

India Looks for No 1 True Broadband Slot through Ultra Low Cost (ULC) Broadband Infrastructure

Ultra Low Cost (ULC) Broadband Infrastructure Delivers Cheapest True Broadband Service and Fastest Subscribers Growth

General

Private operators all over the world are happy to invest in mobile wireless as they find very viable and ready Return On Investment (ROI) in it. Some of the entrepreneurs have become more than billionaire through mobile wireless business but they are against investing in true broadband as they do not see the ROI in it coming soon. However, the nations need both true broadband and mobile wireless. Wireless carriers do not even think that true broadband and NGN can yield any worth while ROI for them. Thus, these two are generally not considered in their business strategies. If under the National Broadband Plan (NBP), some how a legitimate eco system for ultra low cost infrastructure for true broadband is built which gives good ROI, all stake holders would simply jump and replicate the success story of mobile growth in both true broadband and NGN migration.

Strategy

The following innovation needs to be included in the NBP :-

- (a) Fully exploit the strength of core/edge networks and back end OSS/BSS/CRM/IN/Real Time Charging/Billing/SDP of telcos/CMSPs and access networks of HFC (DOCSIS 3.0 CMTS or HPNA or ONT-HPNA) of MSOs/LCOs through interconnection of their respective networks.
- (b) The result is the nation wide rapid roll out of ultra low cost infrastructure for true broadband in an auto pilot mode without disrupting the on-going TV services of MSOs/LCOs.

Methodology

The following steps must be initiated under the NBP :-

- (a) Bring MSOs/LCOs under the simple license regime so that they conduct their business through legal entities under the corp ID No and PAN to account for income tax, service tax and entertainment tax obligations.
- (b) To avoid disruption game by rival telcos/CMSPs at infrastructure level so as to protect the customers interests, lay down the base line revenue share cap between telcos/CMSPs and MSOs/LCOs.

The indicative figures are as follows :-

- (i) HFC based HPNA access network - 30 %
- (ii) DOCSIS 3.0 CMTS access network - 31 %
- (iii) GPON based FTTP access network - 32 %

(c) MSOs/LCOs are obliged to provide on non discriminatory basis access to any telco/CMSP seeking to interconnect its network . In other words, HFC based DOCSIS 3.0 and HPNA access networks must also support open access on standard IP, the way GPON based FTTP networks already support. MSOs/LCOs mostly use over head cables slung over trees, poles, buildings and roof tops enjoying the benefits of not having to pay for the ROW. This makes access network cost very very low. Therefore, the interconnection of MSOs/LCOs access networks and telcos/CMSPs edge networks has the potential to make India as fastest No 1 country in true broadband in the world at least cost.

(d) Telcos/CMSPs can then fully exploit their fiber back hauled cell sites by positioning xGbps MEN routers and inviting MSOs/LCOs to interconnect their access NEs in the cell site itself. Additionally, the telcos/CMSPs can also position their MEN xGbps routers co-located with MSOs/LCOs access NEs. Both arrangements are technically feasible.

(e) The revenue share component gets adjusted on net off basis. If MSOs/LCOs have net MEN routers of telcos/CMSPs co-located, they get extra revenue share from the base line revenue. Like wise, if telcos/CMSPs have net access NEs of MSOs/LCOs in their cell sites, they get extra revenue share from the base line revenue.

Advantages

The country stands to gain the following from the above arrangements :-

(a) India becomes No 1 cheapest and fastest true broadband country in the world.

(b) Huge mobile wireless data traffic generated due to 3G, 4G and BWA gets locally off-loaded through true broadband making up to some extent the utter deficiency of fiber back haul of cell sites.

(c) Huge true broadband base paves the way for NGN migration.

(d) Large true broadband base provides opportunity to deploy 2G, 3G, 4G, BWA and LTE femto cells which would become affordable by 2012. KTMT expects the femto cells to be atleast 50 % of macro outdoor cells by 2016 ie around 250,000 out of total macro outdoor cells of 500,000. This fully exploits the scarce spectrum available in India to serve 1 billion mobile subs.

(e) TV digitalization by Dec 2013 if left up to MSOs/LCOs only to implement is an uphill task. True broadband base easily complements the digitalization of TV by telcos/CMSPs bringing IP TV to homes and shops thereby helping to achieve the target in time.

(f) The CATV industry gets organized by default and Govt starts getting all taxes from them.

(g) Ultra low cost true broadband infrastructure and rapid roll out of GDP growth driving apps would enable full exploitation of all basic infrastructure of roads, rail, ports, airports, education, health and power resulting into huge savings in the long run in the financial outlays of ministries and depts rolling out the basic infrastructure.

(h) This greatest innovation of the century is likely to attract investments from some top global telcos/MSOs who would grab the opportunity and participate in India's quickest true broadband growth leaving behind the developed world in exactly the same way MSOs/LCOs did in quick proliferation of CATV in 90s.

This augurs well for competition in true broadband ab initio.

(i) This is also in consonance with the national policy of sharing the infrastructure. This is actually much more than sharing as it simply brings together the two already existing and in use capital intensive infrastructure of core/edge and access to enable a host of other much needed GDP growth driving apps and services to delightfully ride over the synergized infrastructure resulting into world's lowest tariffs in broadband services too.

(j) With the proliferation of true broadband every where in the country, a galvanizing environment is created which enables a host of smaller IT companies quickly come out with governance strengthening applications which can be operationalized in no time.

(k) The above paves the surest, quickest and cheapest way to enable early preparation and ultra fast execution of an organized National e-Governance Plan in parallel to put the nation on a very strong governance foundation to become No 1 corruption free country by 2020.

(l) Such a NBP based upon solid ubiquitous true broadband platform fully exploiting all the basic infrastructure and fool proof e-governance has the potential to make India No 1 economy by 2030.

Conclusion

There are more than 135 million CATV homes/shops in India served through lowest cost HFC based access networks built from the combination of respective MSOs and LCOs networks. These are growing at CAGR of around 5-6 %. Thus, the number of CATV connections is increasing rapidly. However, majority of CATV connections are provided with analog TV service. Thus, it is impossible to know the exact number of CATV connections without simple add on TV ID adopter fitted on the RF ant port of every TV and sending its unique identity through the back channel to the web client at MSO/LCO location which further sends it to a national servers set up of I&B. Be that as it may, all these homes/offices/SMEs/shops are hot candidates for true broadband service so much essential for driving the GDP growth of the country through virtual education, health care, farmers friendly e-agri and unlimited e-governance applications based upon vernacular video as a simple medium of communication for the exchange of information using these applications. Adopting the above strategic innovation in its NBP, India is now poised to repeat the mobile success story through rapid roll out of world's cheapest true broadband services.