

CIRC Working Paper

13

THE NET NEUTRALITY DEBATE IN THE INDIAN CONTEXT, WITH A PINCH OF SALT

Archana G. Gulati



MAY 2015

CUTS Institute for Regulation & Competition

Suggested Citation:

Gulati, A. G. 2015 'The Net Neutrality Debate in the Indian Context, with a Pinch of Salt', CIRC Working Paper No.13. New Delhi: CUTS Institute for Regulation & Competition.

Author Bio:

Archana G. Gulati belongs to the Indian P&T Accounts and Finance Service. She is posted as Adviser, Competition Commission of India. Views are personal.

Email: ag.gulati@cci.gov.in

Published By:**CUTS Institute for Regulation & Competition**

R 75, First Floor

Greater Kailash I

New Delhi 110048

www.circ.in

circ@circ.in

+91 11 26463021/22/23

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Abstract

The debate on regulation of over the top services in India more or less coincides with global development on the issue. The regulations to ensure 'net neutrality' protect and maintain open, uninhibited access to legal online content without broadband service providers being allowed to block, degrade, or create fast/slow lanes to specific content. This paper analyses the Indian context and debate on net neutrality, which is characterized by some unique features and problems, leading to unique and apparently persuasive arguments.

Net Neutrality: What's the fuss about?

When it comes to topics for debate or discussion, net neutrality is certainly the flavor of the season. What with John Oliver's hilarious video featuring of all things coyote urine, endless newspaper articles and T.V shows, it is easy to get swayed by views and counter views, but difficult to arrive an informed decision on the subject. One of the points raised by John Oliver was that the internet is not broken, so why fix it? There is nothing funny about that. The comedian hit the nail on the head.

But first let's be clear about what net neutrality hullabaloo is about.

The release of the Indian Telecom Regulator's consultation paper on regulation of Over the Top (OTT) services more or less coincided with the United States' Federal Communications Commission's (FCC) recent adoption of Open Internet rules. These rules *inter alia* protect and maintain open, uninhibited access to legal online content without broadband service providers (BSPs) being allowed to block, degrade, or create fast/slow lanes to specific content. In other words these rules enforce network (net) neutrality. As expected the new rules have attracted litigation from BSPs in USA. AT&T Inc. and three cable and wireless trade groups have filed separate lawsuits challenging them. This development is thus just another chapter in the raging net neutrality debate, one that is both apt and inevitable as the internet becomes

increasingly important in our lives. In India, netizens are up in arms against any move to tamper with net neutrality and the Indian telecommunications regulator or TRAI has received over 10,000 petitions in this regard.

Generally, the transmission of data over telecommunications networks is carried out on a best-efforts basis, regardless of type. In other words, the network is "neutral" towards the data transmitted through it.¹ Proponents of network neutrality point out that, if permitted, BSPs can through various methods of traffic control, manipulate the flow of applications or services, thereby, effectively creating "walled gardens" in which consumer choice is limited thus stifling innovation and growth of the internet.² It would seem obvious that network neutrality is pro-competition, as it favours consumer choice and innovation and guarantees equal access to all competing content and application service providers (CAPs). BSPs however argue *inter alia* that in the absence of the ability to control CAPs and obtain a fair share of the latter's revenue, they will be deprived of the resources and incentive to expand and improve networks, which will become increasingly congested, to the detriment of consumers. A counter argument would be

¹ EU study on the Legal analysis of a Single Market for the Information Society New rules for a new age? November 2009

² https://edri.org/files/paper08_netneutrality.pdf

that any attempt to restrict consumer choice or innovation will be self-defeating for BSPs as the demand for varied and bandwidth heavy content gives rise to the demand for high speed internet.

If it is accepted that net neutrality is desirable, another aspect of the debate as encountered in the European context, focuses on the choice between FCC style, *ex ante* regulation versus leaving the matter to *ex post* remedies under competition law. Abuse of dominance by vertically integrated BSPs who discriminate in favour of their own applications or content or anti-competitive agreements between BSPs and CAPs etc. would fall within the realm of competition law, attracting punitive measures by competition regulators. However, there is also a line of thought that contends that competition law is a somewhat limited and tardy mechanism to enforce net neutrality in the fast paced virtual world.

The quest to kill many birds with one stone-Don't kill the golden goose

The most troubling aspect of the Indian debate is that some of the arguments being propounded in favour of changing the rules of open internet are misleading and tantamount to altering the level playing field between content and applications that ride over the internet (OTT/CAP), for the wrong reasons. This paper focuses exclusively on the Indian scenario which is characterized by some unique feature and problems, leading to unique and apparently persuasive arguments, which nevertheless must be considered with a pinch of salt. The first well known problem we face is the scarcity of mobile broadband spectrum and its non-availability to broadband service providers (BSPs) in contiguous blocks. This fact is often blamed for the poor quality of service we all experience. The second is the abysmally low availability of wire line broadband in India creating for the present, an over dependence

on wireless broadband which when coupled with the first problem gives rise to the spectre of spectrum scarcity. The third is the low penetration of broadband in India and the undisputable need to bridge the digital divide urgently. This requires investment in broadband infrastructure and BSPs propound that if they do not receive a share of the OTT providers' revenues (especially those providing competing applications like WhatsApp and Skype) they will not be able to fund further expansion or quality improvement.

