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Smt. Vinod Kotwal:

Thank you for this opportunity to file counter comments to some of the statements made in the submissions made to the TRAI on the consultation of Differential Pricing for data services.

In some of the submissions, it has been pointed out that a differential pricing regime is valid for Internet access because there are other domains which also have differential pricing, such as in Coal, Railways, Gas, water and electricity, aviation, hotels, car manufacturing, TV services, Airline and hospitality, highway toll. (in: Bharti Airtel; answer to Q4; Vodafone; answer 1 (a), Idea Cellular pg 15, 16, 17; MTS, pg 2)

These comparisons are fallacious, and almost every analogy fails, because the Internet access is unique in that:

- It does not distinguish between a service provider/creator and a consumer: every consumer can be a creator, and every creator is a consumer.
- It is interactive, and often (such as in case of gaming, or comments in case of content being read) what is being consumed gets modified based on user interaction.

Net Neutrality means that the access service provider doesn't distinguish between creator and consumer by manipulating speed, cost or availability based on the source or type of access. This ensures that billions of blogs, code repositories and sources of knowledge can be created by contributions from not just businesses, but also consumers themselves.

The Internet is a global public commons built on public land and spectrum. Differential pricing will create different rules of access for certain slivers (sites or apps) of this public commons, thereby impacting contribution and consumption alike. While bringing people online allows for greater contribution to this commons – which we support – differential pricing in actuality fragments it, influencing contribution to a select set of sites or repositories. There are more effective means of improving access without differential pricing (as noted in the many consultations that TRAI has organised on broadband and Internet services in the past), and it is imperative that we seek alternatives to those which don't violate Net Neutrality – a fundamental and foundational principle of Internet access that has lead to its phenomenal growth.

This is our key submission and plea, and also addresses point 2 raised by Vodafone about principles of non discrimination referenced by TTO-99 and TTO-33rd Amendment, by highlighting that **consumers are also creators on the Internet**.



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In addition to this, A World Bank “World Development” report, on digital dividends, on Price Discrimination, states (Page 227)<sup>1</sup>:

“As with other resources where capacity is scarce, as on mobile networks, carriers attempt to use price discrimination to manage traffic. Network providers argue that regulators should grant them more flexibility to manage their traffic flows. But others argue that traffic management should not become an excuse to block certain traffic streams, content, or expression, to give preference to others, or to impede competition. The recent trend to develop services in which some basic content can be accessed free of data charges (such as Facebook’s Free Basics or Internet.org), while other content is subject to data charges, would appear to be the antithesis of net neutrality and a distortion of markets.”

“Access to information is not solely a “developed” or “developing” country preoccupation. Not only is it a fundamental human right, inherent in Article 19 of the International Covenant on Civil and Political Rights, it is also an essential element in the online innovation ecosystem, and therefore an economic development issue. In whatever form a country would wish to use the internet for development purposes, its public policies should ensure that technical management of internet traffic is not used to suppress a tool of innovation.”

To address points made by different stakeholders, our responses are below.

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<sup>1</sup> <https://openknowledge.worldbank.org/bitstream/handle/10986/23347/9781464806711.pdf?sequence=10>



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### 1. No merit in telecom association submissions:

Given that all telecom operators appear to be in agreement on differential pricing, we see no merit in the points being repeated by their industry associations COAI, AUSPI and GSMA. We would request the TRAI to ignore these. In addition, most telecom operators are also key ISPs, and dominate many associations. You would find similarity between these submissions and those being made by Broadband India Forum as well. It's pertinent to note that Broadband India forum does not represent the views to two key independent Indian ISPs, ACT and Spectranet, and is directly contradicted by the submission from the ISPAI, which has chosen to represent the views of independent ISP ISPs.

### 2. NASSCOM's submission contradicts itself:

We'd like to point out a contradiction in NASSCOM's submission.

Within the same submission, they contradict themselves. At one point, they say:

"No double dipping by Telecom Service Providers. Charges would be levied only from end customers based on data consumption and not from Internet Platforms and Applications."

and

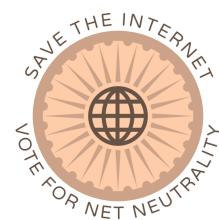
"Any tariff plan of the telecom service provider should ensure

1. Innovation without permissions
2. Data charges that are application agnostic
3. Customer has the unfettered right to choose"

Later, NASSCOM says:

"lower prices for own or partner content/ service should be explicitly disallowed, lower prices in exchange of consideration received from the partner content/service provider should not be allowed, except for the purpose of short term business promotions that have explicit time duration not exceeding 3 months."

