

Responses for Consultation Paper on Differential Pricing for Data Services

Introduction:

We thank TRAI for initiating the consultation process on differential pricing for data services. However, as the earlier consultation process on Regulatory Framework for Over-the-top (OTT) services had questions related to differential pricing, we hope that the responses submitted for that consultation will also be considered while analysing this issue. Differential pricing involves treating of a class of websites, application or services differently by a Telecom Service Provider(TSP) by offering discounted rates for accessing these. Essentially, TSPs, and in some cases content providers, as in the case of Facebook controlling the access through their FreeBasics programme, act as gate-keepers restricting access of consumers to the Internet.

One of the basic legal protections for the freedom of the market embedded in the common law is the non-discriminatory principle of public carriage. If firms providing transport services to the public are able to discriminate among shippers or receivers of goods, they can profit hugely, at the expense of other market participants generally, their own cartel allies excepted. So from ferrymen in medieval England to railroad and trucking companies in the 20th century, prohibiting anti-competitive discrimination in transport services for the public is basic to the fair working of the market.

Telecommunications services are not different in this respect from other forms of transport. Regulators in the 20th century dealt with telephone and other such services on a common-carriage basis, in order to prevent anti-competitive collusion. One aspect of the group of ideas sometimes misleadingly called, all together, "network neutrality," is the principle of prohibiting anti-competitive routing practices. As the recent experience of the US Federal Communications Commission has shown, management of a fair Internet is now as fundamental to the free market as the prohibition by other regulators of anti-competitive practices in other forms of transport. The FCC's imposition of common-carriage rules for Internet service providers is a victory for the public interest after of a decade of attempts by

industry to capture the regulators, to prevent this very outcome. This consultation process initiated by TRAI is also very important to protect the interests of Indian Internet users as well as startups. Any effort to present a ‘walled garden’ of the Internet to India’s less well-off majority on the false ground that this is ‘all they can afford’ is in fundamental conflict with any rational policy of social development through innovation. What citizens should resent, government should also prohibit as an obstacle to social development. The Internet is not a basket of media websites we ‘consume’ any more than a highway is a collection of stores along the side of the road we could shop at. The Internet is the possibility of unlimited interconnection, a social condition in which we can all be connected to everyone else everywhere, with rich technical connections that can allow us to produce services for one another.

The integrity of the network — that it provides one indivisible opportunity for everyone connected to it — is its most important feature. As a tool of social development, the Internet allows people with little capital equipment but plenty of ingenuity to build effective businesses from zero. But only if other people can ‘find’ them on the Internet and receive the services they are offering.

A collusion between one or more local telecommunications oligopolists and a big service platform incumbent to price a small basket of websites at zero, and to deliver network integrity only to those who will pay more for it, destroys this immense value of the Internet in realising human potential. If most people cannot see the ‘real’ Internet, startup businesses will become invisible, and the colluding platform companies will be protected against any developing competition, at the expense of wiping out hundreds of thousands of potential businesses representing India’s economic future. Such collusion is, therefore, directly antithetical to any Digital India worthy of the name. There is no cost savings whatever in providing access only to some addresses on the Internet. The telecom provider is connected to the larger world by the same universal technical protocols — developed and maintained by consensus among all users as equals — through which all computers on the Internet can locate and exchange services with one another.

The provider doesn’t increase its costs by providing the same integrity of universal

interconnection to all users further downstream. On the contrary, it incurs costs by artificially restricting the normal interconnection between parties downstream and the Net as a whole. It profits wildly from those investments, by selling at a high additional price what it could, at no additional cost, have provided to everyone in the first place.

Everything in a digital network, whether part of a phone conversation or data moving according to Internet protocols, is broken into ‘packets’, short bursts of data in a standard envelope. Your smartphone sends and receives millions of packets a day. Whether a packet is ‘voice’ or ‘data’ — and if it is data whether it’s being exchanged with a website in California or Mumbai — the cost of moving it on the local telecom network is the same.

Everywhere in India where a device is connected to the telecommunications carriers’ network, it can profitably be served at current rates for ‘phone calls’ or ‘data’. Everything else charged is mere economic rent to the telecom company. This is the sort of pricing behaviour that telecom regulators exist to prevent.

Question 1. Should the TSPs be allowed to have differential pricing for data usage for accessing different websites, applications or platforms?

