks TRAI to look into this matter, TRAI themselves don't know so they float a consultation paper. This consultation paper if you see the reference, there are about 25 to 50 people who respond total number of different categories. It is just an exercise to complete the files to look democratic then this is followed by open house discussion. In this open house also, you see broadcasters talking, government officials talking. There is hardly any talk from the cable operator who is providing the service. Subscriber doesn't know who the MSO is and who is the broadcaster. The whole thing is a mess. This is how the TRAI works. Now why is it that TRAI is so ignorant. Because, broadcast engineering as a subject is not taught in India. Have you ever heard BSc Broadcasting Engineering? It's not taught, it's not on the syllabus of any university in India.

The people in Prasar Bharti, if you see their profiles, the technical staff, they are either Bsc electrical engineering or Bsc Electronics engineering. Now let me tell you in Electronics at that time Bsc Electronics engineer dealt with thyristor drives or solid state drives. He does not deal with communication, after getting into the service for the 30 years with assured pension, he has a rubber stamp to sign on and he doesn't have to learn because all the installations in Akashwani and DD are done by vendors. It is contracted out, vendor comes and installs and hands over after it. They run it like a shift. That is the syndrome and this is the only brain bank which is available to MIB. Therefore, it's very nice to draft rules, where is the implementation.

Till two years back, TRAI did not have a subscriber complaint desk. To whom will you complain? The law says, the responsibility for implementation of Cable Act is with the collector/ commissioner and in some cases with the police commissioner. Are they accessible? Even if

they are accessible, what will they do? The cable laid on the road hasn't got the right of way; hidden operators don't have a strand map (dividing diagram).

If today you ask me to award marks 0-9 scale on implementation, DAS implementation in DTH will fetch about 6 marks and in cable it will not even get 1 mark. In my assessment, DTH implementation of DAS is about 72 % and in cable counterpart is 22.5. These are facts they can't deny as I am prepared to accept the challenge.

When were talking about consumers, unless a consumer knows what to ask for, how will he know what has not been given to him. Imagine – when I want something and somebody else has to give it, that person has to know what do I want, in that absentia, how will you proceed?

So concept is alright, the system is not developed for this, and there is no implementation force with MIB and TRAI to do a ground zero assessment. Everything is happening in close conference rooms and after that collecting dust in the almira's. I'm being blunt about it. Just by publishing headline in the paper you think things will work? So as consumer organisations you are suffering. I have only tried to put across to you reasons which you may know why you are suffering, and through your own organisation you should demand what is lacking. Now TRAI has laid down quality-of-service regulations they have introduced Career demand ratio, but how many people understand this. How will this happen? So there is a requirement. When there is an observed void at the level of TRAI at the level of consumer organisations, things need to be done. There is also a need to establish a dedicated Broadcast Authority. Recognise them because today broadcast is working, as a part of Telecom in India. Lay down the qualitative requirements, Lay down what all their duties? And lay down what all technical specifications they need. And create some sort of inspection mechanism.

II. ABOUT LT. COL. V.C. KHARE

A, voluntarily pre- maturely retired officer from the Corps Of Electrical & Mechanical Engineers of the Indian Army. He underwent pre-commission training for 3 years at the National Defence Academy Khadakvasla and one year at the Indian Military Academy Dehradun, and was Commissioned in Dec 1959. The Academics curriculum at NDA is recognized as Bachelor of Science. Graduated in Electrical & Mechanical Engineering from the College of Military Engineering, Kirkee and Military College of Electronics and Mechanical Engineering Secunderabad in 1966. Attended Officer's Advance Telecommunication Engineering Course at the Military College of Electronics and Mechanical Engineering at Secunderabad in 1972. This course is equated to Post Graduation in Telecommunication Engineering. Graduated from Defence Services Staff College at Wellington. This course is equated to M Sc (Defence Sciences). Admission to the course is through a competitive examination. This course is a stepping stone to the rank of Major General and above. Holds a post-graduate diploma in Business and Industrial Management.

Held regimental, command, instructional and staff appointments during 24 years service in the Indian Army. Participated in Goa Liberation in 1961, Chinese Aggression in 1962, Indo Pak Wars in 1965 and 1971. Held the rank of Selection Grade Substantive Lt Col at the time of premature voluntary retirement in 1984.

After seeking pre-mature, voluntary, retirement in Jan 1984, commenced his second career in Civil Industry. He has completed 25 years in Civil Industry.

- Worked as Deputy Chief Engineer (Maintenance Planning and Plant Engineering) JK Tyres (Collaboration General Tire Inc US), General Manager (Projects & Installations CATV Networks) with MC Engineering Products Sales Services Ltd, Vice President Shyam Communications (Marketing and Projects), Vice President (Technical) Indusind Media and Communications Ltd and Advisor with Reliance Info Comm and Videocon Industries. Currently Technical Advisor Broadcast Engineering Consultants India Ltd (BECIL), a Govt Of India Undertaking under the Ministry of Information & Broadcasting.
- Designed a common earth station to deliver 200 TV channels on DTH, 400 channels on IPTV and 20 TV channels on mobile telephony for BIG TV, involving end to end management from drafting RFP, vendor evaluation, system integration, infra-structure planning, licensing, and order finalization. He had drafted the Business requirement statement for BIG TV. Also advised on DTH Earth station erection for DTH by Videocon. Finished soft launch of BIG TV (Reliance DTH) and completed Earth Station For Bharat Business Channel DTH Project. Currently Member of Study Team for TRAI for Implementation of Bi-Directionality on CATV in India.
- Having served the Cable TV Industry for 18 years, is now a Consultant since last 8 years. He has been involved in marketing, production including reverse engineering, network designs for Cable TV and management of MSO networks. He has set up state of the art Analog and Digital Headends feeding Hybrid Optical Fiber Coaxial Cable Networks. He has contributed in design and installation of two earth stations for DTH .
- He has contributed in writing Indian Standards for CATV, including the ones for Set Top Boxes. Has several published papers on Cable TV and related matters.
- Life Fellow of Institution of Electronics and Electrical Engineers
- Life Fellow Broadcast Engineering Society of India
- Member Institution of Engineers and Indian Institution of Plant Engineers