The second statement amounts to levying charges from content/service provider, albeit for a short period, and contradicts the first assertion. It is also an instance of "innovation" that requires carrier permission, restricts consumer choice of services to those that pay the telecom operator, and means that charges are not application agnostic.



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NASSCOM also suggests that in case differential pricing is allowed, responsibility for decision making should be delegated to the regulator or a non-profit, for allowing discrimination of content based on source, again contradicting both the points mentioned earlier.

NASSCOM appears to be unclear on both its recommendations, and principles of the principles of nondiscrimination of source of content/service, that are key to Net Neutrality.

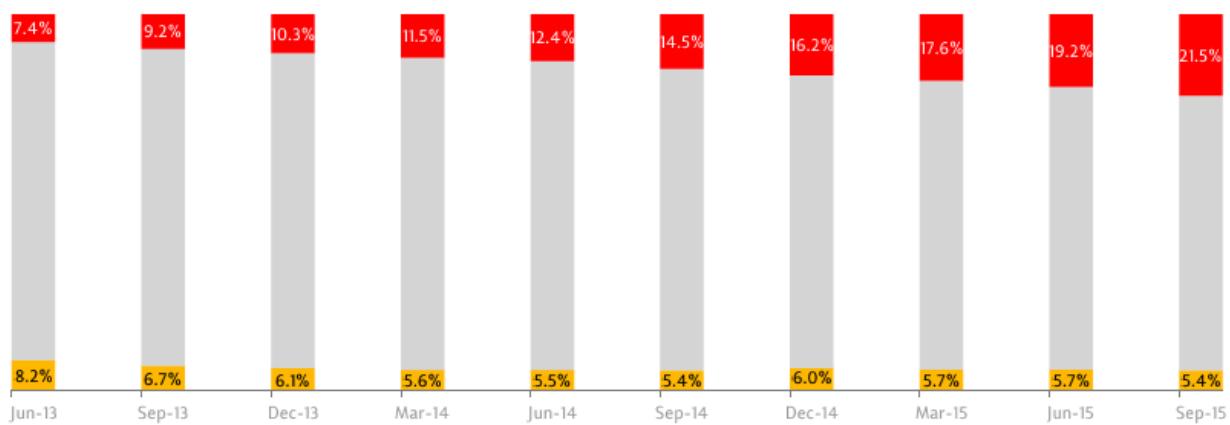
### 3. On telecom operator data revenues

- **Airtel:** “The average data service revenues, as compared to voice revenues, are below 15%, compared to more than 30% in other countries.”

**Answer:** Data Revenues for telecom operators are increasing rapidly. For Airtel, data revenues account for over 21.5% of revenues, and have been higher than 15% of revenues since the quarter beginning October 2014.

## Airtel Mobile Internet In India Data Vs VAS

In Q4-FY14, the sum of data and VAS revenues used to account for 17.1% of total mobile revenues for Airtel in India. Today, data alone accounts for 21.5%.





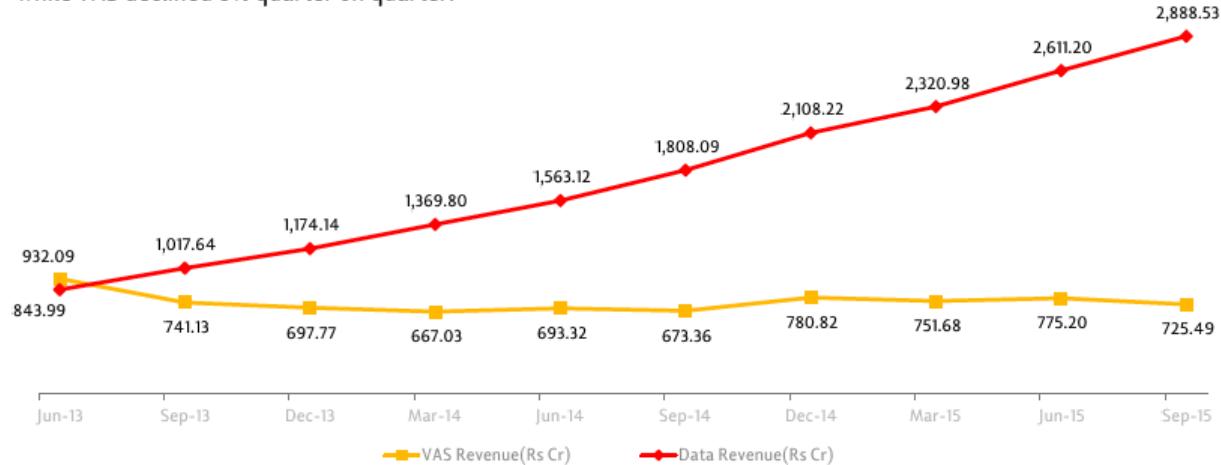
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## Airtel