TSPs should not be allowed to have differential pricing for data services. A traditional economist may point to markets where when differential pricing is possible it can have benefits and costs. However, internet economy is a peculiar species to which simplistic application of such a principle ain't possible. The reasons for this view are enumerated below:

a. Competition distortion

Differential pricing distorts competition by discriminating between various websites and services. This creates an entry barrier for new websites and services as they have to negotiate with TSPs and in some cases content providers who act as gate-keepers to gain access. TSPs could zero-rate their applications or services or those of their partners. This results in other services and applications that are not part of the zero rating package at a disadvantageous position. Such a practice violates Section 3 (prohibition of anti-competitive

agreements) and Section 4 (prohibition of abuse of dominance) of the Competition Act, 2002. There are many instances in other countries that show that differential pricing of data affects users. A few of those are listed below:

Instances

- In 2013, Deutsche Telekom, a German TSP announced plans to set volume caps for data, but exempted or zero-rated its video service. The German regulator held that the practice of Deutsche Telekom of not counting Spotify toward the volume limit constitutes discrimination since a specific application is treated differently than the other applications¹
- In OECD markets where TSPs launched their video services, they have over-priced data bytes while zero-rating their video services²
- Youtube recently complained about T-Mobile's efforts at throttling its video service although it is not part of the Binge-on program offered by T-Mobile, in which the videos of partner services are offered at a low speed and do not count towards data consumption.³

Differential pricing in internet access will be implemented through opaque arrangements between the telecommunication service providers and platform companies designed to trap buyers. Many of these offerings may be “bait and switch” types to attract unwary users and then up-selling them other online services.

b. Differential Pricing incentivises degradation of quality

In the transport economy in the United States, early railroad operators⁴ in an attempt to increase profits by price discriminating between rich and poor consumers decided to offer roofless third-class carriages in order to contrast the quality and price between the third class and the first class ticket. Internet was developed on an end-to-end principle that treated the network mostly as a dumb pipe making it extremely difficult for internet service

1 The unofficial translation of the Report of the Bundesnetzagentur of 14 June 2013 is available at http://www.bundesnetzagentur.de/SharedDocs/Downloads/EN/BNetzA/Areas/Telecommunications/TelecomRegulation/NetNeutrality/Report_BNetzA_NN.pdf?__blob=publicationFile&v=1

2 http://www.dfmonitor.eu/downloads/Neelie_Kroes_Specialized_Services_are_a_giant_net_neutrality_loophole_HI_GHLIGHTS.pdf

3 <http://fortune.com/2015/12/23/youtube-t-mobile-video-throttling/>

4 https://www.whitehouse.gov/sites/default/files/whitehouse_files/docs/Big_Data_Report_Nonembargo_v2.pdf

providers to engage in any kind of differential pricing. If allowed the telecommunications service providers will degrade the service of the regular internet connection or disable a few features, thereby creating a high and low end version of the internet.

As broadband in wireless and traditional wired connections, mobile internet spreads, the archaic business models of telecommunications service providers is threatened as technology is reducing costs of the core of running these services. Whereas once voice or text were big revenue generators, today they are fast becoming just one of many services delivered through broadband. In such an environment, open networks that can provide general connectivity must emerge as winners as they can generate more revenue from users instead of slicing up the internet and offering it as bunches of television channels and turn the internet into cable television.

c. Users denied choice

The subscriber is denied a choice and the TSP or the content provider who acts as the gate-keeper decides the websites she can access. This limits the understanding of the new user about the Internet and only helps to further the commercial interests of a select few corporates included in the zero-rated bouquet of services. A survey on communications use in Africa showed that the number of people who had responded saying they used Facebook was much higher than those who said they used the Internet. A more recent survey conducted by *Quartz* in Indonesia and Nigeria shows that at least a few millions of Facebook's 1.4 billion users suffer from the same misconceptions.⁵ The survey observes that in both countries more than half of those who don't know they're using the Internet say they “never” follow links out of Facebook, compared with a quarter or less of respondents who say they use Facebook and the Internet. If people stay on one service, it follows that content, advertisers, and associated services also will flow to that service, possible to the exclusion of other venues.⁶ Yet another study that looked at how newer, low-income users were responding to mobile internet, and in particular, to data plans that provide restricted access,

5 <http://www.theatlantic.com/technology/archive/2015/02/facebook-is-bigger-than-the-internet-whoa/385350/>