Let's look at the reasons being cited in support of "fixing" net neutrality as it exists in India, one at a time.

Reason One: Overdependence on wireless broadband

It is true that we have an abnormally high mobile to fixed broadband ratio of 4:1. In fact India's fixed broadband penetration ratio of 1.2 per 100 is very low as compared with the world average of 9.4 per 100. We rank 125th in the world in this regard³. How did this come about? We have a near monopoly situation in wirelines which is borne out of a legacy of overprotection of PSU incumbents (BSNL & MTNL). Investing in wire line exchanges and copper lines to subscriber homes is a costly business and local access prices⁴ were kept artificially low through regulation, making investment unattractive. PSU incumbents would not allow private players to share / piggy back on their (state funded) infrastructure to provide competing wire line access services to consumers and unlike other countries, this was not mandated in India. As PSU monopolies led to inefficiencies and

³ TRAI recommendations on "Delivering broadband quickly: what do we need to do?" April 17, 2015

⁴ It may be noted that at the time the tele-density in India was as low as 4% and the poor could not afford telephones.

regulatory barriers made investing in wirelines unattractive, innovation driven, privately provided wireless telephony took over. The incumbents put up a good amount of resistance through various means such as denying interconnection to their networks⁵ or charging heavily for it or even questioning the authority of TRAI to regulate interconnection between service providers,⁶ while using their clout to extract their pound of flesh from the then interlopers-mobile service providers. By way of example, for years after long deprived, rural/poor Indians had finally bought their first telephone connection (a mobile), mobile services continued to cross-subsidize landlines by way of Access Deficit Charges⁷ in the name

⁵ See for e.g., <http://trak.in/tags/business/2011/09/13/bsnl-interconnectivity-yet-another-ai-india-in-making/>, http://articles.economictimes.indiatimes.com/2005-10-23/news/27493208_1_bsnl-bharat-sanchar-nigam-limited-interconnect-agreement and <http://www.governancenow.com/gov-next/egov/bsnl-snaps-services-pvt-operators-har-coai-slams-psu>

⁶ See for e.g., <http://indiankanoon.org/doc/138010452/>

⁷ TRAI recognized that basic telecom service providers in India had historically run a cross-subsidised system in which relatively high long-distance tariffs raked in surpluses which were used to offset the losses that would otherwise have resulted because various items were priced below cost. These below cost items included local calls, monthly rentals, the free calls provided by fixed line operators and services to rural exchanges, for instance. With competition eroding the fat margins available in the long-distance segment, this system clearly could not continue to work. Hence, the regulator reasoned, one of two things would have to be done. Either the prices which were hitherto subsidised would have to increase to meet costs or an "access deficit charge" would have to be provided to operators to cover the gap between tariff and costs. Calculations suggested that hiking prices to cover costs entirely would make telecom unaffordable for many. Thus, Trai settled on increasing tariffs somewhat (by changing the pulse rate, that is by reducing the time period that counts as a metered call) and providing an ADC to

of cheap access for the rural/poor Indian. The net result of indulging the incumbents is the lack of a competitive wireline sector. The country has paid the price, losing out on potential connectivity through wireline telephony/broadband (we have only 15.2 million wired broadband connections in a country of 1.2 billion and the incumbents continue to lose 2-3 million landline connections every year). The opportunity cost of our digitally deprived millions remains uncalculated. However, this imbalance needs to be rectified through regulatory reforms rather than accepted as permanent; nor should it become a reason for interfering with net neutrality.

Lest we believe the spiel that mobile services in India are highly competitive and thriving, it is important to note that we are not faring too well in wireless broadband space either. We rank 113th in the world with a penetration ratio of 3.2 per 100, performing worse than Nepal and Sri Lanka. We have one of the lowest broadband speeds in the world, both in wired and wireless broadband and broadband prices as a percentage of per capita incomes are higher in India than in Pakistan or Sri Lanka. The top four players command about 75% percent of the wireless broadband market. They are the new incumbents and once again, they would like to protect their turf. The new kids on the block this time are applications like WhatsApp and Skype which represent Schumpeterian creative destruction, allowing much cheaper messaging and voice services over the internet. Providers of mobile services who were themselves beneficiaries of deregulation and technological progress, should adapt and innovate to compete, rather than attempt to

cover the rest-A description of ADC from http://articles.economictimes.indiatimes.com/2003-10-13/news/27548230_1_access-deficit-charge-adc-tariff-order

thwart consumer access to applications or OTT providers' access to consumers. Competition at a service / platform/ technology level results in innovation and growth and the consequences of protectionism are just the opposite. Just because BSPs have invested in a particular technology they should not be allowed to get away with rent seeking by manipulating regulation and disadvantaging competitors.

