

## Net Neutrality Contradicting postures in the U.S. and India

The Internet has evolved from a network that inter-connected defense networks to become an essential infrastructure for commerce and industry. Since the controversial term “**Net Neutrality**” (NN) was coined in 2003, much of the debates have revolved around the potential consequences of network owners {i.e. Telecom and Internet Service Providers (TISPs)} exercising additional control over the data traffic in their networks.

TISPs provide the last mile connectivity to carry content and applications to the end users. Traditionally the basic feature of provision of Internet connectivity has been the ‘best effort’ paradigm<sup>1</sup>, where all end user service requests demanding network capacity are treated equally irrespective of nature or content. However, while best effort is stated regime, traffic management techniques that allow connectivity providers to manage traffic more extensively, and to differentiate packet routing based on content, applications, and users, have been in use.

Traffic management allows for a wide range of operations such as construction of fast lanes for certain types of data, guaranteed network capacity for certain types of users, prevention of access to illegal content, and authentication of customers. The advanced traffic management techniques include ability to charge application providers, and users in a differentiated manner, or to block certain kinds of traffic. The changing hues of net neutrality emerge in the context of exponentially increasing amounts of

data, and increasing varieties of applications, resulting in repeated demands for capacity enhancements of networks.

**Table 2: Some classic cases on net neutrality deviations in the U.S. and India**

- 2007: ComCast restricted the use of certain peer to peer applications
- 2009: AT&T decided to put restrictions on the iPhone applications that can run on its 3G network
- 2009: AT&T allowed SlingPlayer Mobile to stream IP based video broadcast over Wi-Fi networks but not on its 3G network
- 2014: Airtel charging extra charges for Voice Over IP calls.
- 2015: Reliance Communication free access to Facebook Free Basics services

### Net Neutrality Regulation in the US

In the U.S., regulating the Internet falls within the jurisdiction of Federal Communications Commission (FCC) under the Communications Act of 1934 (the Act). The power to regulate “telecommunication common

carriers” is granted by Title II of Act and that for ISPs as “information service providers” under Title I. Title II explicitly gives FCC the authority to

protect the interest of the consumers against “unjust and unreasonable discrimination” since telecommunications service is treated as a public utility. However, under Title I the FCC had no authority to regulate ISPs against any possible discriminatory behavior.

In 2015, FCC passed the net neutrality rule, reclassifying the Internet service as a telecommunication service and hence placed it under

2015: FCC passed the net neutrality rule to classify the Internet as a public utility under Title II of the Communications Act 1934

- 2010: FCC approved the Open Internet Order setting rules for transparent disclosure, non-blocking and non-discrimination on fixed broadband service

2005: FCC adopted Net Neutrality principles, especially as applicable to wired broadband Internet service providers

11 June 2018: Repeal of Title II provision came in to effect

14 Dec 2017: FCC voted (3-2) to repeal net neutrality rule

- 18 May 2017: FCC proposed Restoring Internet Freedom Notice of Proposed Rulemaking (NPRM) seeking comments on roll back of net neutrality regulations

<sup>1</sup> In a best effort network, all users obtain best effort service, meaning that they obtain unspecified variable bit rate and response time based on the current traffic load.

Title II.<sup>2</sup> However, in 2017, FCC repealed the net neutrality policy for ISPs by putting it back under Title I.

Many states in the U.S. (e.g. Washington and Oregon) have been pushing to introduce net neutrality at their level. California has adopted the most comprehensive net neutrality rules. However, these [have been challenged](#) by the US Justice Department.<sup>3</sup>

## Net Neutrality Regulation in India

The debate on NN started when Facebook announced its Free Basics programme in a tie-up with Reliance Communication in 2015. A number of consultations were initiated by the Telecom Regulatory Authority of India (TRAI). In its National Digital Communications Policy 2018, the Government of India accepted regulator's recommendations in full paving way for prohibition of discriminatory traffic management with some exceptions for specialised services. [A committee](#) will be formed to advise government on issues of monitoring compliance with net neutrality. The license conditions of ISPs have also been [amended to](#) incorporate net neutrality rules.<sup>4</sup>

## The Debate

TISPs oppose NN regulations and claim that such regulations would discourage investment in broadband networks. They claim they would have no incentive to invest in network capacity unless they could actively

<sup>2</sup> However, it has been pointed out that NN laws in US were never applied to ISPs which edit (filter and curate) the internet. [https://www.mercatus.org/bridge/commentary/state-net-neutrality-laws-could-encourage-filtering?utm\\_source=marketing&utm\\_medium=email&utm\\_campaign=issuesp\\_olight](https://www.mercatus.org/bridge/commentary/state-net-neutrality-laws-could-encourage-filtering?utm_source=marketing&utm_medium=email&utm_campaign=issuesp_olight) and <https://techliberation.com/2017/07/12/heres-why-the-obama-fcc-internet-regulations-dont-protect-net-neutrality/>

<sup>3</sup> However, it has been argued that Indian NN regulations are more comprehensive than CA rules: [https://www.medianama.com/2018/09/223-californias-gold-standard-net-neutrality-law-doesnt-fully-stop-zero-rating/?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+medianama+%28Medianama%3A+Digital+Media+In+India%29](https://www.medianama.com/2018/09/223-californias-gold-standard-net-neutrality-law-doesnt-fully-stop-zero-rating/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+medianama+%28Medianama%3A+Digital+Media+In+India%29)

<sup>4</sup> Also at <https://www.communicationstoday.co.in/net-neutrality-telecom-department-amends-unified-licence-norms-for-operators-vnos/> and <https://www.communicationstoday.co.in/net-neutrality-debate-more-transparency-needed-for-specialised-voip-and-iptv-services/> - certain services that are provisioned for specific content, and require a minimum quality of service, are exempt from the regulations on net neutrality

manage and price traffic on their network to provide the desired Quality of Service.

In contrast, proponents of NN regulations (comprising mostly consumer rights groups, Internet content companies and start-ups) note that the Internet has operated according to non-discriminatory neutrality principle since beginning. To support their claim that net neutrality has been the main driver of growth and innovative applications of the Internet,

they rely on the end-to-end design principle under which the control and intelligence

functions reside largely with users at the 'edges' of network, rather than in the core of network itself. They claim this creates an environment

that does not require users to seek permission from the network owners and thus promotes innovations.

## Conclusion and Unanswered Questions

Tim Berners-Lee, Inventor of the World Wide Web has said: "The neutral communications medium is essential to our society. It is the basis of a fair, competitive market economy. It is the basis of democracy, by which a community should decide what to do. It is the basis of science, by which humankind should decide what is true. Let us protect the neutrality of the net."

While the recent regulatory stances of the U.S. and India seem to be towards supporting the opponents and proponents of NN respectively, the very important questions that remain to be answered are as follows:

- 1 What are the mechanisms to detect NN (or violation thereof)?
- 2 What could be "reasonable traffic management practices" that makes a trade-off between the views of opponents and proponents?
- 3 What are the regulatory over heads of NN regulation compared to the benefits for society?

Be that as it may, it is time for all stakeholders to arrive at a common consensus to provide uninhibited quality broadband services to all!

*(This Policy Note is authored by Dr V Sridhar, Professor at the International Institute of Information Technology Bangalore, India)*