6 <http://qz.com/333313/millions-of-facebook-users-have-no-idea-theyre-using-the-internet/>

showed that many low-income users between ages 18 and 35, who had no access to Wi-Fi and had only recently started using mobile internet, expressed a strong preference for unrestricted all-access internet plans, even when limited plans were more affordable. It was concluded that the next generation of internet users are mostly young, and curious about the ability of the internet to materially benefit their lives. Limited access curtailed this ability. Some users also expressed fear of being unexpectedly charged for leaving the “free zone”, by, for example, clicking on links on Facebook. They felt more comfortable with the standard flat-fee data plans.⁷

d. Violation of license conditions

TSPs provide Internet services based on the license agreements entered into with the Department of Telecommunications. Condition 2.2 of the Internet Service License⁸ states that “*Internet access means use of any device/technology/methodology to provide access to internet including IPTV and all content available **without access restriction on Internet including web hosting, web colocation but it does not include service provider’s configured Closed User Group Services (VPN)***”. Condition 2.1 of Chapter IX of the Unified License⁹ states “The Licensee may provide Internet access including IPTV. The subscriber **shall have unrestricted access to all the content available on Internet except for such content which is restricted by the Licensor/designated authority under Law**”

When the TSP provides the subscriber access to the Internet, it should be to the entire Open Internet except content blocked under the provisions of the information Technology Act, 2000. Restricted access to select bouquet of services cannot be permitted.

e. Privacy/ Security concerns

Restricted Internet Services provided by TSPs in association with content providers as in the case of FreeBasics by Facebook, require subscribers to access Internet through their servers which are often located outside India. Such services by design, track all the web interactions of all users, receive and store data on navigation information. Often, encryption

7 <http://www.savetheinternet.in/files/amba-kak-thesis.pdf>

8 cca.ap.nic.in/i_agreement.pdf

9 http://dot.gov.in/sites/default/files/Unified%20Licence_0.pdf

is broken at the end of the proxy server of the gate-keeper and this affects the privacy and security of the communication. As proposed these kind of services break the authentication function of HTTPS, partially break the basic security of the content exchanged by first decrypting it all at their servers and then re-encrypting it for onward transmission to the intended recipient. Thus, restricted Internet services by its very nature result in loss of privacy and affects security.

f. Big Data

With the advent of sophisticated techniques of analytics and availability of big data have created new ways for businesses to collect data about their customers that can be used to offer a gradation of prices based on various factors. Now its possible to collect information about location, search history, travel history, device history, likes, dislikes, more so on mobile applications that require users to create accounts to log into. Such information linked with information gathered from other sources creates user profile that allows for price discrimination at a scale unprecedented in history of capitalism. Given sufficient data combined with sophisticated analytical tools give the telecommunications service provider an ability to predict consumer behaviour and change its services accordingly. This can result in discrimination against some specific groups.

g. Harms user interests

If TSPs can charge Over The Top(OTT) services to be zero-rated, they would have an incentive to lower monthly bandwidth caps or increase the per-byte price for unrestricted Internet use in order to make it more attractive for applications providers to pay for zero-rating.

In many OECD countries, operators have reduced data caps to promote their video services which are zero rated.¹⁰ However, in sharp contrast, when the Dutch regulator prohibited zero-rating practices followed by ISPs , KPN, a TSP, doubled its monthly bandwidth cap for mobile Internet access from 5 to 10 GB as it could not proceed with the zero-rating plan for

¹⁰ http://www.dfmonitor.eu/downloads/Neelie_Kroes_Specialized_Services_are_a_giant_net_neutrality_loophole_HI_GHLIGHTS.pdf

its mobile service and without higher data caps, users would not find its video service attractive. Thus, enforcing net neutrality would benefit consumers.¹¹

h. Breaks the open, decentralised nature of the Internet

The Internet or the *Network of Networks* was designed to be open with anyone on the network being able to reach anyone else on the network. However, with differential pricing the Internet is broken into parts with users access restricted to parts of the Internet. This leads to two kinds of Internet, where the users of a service like FreeBasics are given access to only select services with the vast resources on the Internet being denied to them.

Experience of other countries:

Chile, Netherlands and Slovenia are a few of the countries that have strong Net Neutrality laws that prevent zero rating. In Netherlands, the regulator imposed fines on KPN and Vodafone for violation of net neutrality.¹² A fine of EUR 250,000 was imposed on KPN for blocking various services including several Internet calling services. A fine of EUR 200,000 was imposed upon Vodafone for zero-rating HBO's video service. In 2014, the Chilean Telecommunications Regulator banned zero rating of social networking apps like Facebook and Twitter.¹³ Frode Sørensen, Senior Advisor at the Norwegian Post and Telecommunications Authority has clarified that *“The Norwegian guidelines on net neutrality state quite clearly that 'Internet users are entitled to an Internet connection that is free of discrimination with regard to type of application, service or content or based on sender or receiver address.' This means that in the Norwegian market zero-rating would constitute a violation of the guidelines.”*¹⁴

India should opt for a regulatory framework that protect the interests of its Internet users. With the Government striving hard to promote startups, regulations that are introduced

