

To Sh. C V Vinod, Chief General Manager Telecom, BSNL, Kerala Circle, Thiruvananthapuram-33

Respected Sir,

Sub: Feedback reg "Utility of IP-MLLN solution in BSNL Telecom Network" in today's scenario

Ref: Corporate office No.BSNLCO-CNP/11(14)1/2020 CNP dated 16/9/2020

As per the letter referred above, corporate office has requested to send feedback regarding "Utility of IP-MLLN solution in BSNL Telecom Network" in today's scenario. The following points are put forth in this regard.

The new tender for IP MLLN equipments boasts of higher speeds over traditional copper lines, modems that support connecting multiple copper lines simultaneously for providing higher bandwidth and some type of modems that can even be connected via fiber. Definitely these are some added advantages over the present TDM MLLN system. But basically it is still a copper based technology and the present status of our underground copper network is very bad in many areas combined with frequent faults. Even though we cannot abandon our precious copper network right away, we cannot rely on the same for the future also. Fiber network is going to be the core network of a future-oriented service provider and will soon replace a major part of our copper network.

Presently BSNL is using TDM-MLLN service from Tellabs with ITI as AMC partner. It is understood that we are paying huge amounts as AMC charges for diagnosing & rectifying hardware & software faults, Card/modem repairing service, ROT support, preventive maintenance, software upgradation etc. Recently AMC of Ph-2, Ph-2+ & Ph-3 equipments supplied by ITI has been renewed w.e.f July 2019 for five years upto 2024. At a time when our copper network is getting degraded day by day, due to various reasons, it is high time to introspect whether we should invest more and more in copper technology, albeit with some better features and capabilities. The installation, A/T etc will also be needed to be performed for any new equipment procurement and we will also need to pay AMC charges for IP-MLLN equipments, cards, modems, ROT support etc, however low number of equipments we order. It is also pertinent to note that the cost of this new equipment and AMC involved is silent in the circular which should be one among the basic criteria in deciding the requirements in a real business environment.

It is understood that most of the circuits in MLLN are being upgraded to 2Mbps or above and we are actively converting these circuits to fiber wherever feasible. This allows for better quality of service, lesser interruptions/errors and overall better maintenance of the high revenue earning circuits. The leased line customers, mainly banks, are also preferring OF cable media nowadays because of better reliability and they are even ready to pay the one-time charges for OF conversion, which is an added revenue for BSNL. They are also ready to purchase the fiber media converters which are readily available in the market. All of this actually makes the migration process easier and also BSNL can offer better services to its customers. For providing Ethernet circuits on fiber, we are already having CPAN as well as STM systems in sufficient numbers and it does not make sense in procuring IP MLLN equipments even though some of the modems will support fiber as uplink. Even provisioning of circuits over VPNoFTTH technology can also be utilized as per the field scenario.

As a sample case study, we can take Ernakulam BA of Kerala circle. Out of around 3500 leased lines working in EKM BA, around 1900 leased lines are working in copper. Out of these 1900 copper circuits, only around 800 circuits are having bandwidth below 2Mbps, the rest are 2Mbps circuits or above and we are converting many of these circuits into fiber as per our feasibility and demand & convenience of the customers. This particular exercise of OF conversion will free up a lot of our MLLN equipments, line cards, modems etc and by rearranging the same we can better utilize the existing TDM-MLLN infrastructure in a better way. Moreover most of the equipments supplied in the last phase are still not completely loaded. Mostly only a few XCG cross connect cards will be needed to be purchased per BA, just to resolve VMUX faults in case of emergencies like lightning prone areas. The rest of the demand we can manage comfortably by rearranging the cards as more and more circuits gets converted to fiber. So from all of the above, it is very clear that we can cater to the pending provisions, if any, and future demands sufficiently using the existing TDM-MLLN architecture itself, with minimal purchase of cards and modems.

As there is very little demand presently and in near future for exclusively copper circuits and for low bandwidths, it is our opinion that there is not much utility for IP MLLN systems in BSNL network in the present scenario and we need not go for large-scale procurement of IP MLLN equipments at this time. Instead the funds may be better utilized for calling limited tenders for provisioning of fiber network for leased line circuits, rearrangement of TDM MLLN equipments and cards, procurement of minimal no of TDM MLLN spare cards etc. If at all any requirements for IP MLLN are there in certain BAs or circles, we may take up the case individually and after necessary amount of scrutiny.

Thanking You,

Sincerely Yours

Jithesh K P Circle Secretary SNEA Kerala Circle