MTNL/RA/TRAI Consultation Paper -08/2014
Dated 16.08.2014

To,

The Advisor (QoS)
TRAI, New Delhi

Sub. : Comments on TRAI Consultation Paper on "Migration to IP based Networks" .

TRAI issued consultation paper on 30.06.2014 on the aforesaid subject and asked the various stakeholders to comment on the issues mentioned in the consultation paper. In this regard, following is submitted:

- The IP based interconnection technology in India is at evolving stage, and should be allowed to mature over a period of time and then the issues experienced over time of development, may be addressed/ deliberated. At this stage framing Regulation/control is not justified.

- The existing technology cannot be discarded at random with advent of new technology as huge investments have already been made by operators in existing networks. As mandating new technology will force operators to make further huge investments and that will not be justified in the present scenario, as the industry is already debt ridden.

- The compatibility of the IP based interconnect system with existing nodes(exchanges) is to be ensured/ validated and also it should always be the responsibility of new technology adopter to connect with the old technology system i.e. there should be downward compatibility with existing technologies, which is also worldwide accepted & adopted phenomenon.

- The technology up gradation for interconnection from TDM to IP, involves many issues like tariff/ charging issues, charging for NLD/ILD calls, numbering plans, and also includes various technical issues like routing, IP interconnection standard protocols, technical specifications, emergency services etc. as already referred in Consultation Paper.

- If deemed fit, a proper detailed study may be carried out regarding feasibility /implementation of the aforesaid technology including technical issues may be referred to TEC for study and their recommendation.

Further the point wise submission to issues raised in Consultation paper is as follows:

Q1. Is there a need to mandate IP interconnection? If so, what should be the time frame for implementation of the same? Please comment with justifications.

MTNL Response : As the technology is in evolving stage in India, it should be allowed to mature over a period of time and then the issues experienced over time of development, may be addressed/ deliberated. Therefore it should not be mandated at all. As presently most of the interconnect systems are TDM based, and operators have already made huge investments in the existing systems, mandating new technology will require further huge investments. As presently the industry is already heavily debt ridden, therefore mandating new technology will not be justified.

Therefore in present scenario choice for adoption of new technology should be left to the operators, and it should always be the responsibility of new technology adopter to connect with the old technology system i.e. there should be downward compatibility with existing technologies

Q2. Whether both TDM and IP interconnection should be allowed to coexist? If so, whether the existing regulation i.e. 'Reference Interconnection Offer dated 12th July 2002' addresses the requirements of IP interconnection also? Please comment with justifications.

MTNL Response : Yes, both TDM and IP interconnection should be allowed to co-exist and should be left to the operators to choose the technology through mutual negotiation. The matter regarding RIO being subjudice, no comments can be offered for the same.

Q3. In case IP interconnection is mandated in India, whether the enforcement of interconnection agreements should rely on

(i) Bilateral agreements and dispute resolution; or

(ii) Mandatory reference offer

MTNL Response : In view of response to Q1 above, it is re submitted- that IP interconnection should not be mandated in India in the present industry scenario. When the technology will be upgraded to IP by the operators, it should be left to the operators to enter into bilateral agreements for interconnection.

Q4. In an IP based network scenario, which mode of interconnection is preferable to carry traffic:- peer-to-peer, Interconnect Exchange or combination of both? Please comment with justifications.

MTNL Response : The preferable mode to carry traffic should be peer-to-peer in line with existing set-up.

Q5. In case an Interconnect Exchange is required, should such Exchange be placed within each licensed service area or a single Interconnect Exchange will be adequate for the entire country? Please comment with justifications.

MTNL Response : As commented in Q4 above, the mode of interconnection should be peer to peer. Though MTNL is not in favor of setup of interconnect exchanges. Even in case, Interconnection Exchange is established, it should be provisioned for each license service area, to simplify the inter connectivity and corresponding issues.

Q6. Whether any regulatory intervention is required to mandate the locations and structure of points of interconnection (POI) for IP based network architecture? Please comment with justifications.

MTNL Response : No, regulatory mandate is not required. It should be left to operators, mutually agreed to have inter-connectivity, in each licensed service area.

Q.7 What are your views on the migration from the existing interconnection regime-measured in terms of minutes of traffic to an IP interconnection regime replaced by measures of communication capacity? Please comment with justifications.

MTNL Response : As the Indian telecom industry is driven more by voice based revenue, this is not appropriate time to migrate to measure of communication capacity.

Q.8 In an IP interconnection between networks, comment on the type of charging principles that should be in place

(a) Capacity based in terms of Mbps.

(b) Volume based in terms of Mbps.

(c) QoS based.

(d) a combination of the above three.

MTNL Response : The proper methodology may be decided based on experience with technology over a period of time. However, as indicate in reply to Q7 above, at present Minutes based charging applicable in TDM may also be adopted in IP based interconnectivity. However, with migration to IP technology over time by operators, it may be reviewed.

Q9. What should be the criteria to estimate the traffic minutes in IP environment if interconnection charges continue to be minute based? Please provide justification in support of your answer.

MTNL Response : The traffic minutes would be based on the call detail records.

Q10. In addition to the above, any other modifications or components of IUC which are required to be reviewed in the IP **based network scenario? Please provide all relevant details?**

MTNL Response : No comment.

11. Do you envisage any interconnection requirement for application & content service providers? If so, what should be the charging mechanism? Please provide all relevant details justifying your comments.

MTNL Response : As earlier also, the same was not regulated by TRAI. Therefore it is proposed that it should be left to operators and application providers.

Q12. Whether the existing regulatory framework for measuring and reporting quality of service parameters as defined for PSTN/PLMN/Internet may continue to apply for IP based network services? Please comment with justifications.

MTNL Response : Existing Regulatory framework should continue.

Q13. In the context of IP based network Migration, if the parameters in the existing QoS regulation are required to be reviewed immediately then please provide specific inputs as to what changes, if any, are required in the existing QoS regulations issued by the Authority. Please comment with justification.

MTNL Response : Not applicable in view of reply to Q12 above.

Q14. In case new QoS framework is desirable for IP based network, do you believe that the QoS be mandatory for all IP based network services. If yes, what should be QoS parameter and their benchmarks?

MTNL Response : Not applicable in view of reply to Q12 above.

Q15. What should be the mechanism for monitoring the parameters for end to end QoS in IP based network environment? What should be the reporting requirement in this regard? Please comment with justification.

MTNL Response : Not applicable in view of reply to Q12 above.

Q16. Should sharing of the IP based core and Access network element by different telecom service providers be allowed in IP based network scenario? What are the challenges, opportunities and problems of such sharing? Please comment with justifications.

MTNL Response : It is proposed to review this point later when all operators including legacy operators becomes ready for the same.

Q17. Do you see any issues concerning the national numbering plan with regard to the migration towards IP based networks?

Q18. Do you believe that ENUM has to be considered when devising the regulatory policy for IP based networks as it will provide essential translation between legacy E.164 numbers and IP/SIP (Session Initiation Protocol) addresses.

Q19. Which type of the ENUM concept should be implemented in India? What should be the mechanism for inter-relationship between number and IP addressing, and how it will be managed?

Q20. Is there a need to mandate Emergency number dialling facilities to access emergency numbers using telephone over IP based networks platform? Please give your suggestions with justifications.

Q21. How will the issues, of Caller location delivery and priority routing of calls to the emergency centre in IP based networks environment, be handled? Please comment with justifications.

MTNL Response (Q 17- 21): No comment

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