11 Network Neutrality and Zero-rating, Barbara van Schewick, February 19, 2014 available at <http://apps.fcc.gov/ecfs/document/view?id=60001031582>

12 <https://www.acm.nl/en/publications/publication/13765/Fines-imposed-on-Dutch-telecom-companies-KPN-and-Vodafone-for-violation-of-net-neutrality-regulations/>

13 <https://gigaom.com/2014/05/28/in-chile-mobile-carriers-can-no-longer-offer-free-twitter-facebook-and-whatsapp/>
The machine translation of the order is available at https://translate.google.com/translate?sl=es&tl=en&js=y&prev=_t&hl=en&ie=UTF-8&u=http%3A%2F%2Fwww.subtel.gob.cl%2Fnoticias%2F138-neutralidad-red%2F5311-ley-de-neutralidad-y-redes-sociales-gratis&edit-text=&act=url

14 <http://eng.nkom.no/topical-issues/news/net-neutrality-and-charging-models>

should permit and promote innovation and should ensure that there are no entry barriers to startups for reaching out to users.

Question 2: If differential pricing for data usage is permitted, what measures should be adopted to ensure that the principles of non- discrimination, transparency, affordable internet access, competition and market entry and innovation are addressed?

Differential pricing of data services affects consumers as well as startups as explained in the answer to the first question. Thus, it is in nobody's interest to permit differential pricing.

Question 3: Are there alternative methods/technologies/business models, other than differentiated tariff plans, available to achieve the objective of providing free internet access to the consumers? If yes, please suggest/describe these methods/technologies/business models. Also, describe the potential benefits and disadvantages associated with such methods/technologies/business models?

Differentiated tariff plan, although marketed as a method to provide free/discounted access is often a tactic to get more users for the free/discounted bouquet of services. The real issues of digital literacy and providing access to the poor and people in villages remain un-addressed in this debate on zero rating.

Many Panchayaths¹⁵ and municipal corporations¹⁶ are taking the lead in providing free Internet access to the public. The need of the hour is to support and promote such initiatives at the grass root level than banking on marketing gimmicks pushed as philanthropic ventures.

Other suggestions which have been advanced to improve access include:

- Free packs of with a data cap like 500 MB/month
- Free access provided at low speeds using 2G networks
- Free Wi-Fi Hotspots and community centres.

15 <http://www.thehindu.com/news/national/kerala/free-wifi-for-all-at-eraviperoor/article7707446.ece>

16 <http://www.thehindu.com/news/national/kerala/malappuram-to-log-on-to-free-wifi/article7483969.ece>

- Data coupons that can be redeemed for data.
- Direct Money transfer for data packs
- Websites/Apps transferring money earned from advertisement to the user's accounts as Internet data subsidy¹⁷
- Ad supported data packs, i.e watching advertisements for data credit.
- Data bundling with new devices
- Using USO funds to fund access schemes for the disadvantaged sections

Question 4: Is there any other issue that should be considered in the present consultation on differential pricing for data services?

The earlier consultation on Regulatory Framework for Over-the-top (OTT) services overlaps with the current consultation process. Hence, it is important to have a definite road map and to have a time-bound plan to finalise the process. The comments and counter-comments provided on the issue of zero-rating in the earlier consultation process will have to be considered while analysing the issue of differential pricing.

To conclude, we repeat the suggestion given in our comments to the earlier consultation paper. There are several ways to enforce the principle of Net Neutrality, including the following:

- In exercise of its powers under Sections 11(1)(b)(v) and 36 of the TRAI Act, TRAI could issue a set of legally binding regulations that embody and thereby enforce the principles of net-neutrality, and the DOT could amend the license terms under which TSPs operate, mandating strict observance of said TRAI regulations.
- Based on responses received to the consultation paper, TRAI could [in exercise of its powers under Section 11(1)(a) of the TRAI Act] make recommendations to the DOT concerning the incorporation of net-neutrality respecting obligations into TSPs' service licenses. Giving effect to the recommendations and incorporating relevant terms into service licenses would cement the TSPs' obligation to respect the principles of net-neutrality in their conduct.

¹⁷ <https://medium.com/@inw/internet-access-alternatives-to-internet-org-for-the-digittally-excluded-don-t-let-access-providers-7aa481c03569#.fq8altwfd>

- In exercise of its powers under Section 11(1)(a) and based on the responses to the consultation paper, TRAI could make recommendations before the Central Government to enact a new central legislation or amend an existing legislation such as the Indian Telegraph Act in order to mandate strict adherence by TSPs to the principles of net-neutrality. Giving effect to these recommendations would again oblige TSPs to respect the principles of net-neutrality at all times.