

Multi Play - Band Width Bonanza for Telcos/MSOs on High Capacity High Speed Coaxial CATV Access Network to Homes and SMBs

Summary

1. Telcos and MSOs in India are poised to exploit the band width bonanza of LCOs last mile coaxial CATV network to homes and SMBs. 2. From the optical node of LCOs HFC access network, on an average 300 homes are passed. In some cases, the number of homes passed goes beyond 600. 3. As there is a very high penetration of CATV in India, thus for 100 % homes connected to one optical node, both down stream and up stream band width is really huge. This band width bonanza is very attractive for telcos and MSOs to interconnect their networks to LCOs access network to offer multi play to homes and SMBs.

Analysis

India follows CCIR CATV RF frequencies for channels allocation to provide PAL TV services .

As digitization of TV has started gaining momentum, all three services like analog TV, digital TV without CAS and digital TV with CAS are being provided in a product mix to ward off the competition from DTH as also meet the increasing demand for digital TV. However, IP over Ethernet over Cable (IPoEoC) is being tried out but not yet commercially launched on large scale. Telcos and MSOs are pondering as to what should be done to exploit the band width bonanza available with LCOs last mile to homes and SMBs.

Just to get an idea of this band width, consider that only 13 RF channels are available for digitization in the forward path. One RF channel of 7 MHz can yield up to 40 mbps and thus 13 RF channels would provide 520 mbps to each 1 km coaxial line passing minimum 150 homes. For the up stream, if only three RF channels are digitized, the same 1 km coaxial line can get 120 mbps. This D/S band width of 520 mbps and U/S band width of 120 mbps passing 150 homes can provide true broad band experience finally including the base level multi play services of voice, broad band Internet, IP TV and FMC deploying IPoEoC technology from optical node of LCOs right up to homes or SMBs.

The telcos have multiple points where their IP/MPLS BW can easily be aggregated and back hauled like MSC/DLC/hub site/fiber site locations where LCOs optical nodes get interconnected through telcos fiber. Thus, technically IPoEoC can be deployed as an end-to-end network to offer multi play to millions of homes and SMBs. The LCOs only need to convert their last mile co-axial network into two way which does not cost more than USD 6 per point.

The above is a hot combination of telcos/MSOs and LCOs interconnected together realizing a huge band width right up to homes to launch multi play in India without laying time

consuming and capex intensive own cables. FTTH can be started in all new colonies in coordination with real estate companies but existing more than 100 million homes can be served through such a band width bonanza already available to homes and SMBs.