Response to Consultation Paper on Internet Telephony dated 22/06/2016 Manjesh Hanawal, Assistant Professor, IEOR, IIT-Bombay

Q2: Point of Interconnection for Circuit switched Network for various types of calls is well defined. Should same be continued for Internet Telephony calls or is there a need to change Point of Interconnection for Internet Telephony calls?

A2: Same should be continued.

Q3: Whether accessing of telecom services of the TSP by the subscriber through public Internet (internet access of any other TSP) can be construed as extension of fixed line or mobile services of the TSP? Please provide full justification in support of your answer.

Q3: Yes. By accessing the telecom services through public Internet, any internet enabled device can make calls, transfer audio/video/data files to not only subscribers on the public internet but also on the private networks of the TSPs.

Q5: What should be the termination charge when call is terminating into Internet telephony network?

A5: Unlike the TSPs, ITSPs do not have to maintain last mile connectivity. Hence termination fee is unnecessary for the ITSPs. Further, in addition to subscription fees, ITSPs can also earn from advertisements. Where as, TSPs revenues are mostly form subscription fees.

Q10: What should be the framework for allocation of numbering resource for Internet Telephony services?

A10: All telecom services should be treated under one regulation irrespective of the technology they adopt. Hence, the same numbering procedure used for mobile and fixed line should be extended for services of ITSPs. Specifically, number assigned to a subscriber should not depend on what access technology is used.

Q12: Is it possible to provide location information to the police station when the subscriber is making Internet Telephony call to Emergency number? If yes, how?

A12: Yes. Since Internet telephony requires Internet connection, the coordinates of the mobile are known and that should be transmitted with the voice/data/video signals. When one books a Ola/Uber taxi, the driver gets the precise coordinates of the user. Same can be used in Internet Telephony calls.

Q13: In case it is not possible to provide Emergency services through Internet

Telephony, whether informing limitation of Internet Telephony calls in advance to the consumers will be sufficient?

A13: Each time a subscriber initiates a call through a ITSP, the app should display the average rate possible for the call and warn the subscriber if the rate are below some threshold.

Q14: Is there a need to prescribe QoS parameters for Internet telephony at present? If yes, what parameter has to be prescribed? Please give your suggestions with justifications.

A14: The main difference between TSP and ITSPs is that TSPs can guarantee certain QoS on their network but ITSPs cannot as they work on public network. If ITSPs has to be treated on par with the TSP, ITSP should also be made to guarantee certain QoS. One possible ways is, allow a ITSP subscriber to use the service only if his/her Internet sped is above some limit.

Q15: Any other issue related to the matter of Consultation.

A15: Both TSPs and ITSPs should be brought under one regulation—one service one rule--. However, some more deliberation is required on the revenue models of TSPs and ITSPs. ITSPs have the advantage of earning from advertisement, which the TSPs lack. Only allowing termination charges on the TSPs but not on the Internet Telephony networks can overcome this imbalance to some extent.