### Mobile Internet In India

#### Data Vs VAS Revenue (Rs. Cr.)

Data revenues are now 3.98 times of VAS revenues. Data revenues grew 10.6% quarter on quarter, while VAS declined 6% quarter on quarter.

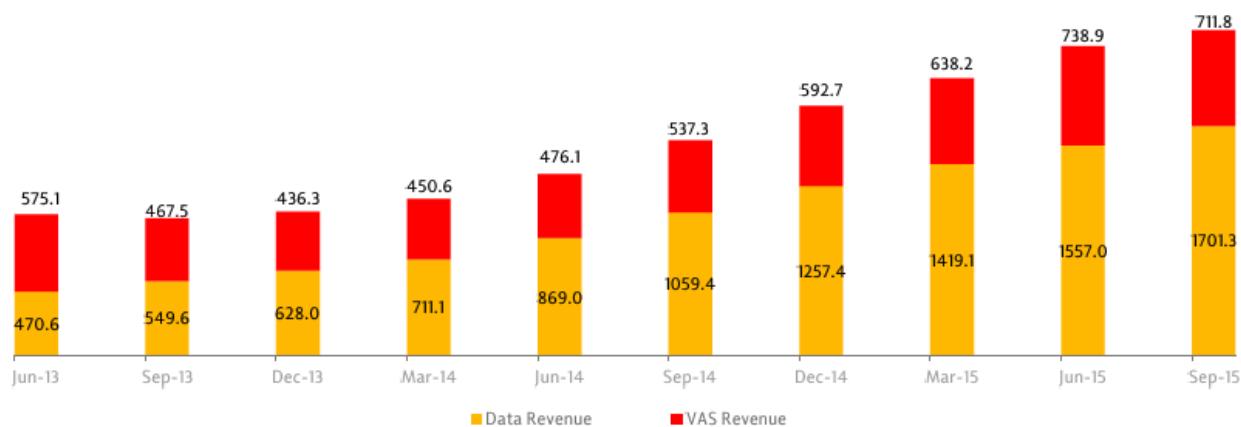


## Idea Cellular

### Mobile Internet In India

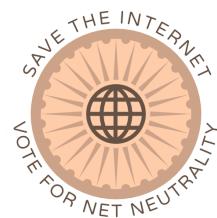
#### Data Revenue Vs VAS Revenue (Rs. Cr.)

Year on year, Idea Cellular's data revenue increased by 60.6% and VAS revenue increased by 32.5%. In September 2015, total Non-Voice revenue grew to Rs. 2,413.01 crore.



#### 4. On investment made in Data networks

- **Airtel:** “In an intense competitive market where TSPs have invested thousands of crores for creating the broadband network and buying spectrum, a rigid tariff framework will



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slow the data penetration to a great extent. At this stage, when the technologies, services and commercial models of the Internet ecosystem are evolving, the best way is to allow the market forces to work freely to meet customers' expectations."

- **Vodafone:** "The telecom industry requires a financial sustainable business model, an open and pro-innovative environment for all – device players, OTT and Telcos and an assurance of same rules for the same communication services."

**Answer:** There is no economic rationale for telecom operators to not invest in data or spectrum for provisioning of data services.

- Data usage is additive and does not cannibalize even VAS revenues. As is evident from charts above, both Data and VAS have grown substantially for Idea Cellular and Bharti Airtel. Data is between 2.5-4 times VAS revenues.
- Data such as VoIP are not even cannibalizing voice revenues. Gopal Vittal, CEO of Bharti Airtel, told investors<sup>2</sup> in Feb 2015 that "There is still no evidence that suggests that there is cannibalization" and that contribution of VoIP is "at this point in time is very, very tiny. And so it is not really material as we look at it."