Reason two: Spectrum scarcity

The scarcity of adequate and contiguous spectrum must be solved by better spectrum planning in the long run and the use of the many available technological solutions to enhance spectrum efficiency in the short run, rather than by limiting / controlling applications that are bandwidth heavy. The former would include freeing up spectrum held by defence and railways etc. and allowing spectrum trading and sharing. The latter could include solutions to enhance spectrum efficiency like using state of art technology to create multiple small cells to support more users with the same amount of spectrum and creating Wi-Fi hot spots to shift users from mobile broadband to unlicensed Wi-Fi spectrum whenever feasible. If additional infrastructure costs must be borne to this end, then so be it. If service providers must be incentivized to do so by rationalizing indirect taxes or through subsidies, then so be it. If stringent penalties for poor quality of service to make service providers invest in required infrastructure are the need of the day, then so be it. Meddling with net neutrality is not perhaps the right solution. The results of anti-competitive protection afforded to wirelines should make us wary.

Reason three: Bandwidth hogging applications should cost more

Another inappropriate argument doing the rounds is that some users are clogging the internet by their patronage of sites that

demand heavy downloads, to the detriment of others and that the solution lies in charging more for such applications. We should understand that even now broadband providers in India offer multiple tariff plans with different browsing speeds and download limits. Once you cross a limit in terms of downloads, the speed goes down drastically, say, from 16 megabytes per seconds to 512 kilo bytes per second (the prevalent practice of fair usage). BSPs offer top ups, to maintain speed, albeit at a cost. So there is already an inbuilt disincentive to excessive downloads. Mindful of this limitation, OTT players respond by continuously innovating to make their applications more bandwidth efficient. Contrary to popular perception, users are not enjoying a free lunch at the cost of BSPs. The more they download, the more they pay. As of today, service providers are free to come up with creative pricing plans to cater to low usage or extract more revenue by offering faster/heavy broadband usage plans. Thus, if you can imagine the internet as a highway, we already have fast and slow lanes (different broadband speeds). You pay more for the fast lane and when you tarry longer than allowed (download limit) on the fast lane you are physically deposited in the slow lane. Thus, we already have less than perfect net neutrality. However, the freedom that we do enjoy today is that the BSPs cannot interfere with where we spend our time on the road (within the allowed download limit).

Comparisons with other sectors are odious as just because we do not find an ideal degree of competition in many sectors, does not mean we should replicate the same for the internet. But for the sake of understanding, this is akin to airlines or railways charging more for nonstop / high speed service; this is acceptable. However, BSPs want to do more, i.e. to charge based on the content that you seek and to discourage use of competing

technologies (WhatsApp/ Skype etc.). That is like being charged, not only for the distance or speed when travelling, but also being made to pay a premium for visiting a particularly popular destination and especially if that destination allows you to continue your journey through a competing means of transport rather than taking the more expensive flight/train option (say a cheaper crowdsourced taxi service). The beauty of the internet is that, so far, such practices are absent / frowned upon / illegal.

It is important to highlight that this is not an argument in favour of an unregulated internet. Wherever regulation is required in the interest of consumer welfare or national security, it should be implemented. However, both sector and competition regulators must be wary of incumbents' attempts to artificially create price parity with innovative competitors with better / more economical offerings, on grounds of loss of their competitive advantage and profits. Regulation must not stand in the way of technological progress and the consumers' right to better and cheaper services-the fruits of healthy competition. Such behaviour is not unique to telecommunications but the ICTs world is particularly prone to rapid technological change and disruptive upheavals. Resistance to the same is also the norm. We have recently seen the same in e-commerce (the uproar over Flipkart's online discounts, is an example⁸).

The other thing to remember is that growing data usage is a major source of revenue for service providers. As per TRAI data revenue of

BSPs has nearly doubled, from Rs. 3057.83 Crores in June 2013 to Rs. 5910.28 Crores in September 2014.⁹ As on March 31, 2015, Bharti Airtel's India mobile data revenue rose 70.4% (over a year) to Rs.2,324 crore, boosted by a 41% increase in average usage per customer to 656 megabytes (MBs) and a 30% increase in data customer base to 46.3 million. Idea's data average revenue per user (ARPU) rose 44% to Rs.150 at the end of the fourth quarter, with data contributing 16.9% of the company's service revenue, up from 10.1% a year ago. Both companies reported a healthy growth in net profit¹⁰.

