The following are my comments on the questions raised in the "Consultation Paper on Regulatory Framework for Over-The-Top (OTT) communication Services", dated November 12, 2018.

Q.1 Comparison of OTT services with those provided by the TSPs.

In current times and the future, it seems like it is/will-be that the unique function of TSPs is that they provide their customers with the ability to connect to the global internet. It is their then previously primary functions of serving as a voice (calls) and text (SMS) carrier that OTT services have taken over. Specific OTT services and/or providers are too numerours to list.

Q.2 Substitutability as criterion for regulation/licensing.

Substitutability should be considered, but only in one aspect, namely, the service of providing access to the global internet. But OTTs by defenition do not provide this, and so are not comparable.

Q.3 Impact of regulation/licensing requirements on TSPs.

As any regulation will, it does impact revenue. But such measures are necessary shackles on a TSP so as to protect consumer rights, and to ensure democratic access to the internet. OTTs play a relatively secondary role in this aspect, as they do not

directly control people's ability access the internet.

And for this reason, I think that OTT services should not be required to infuse funds or participate in the regulatory/licensing regime.

Q.4 Inter-operability

The term used for this amongst communication services is 'Federation'. It is practically impossible to enforce federation amongst OTT services, since new services may spring up anytime, that are not federated, and then it would be an unfair cost on the regulated services. Also, it would impose an innovation penalty on the services, because

every feature will have to consider inter-operability.

Now this may sound radical, but I am of the opinion that in fairness,

TSPs should also not be required to have their voice/text communication services be inter-operable, as long as they provide unfettered (as per Net-Neutrality rules) access to the internet. Emergency calling requirements should still exist.

## Q.5 Lawful interception abilities

I am of the opinion that such situations should be dealt on a case-bycase basis, and not at the regulatory level, as that may be considered to be a violation of the privacy of an individual, as described in the ruling by the 9-judge Supreme Court bench.

In cases of suspicion, law-enforcement authorities may issue warrants to the provides to submit whatever information they may have on the subjects under investigation. In case of non-cooperation, measures may be take to block or punish as per law.

Q.6 Emergency service access.

No, I feel that this should only be a requirement on the TSPs, since OTTs are a layer on-top of what the TSPs provide. Even if they did provide emergency services, they would only be at-most as stable as the undelying connection, and so, it makes sense to delegate this responsibility to that level.

## Q.7 Non-level playing field.

Yes, the current situation is a non-level playing field, due to the reulations enforced on those services provided by the TSPs, which are "substitutable" by OTTs. Regulations should only be applicable to TSPs, and only as far as their being a provider of internet services is concerned. Infact, the provision of voice, text, RCS, VoLTE etc., must all be considered an OTT service provided by the TSP, and should be under Net-Neutrality regulations. i.e., the TSP should not unfairly prioritise thier own communication services (apart from emergency exceptions) over other data.

Q.8 Revision of regulation/licensing.

Yes, the TSP's regulation will (in the scenario of my comments) have

to be re-charted to exclude their communicaion services, while at the same time, bringing them under that ambit of Net-Neutrality. I understand that this shifting of regulation is very radical, but I think that it is the only fair option.

I feel that many of the above questions arise partly due the name itself: OTT, indicating a parasitic relationship with the TSPs. But they are actually Through-The-Network, rather than Over-The-Top. In that vein, the TSP's customers are those who bear the burden of funding innovation and development of the network infrastructure, and not internet services.

I hope you will provide due consideration to my opinions/comments.

Thank you Vishnu