In addition, cannibalization is limited, and any cannibalization from VoIP is being looked at as being more than compensated by growth in Data revenues. Himanshu Kapania, CEO of Idea Cellular said on its earnings conference call in July 2015, excerpted below<sup>3</sup>:

"As regards customers who are high end mobile data users is there a cannibalization with voice, so the question is are these consumers using latest messaging services? Definitely lot of these consumers are using messaging services and definitely there is cannibalization on SMS, now have they started to use VOIP, voice services on data rather than effective circuit switch voice network? Yes, there has been some movement, **I can tell you the last number which I saw which was about a month back, about 0.1% to 0.2% of our traffic is currently moving on VOIP.** I have been in touch with most of the global CEOs and speaking to them through GSMA, we have had a recent call with them and in fact in the developed market, I am talking of markets **where there is no bundle voice with data, we are finding that the adoption of VOIP services is at best at the level of 1.5% to 2.5%.** I do not see a worry in India looking at the markets which have already much more evolved, which has almost 60% to 70% of the consumers accessing internet from mobile. India is in a very early stage."

<sup>2</sup> No evidence of VoIP cannibalization of Voice – Airtel India CEO Gopal Vittal, Medianama, February 24, 2015

<http://www.medianama.com/2015/02/223-no-evidence-of-voip-cannibalization-of-voice-airtel-india-ceo-gopal-vittal/>

<sup>3</sup><http://www.ideacellular.com/wps/wcm/connect/f7417f86-779c-402b-9f9b-bf544f993c1c/Transcript+Q1FY16.pdf?MOD=AJPERES&CACHEID=f7417f86-779c-402b-9f9b-bf544f993c1c>



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“Having said that, what is interesting trend we found for consumers who actually shift their SMS or voice on to internet, that customer was earlier giving us approximately say Rs.25 on SMS and was giving us Rs.150 on voice. When we do his ARPU calculation, this consumer tends to use lot more data compared to when he was purely on circuit switch or was purely on voice plus text message. **We have had seen improvement of 5-6 times for the cannibalization loss that has happened.** This is what our sense is that there will be some cannibalization, we will budget for it but it is not something of a fearful nature that we have to worry about.”

Apart from this, Kapania also said in May 2015<sup>4</sup>:

“Our belief is that circuit switched voice is far superior to voice over IP (VoIP) technology, and the current quality of services (of VoIP) does not compete with the circuit switched quality that we offer”

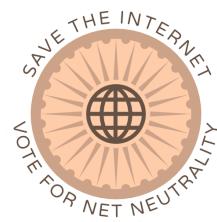
- Data investments are being undertaken by telecom operators in a rational manner: Himanshu Kapania, CEO of Idea Cellular, said on its earnings conference call on April 29<sup>th</sup> 2015<sup>5</sup>, excerpted below:

“As I mentioned, capex expenditure for us is RoI (return on investment) led, and we are allocating expenditure to capex because we believe that the demand that we are seeing is much higher than what we have seen in FY13-14. It is important for us to tap a larger percentage of the demand. Most of it is going to be preparing us for mobile data as well as new markets where we don't have 2G presence. There is a small component for reconfiguring our spectrum, but that will allow us into 3G business. So it is all demand led.”

“The pace of 3G adoption - we're very pleasantly surprised. It gives us a lot of confidence to go ahead and make the investment now. We have seen that there is sufficient RoI. For us, the capex investment is RoI led. There is a reason why we're increasing our guidance, because there is sufficient RoI available and helps us in our growth journey.”

<sup>4</sup> <http://www.medianama.com/2015/05/223-idea-earnings-call-q4-fy15-voip/>

<sup>5</sup> <http://www.medianama.com/2015/05/223-idea-earnings-call-q4-fy15-voip/>