Reason four: Revenue for expansion to bridge the digital divide

Particularly perturbing, is the argument that in the absence of ability to extract their share from the revenue of OTT players, service providers would not be able to invest in infrastructure required to take broadband to the masses. There are more transparent and less harmful ways to encourage investment in broadband infrastructure. Rationalizing the indirect tax structure is one way. Also, tools like universal service funds (USFs) that are mandated to incentivize telephony and broadband in underserved areas exist specifically for this purpose. Used effectively, USFs are a transparent and far less market distorting method of encouraging penetration. India too has a Universal Service Obligation Fund (USOF). Unfortunately, the Fund has not been used effectively for broadband penetration. Ironically, the only broadband related USOF schemes are ones that subsidise the incumbents for wireline/OFC based broadband. However, nothing stops the government from initiating more schemes to rapidly take broadband to

⁸ See for e.g., <http://www.livemint.com/Industry/f6eARBcJOWrTZtuDcZZzI/Ecommerce-boom-hurts-brickandmortar-retailers.html> and <http://blog.ipleaders.in/are-deep-discounts-in-e-commerce-anti-competitive-flipkarts-big-billion-day-sale-and-the-way-forward/>

⁹ TRAI Consultation Paper 2/2015

¹⁰ "Data drives growth for telecom firms," The Mint, 30.4.15

the masses by paying subsidies to willing operators regardless of their technological choice. As per USOF rules, the subsidy is available to both public and private sector players and is discovered through a transparent bidding process. Ideally, USOF schemes should be technology agnostic. This makes it the ideal means to bridge the digital divide. Why then must we “fix” the freedom of the internet on this ground?

Reason five: Cheap browsing for the Poor

A related myth is that a broadband package where OTT players pay for specific content and thereby make browsing it free, would be beneficial to the poor, unconnected Indian. An erroneous comparison being made in this regard is that “zero rating” tariff plans of this nature are akin to the *chotta*¹¹ recharge which revolutionized access by allowing the poor to use mobile services as per their paying capacity. This is a case of confusing access to the internet with access to the content that rides on it. The *chotta* recharge meant buying a low value, prepaid voucher to make a few mobile calls while receiving unlimited free calls within the validity period. This worked because we have a pro consumer, “calling party pays” regime which was exploited to the poor man’s advantage through the famous Indian “missed call.” However the *chotta recharge* did not purport to influence *who* the subscriber could call. The correct equivalent of *chotta* recharge would be a low value, prepaid voucher to use the internet (regardless of content viewed) at specified speeds and download limits within a definite validity period - something akin to this is already being provided to rural subscribers through USOF’s wireline broadband scheme.

Let’s also remember that the utility of the net cannot be reduced to a few applications. If that was the case, the digital divide would

only be redefined to a situation of a divide between the “*have it all*” and the “*have a few (profitable for the BSPs / OTT providers)*” applications. Notwithstanding the harm this would do by way of discouraging innovation and distorting consumer choice, do we really want our price sensitive, digitally uninformed masses’ internet experience to be limited largely to Facebook or Bing? As it is, we rank among the Least Connected Countries on the ICT Development Index which includes ICT skills, usage and access. There are 11 countries from the African continent which are ranked above India on this index. If giving the poor free access to content is a goal, it is better to use mechanisms like USOF to subsidise the rural / poor person’s access to much needed, relevant applications (e-health, education, etc.) in a transparent manner, leaving them to explore the rest of the legally available content as they please. Is that not what the World Wide Web is all about?

The transformative power of the internet thrives on externalities created by scale and scope-billions of users and access to a mindboggling range of information, services and products (the exotic coyote urine included, which when Googled, turns out to be a wild animal repellent). We should be wary before we stand either in judgement of or in the way of the freedom of this open exchange and that too for the wrong reasons.

¹¹ small

ABOUT CIRC

CUTS Institute for Regulation & Competition (CIRC) was established in 2008 by CUTS International (www.cuts-international.org). With the mission to *be a Centre of Excellence on Regulatory and Competition Issues*, CIRC primarily focuses on economic regulation in infrastructure sectors, and competition policy and law with an objective of reaching out to the target audience in India and other developing countries in Asia and Africa. Its crucial role in research and capacity building in the area of competition policy and law and regulatory reforms has created an intellectual knowledge base. This rich experience of working on regulatory issues and competition policy and law has resulted in many national and international publications which has enriched a more informed discourse on public policies and greatly benefited different stakeholders in the society. Since its inception, CIRC has been undertaking several trainings, seminars and public lectures on competition policy and law in India and abroad. It also organises international symposia on the political economy of competition and regulation in the developing world and India.

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CUTS Institute for Regulation & Competition

R 75, First Floor, Greater Kailash I

New Delhi 110048, INDIA

Tel: +91 11 26463021/22/23, Fax: +91 11 40535921

Email: circ@circ.in, Web: www.circ.in