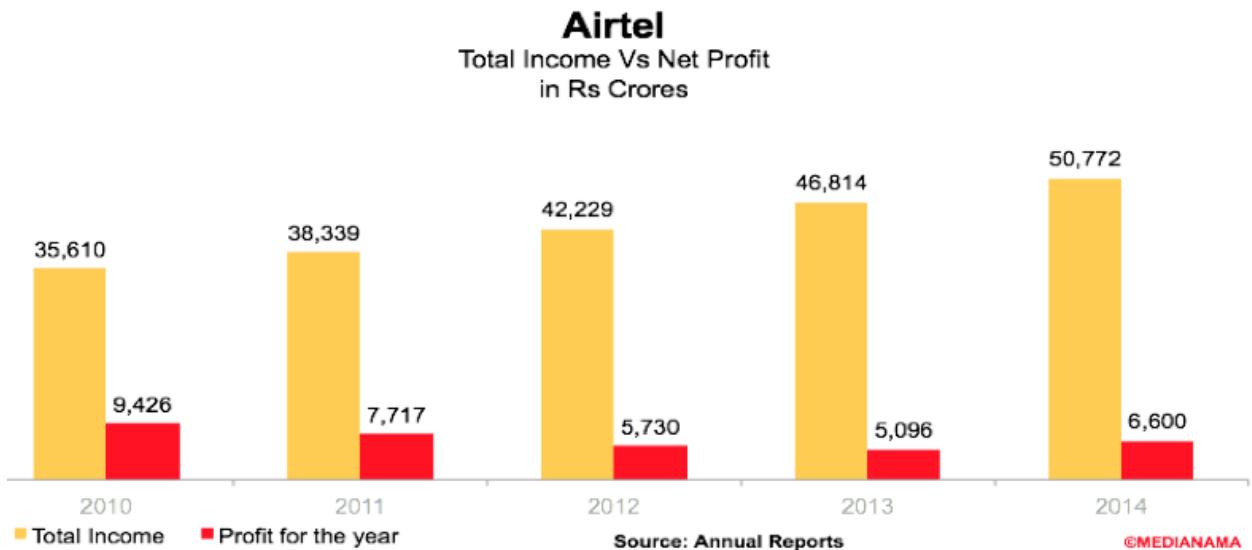
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- **Telecom operators are profitable:** Bharti Airtel, Vodafone and Idea cellular are running significantly profitable operations, thereby justifying their investment.

### Last 5 years

Total Income: Rs 210,447 Crores

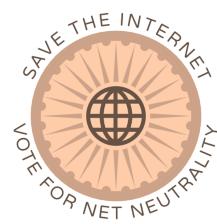
Profit: Rs 34,569 Crores



- If there are operators who are unsustainable, given the telecom operators' preference for free market operations, the regulator (and by extension, citizens whose spectrum is licensed to telecom operators, with the government as a custodian) is under no obligation to ensure the survival of those telecom operators who have made bad business decisions and/or are not preferred by customers.

## 5. On regulatory approach (light touch etc)

- **Airtel:** "A light touch regulatory approach (tariff forbearance regime) has been the key factor in the proliferation of voice services in our country."
- **Idea:** "One of the key factors responsible for this growth and contribution from Private sector is the policy of forbearance of retail tariffs adopted by TRAI since 2002, wherein the operators have been given flexibility to tariff their products."
- **Idea:** "It is thus necessary for the TRAI to adopt the principle of Light touch Regulation while on cusp of next great challenge – wireless broadband (mobile data) penetration across the country."
- **Idea:** "Such flexible approach was allowed by Authority earlier in case of voice telephony – local calls were aided by multiple VAS products, roaming, sms etc. Same principles need to be applied for data growth too."



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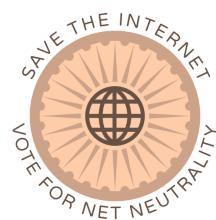
**Answer: Discrimination is not innovation.** We would recommend a light touch regulatory approach when it comes to pricing of telecom services that are non-discriminatory, since the purpose of the regulation should be in order to prevent discrimination. Telecom operators aren't allowed to charge differentially for, say, local voice calling: you're not charged differentially on the basis of whether you are calling one person or the other. In the same manner, while tariff "innovation" should be permitted in terms of non discriminatory access in terms of speed of access, or data, telecom operators should not be allowed to discriminate in terms of types of Internet access (whether video, gaming, productivity apps, video calling, voice calling), or the source of data, depending on service provider. Internet access is one type of telecom service, as are circuit switched voice, circuit switched messaging and USSD. Individually, content and services on the Internet are not distinct telecom services.

Approaching regulation on a case-by-case basis, as some opponents of Net Neutrality have advocated, would place an untenable burden on the regulator as well as on both commercial and noncommercial creators (of content and services).

Regarding VAS, please refer to our points below in point 17 (**Claim that there is competition in the telecom market**).

## 6. On claim that pricing flexibility is needed

- **Airtel:** “Pricing flexibility is a core tenet of marketing and innovation. The differential pricing or marketing innovation is critical for the growth of data services. Customers find differential offerings, a great value proposition as these enable them to use various products/services of their choice at a much lower price. Thus, TSPs should continue to have the flexibility to offer a variety of packages to consumers. Needless to say, the existing legal and regulatory framework in India provides for adequate safeguards against any potential concerns arising out of differential charging.”
- **Vodafone:** “Competition and choice is now also possible with respect to the content that is available on the Internet and consumers can equally benefit from innovative and customized data offerings that can be offered by its service providers either independently or through various innovative new services and business models based on mutual commercial arrangements with the content providers.”
- **Telenor:** “Under the present regime of tariff forbearance, existing regulatory framework provides the freedom and flexibility to telecom service providers (TSPs) to design various tariff packages and bundling of services as per the prevailing market demand and to meet the varied needs of their customers [...] In principle, any policy should not restrict innovation and flexibility of TSPs to offer packaging/ bundling of services/products, as market segmentation is elementary to marketing practice.”



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**Answer:** While it's true that *market segmentation* is a "core tenet of marketing and innovation", and that the existing regulatory framework does provide flexibility to TSPs to design tariff packages, the anti-competitive practice of *foreclosure* is not, and all free market states have regulations in place specifically to prevent its occurrence. The accepted use of the phrase "differential pricing" when it comes to the internet concerns the foreclosure of customers/businesses from accessing services/customers – through discriminatory pricing or outright censorship – and it is this that we are against.

Telenor failed to point out that in its own parent country, the regulator has advised telecom operators to avoid Zero Rating<sup>6</sup>, saying:

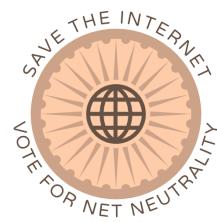
"The Norwegian guidelines on net neutrality state quite clearly that "Internet users are entitled to an Internet connection that is free of discrimination with regard to type of application, service or content or based on sender or receiver address." This means that in the Norwegian market zero-rating would constitute a violation of the guidelines. At first glance it may appear that all traffic is handled equally in this charging model, but the fact is that once you have used your quota, the traffic that is exempted will be allowed to continue, while all other traffic will be throttled or blocked. This is clearly a case of discrimination between different types of traffic."  
...  
**"Internet service providers should use methods other than discrimination of content and/or applications to differentiate their products. One possibility is differentiation on the basis of speed, in line with the Norwegian guidelines on net neutrality."**

Lest we forget, Telenor is majority owned by the Norwegian government.

## 7. On price sensitivity of Indian customers

- **Airtel:** Currently in India, barely 30% of the population has access to the Internet. With approximately 1 billion people who are yet to be connected, a majority of customers are price sensitive. Therefore, Internet access cost needs to be low enough for its adoption by the masses. Differential pricing allows the telecom operators to create the suitable/targeted tariff packages which suit the need of various types of users and hence, such differential tariffs should be continued."
- **Vodafone:** "The Indian consumer is highly price sensitive. The availability of affordable and innovative data services will be key to driving the take up and growth of data and help deliver on the Digital India vision."
- **MTS:** "The overwhelming conclusion from the empirical study across many markets, is that price differentiation is often found to be welfare enhancing."

<sup>6</sup> <http://eng.nkom.no/topical-issues/news/net-neutrality-and-charging-models>



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**Answer:** We are absolutely not opposed to cheap data packs and/or free internet being offered to consumers. We simply oppose the claim that this requires any violation of net-neutrality. In our response we have infact indicated a number of innovative business models that are already doing so. Further schemes such as Direct Benefit Transfer have been proposed elsewhere.

Access to one service is by definition not access to the Internet. Differential pricing allows telecom operators the ability to convert a C2C and B2C relationship between content and services online into a C2B2C and B2B2C service, by becoming a middle-man, and influencing availability of individual services to consumers. Holding access to ransom by forcing the false choice of no access or limited access vs foreclosure of the competition is something we are against. See answer to point 5 “**On regulatory approach (light touch etc)**”.

A perverse and fallacious argument made by TSPs is that differential pricing is commonplace in wider industry and not allowing such a practice would be anti-competitive and to the detriment of wider society especially the low-income price sensitive customer. **What they fail to say is that unlike other private enterprises, they are not producing goods and services using their own resources on their own private property. The Government of India on behalf of the citizens of the nation licenses/leases public spectrum and right-of-way for them to build their infrastructure** and allow them to charge for telecommunication services. And now through the introduction of differential pricing TSPs want to not only charge for the use of the infrastructure, that is, the carriage of data in lieu of the license fee. They seek to impose a further rent based on nature of content and/or destination of data on the citizens of India as well as international providers interacting with them, that is, the very same citizens whose spectrum and land they are licensing. This rent may be monetary in the form of higher access fees for both producers and consumers of content/services based on the destination of their traffic; or it could be or in the form of restrictions of content imposed on developers, being forced to share their data or the imposition of private APIs. Nevertheless in all cases the internet users are forced to bear that rent. Thus, the push for overt legalization of differential pricing is a predatory attempt to legitimize rent-seeking behaviour on producers of internet services.

Such an act is not to the benefit of consumers. Firstly, just because they promise to use some of the rent so collected to subsidize services to a subset of consumers does not absolve them of this predatory nature of the rent seeking itself.

It can be illustrated that TSPs’ claims that such services are to the benefit of the low-income internet user and the larger society are absolutely false using the following counterfactual. Let us for a moment assume that TSPs are introducing differential pricing out of altruism in order to help the most vulnerable consumers, least experienced and most-price sensitive. It must be recognized that this price-sensitivity and low technological experience extends to domains to the



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use of services and content online. Given the nascent stage of internet in India, there is very little locally relevant content and services for this user group which will exponentially expand in the coming years, much of it driven by such users themselves. The very imposition of differential pricing will then restrict these users the opportunity to participate in the internet economy and culture as they will have to negotiate TSP-imposed barriers of entry due to the price or tech differentiation. So even though the poor may have low cost or even free access, they will not have available to them access to services they could have themselves produced, instead relying on large CSPs tied to the TSPs only. Thus the price benefit would eventually evaporate due to absence of relevant services, lower productivity and poor competition even if they were to initially receive limited access to some websites (which by definition is not the internet) for free.

The situation is even more dangerous when we consider that private enterprises like TSPs and their platform partners are more likely seeking to profit through this rent. So any benefit will in such a circumstance be only partially passed on to a consumer.

All this is especially disturbing because it is in the very nature of internet the producer is herself the consumer too (because you need access to the internet to produce a service on it and most of the content catering to rural markets is going to be locally built), thus this effective rent is charged to everyone on the internet. Even the poorest pay a price because services designed for them will either not be created or created more slowly because of this rent on producers. Meanwhile, TSPs and partners looking to monetize this new revenue resource will divert more investment from infrastructure and connectivity R&D, meaning the service quality (which should be measured using the metric of Moore's law) will deteriorate over time.

MTS has failed to provide any information to justify its claim. In fact the Internet Association<sup>7</sup> (of which Facebook is ironically a member) in its Amicus Curiae brief in a United States Court of Appeals argues that the very reverse was observed in the American market, where there was a move away from "walled garden" to embrace open Internet.

Less experienced, low-income users prefer an open, unlimited Internet with data limits<sup>8</sup>. This preference is strong enough for most to have rejected zero-rated plans in favour of all-access plans – even when the latter are costlier. Those with low clarity on mobile data pricing complained that zero-rated plans would imply heightened risk of unexpected charges, a risk they were unwilling to take.

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<sup>7</sup> M. C. Erickson, A. W. Guhr and S. K. Leggin, Internet Association Amicus Curiae Brief in Support of the Respondents in United States Telecom Association, et al. v Federal Communications Commission and United States of America [https://apps.fcc.gov/edocs\\_public/attachmatch/DOC-335431A1.pdf](https://apps.fcc.gov/edocs_public/attachmatch/DOC-335431A1.pdf)

<sup>8</sup> A. Kak, "THE INTERNET UN-BUNDLED: Locating the user's voice in the debate on zero-rating," Oxford University, August 2015 <http://www.savetheinternet.in/files/amba-kak-thesis.pdf>



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Thus allowing the TSPs to only charge for traffic/time and allowing CSPs to develop their services on the open infrastructure and standards of the Internet unencumbered by TSP requirements and rent is only route in the best interest of the people of India who are the licensor of the resources that the TSPs use. This is, for example, a common regulatory practice in Banking Industry which strictly separate Investment Banking and Commercial Banking operations.

## 8. Global Precedence of Differential Pricing

- **Airtel:** “Some of the telecom markets which have encouraged differential tariff plans/STVs are Singapore, Hong Kong, Thailand, Malaysia, New Zealand, UAE, Bangladesh, and Philippines.”
- **Telenor:** “Considering this, FCC has decided to look at and assess such practices under the no-unreasonable interference/ disadvantage standard, based on the facts of each individual case, and take action as necessary.”

**Answer:** Telenor’s reading of the FCC’s intent is blatantly misleading: two points previous to the “No unreasonable interference” point (8.11) is the “No paid prioritization” point (8.9).

It’s important to note that, in passing the binding Open Internet order in the first quarter of 2015, the FCC included these rules said that a prior conduct standard regarding **zero rating and net neutrality would be set subsequently as the FCC received complaints**. Earlier this month (December), the FCC sent letters to Comcast, AT&T, and T-Mobile<sup>9</sup> seeking more information on whether their zero rating services violated net neutrality rules. It’s also important to note the discriminatory nature of T-Mobile’s Binge-On plan, where an entity not participating – YouTube – found that its service had been slowed down.<sup>10</sup> One Binge-on partner has quit the program following Net Neutrality concerns.<sup>11</sup>

In addition, there are several jurisdictions where differential pricing and Zero Rating is not allowed. The status of regulation is some jurisdictions:

### North America:

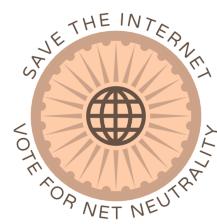
#### **USA**

<sup>9</sup>

<http://bits.blogs.nytimes.com/2015/12/17/f-c-c-asks-comcast-att-and-t-mobile-about-zero-rating-services/?r=0>

<sup>10</sup> <http://arstechnica.com/business/2015/12/youtube-criticizes-t-mobile-for-downgrading-video-quality/>

<sup>11</sup> <http://arstechnica.com/business/2016/01/video-startup-quits-t-mobiles-binge-on-over-net-neutrality-concern/>



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Passed the binding Open Internet order in the first quarter of 2015. These rules said that a prior conduct standard regarding zero rating and net neutrality would be set subsequently as the FCC received complaints. Earlier this month (December), the [FCC sent letters](#) to Comcast, AT&T, and T-Mobile seeking more information on whether their zero rating services violated net neutrality rules.

### **Canada**

The Canadian Radiotelevision and Telecommunications Commission (CRTC) issued rulings stating that zero rating practices by telecom companies violated Canadian law (see [here](#)).

### **Europe:**

The following European countries already ban or strictly regulate zero rating at the country level:

**Estonia, Latvia, Lithuania, Malta, the Netherlands** (see [here](#)), **Slovenia** ([here](#)), **Norway** (which is outside the EU, but whose Post and Telecom Authority has [said that zero rating would violate its net neutrality rules](#))

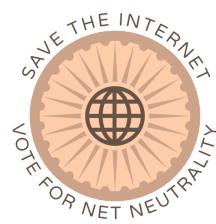
The **European Union Parliament** passed a proposal to harmonise **EU wide net neutrality standards** earlier this year. The Body of European Regulators of Electronics Communications (BEREC) initiated a consultation to frame rules to interpret this; it indicated in [hearings in December](#) that it wished to address zero rating and decide whether the EU's net neutrality rules permitted such practices at all.

### **Latin America:**

**Chile** banned zero rating under the terms of its 2014 Net Neutrality law as an act of price discrimination (see [here](#))

**Brazil** is currently holding consultation to frame implementing regulations for its Marco Civil Law, which put in place that net neutrality is part of the civil rights citizens have with respect to the Internet. It has been recommended that zero rating be prohibited by these implementing regulations (see [here](#)).

## **9. On claim of Differential pricing as marketing innovation**



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- **Airtel:** “We believe that marketing interventions such as free sampling, try to buy, toll free, zero ratings or sponsored data should continue to be encouraged to allow more and more users to come online and use Internet services.”

#### **Free access to individual sites as sampling**

- **Airtel:** “We firmly believe that sampling of the Internet and allowing free experience of sites is core to Internet adoption. Pricing innovation such as zero rated websites holds great socio-economic merit, and as such must be evaluated pragmatically. However TRAI can review all such schemes to ensure that the differential charging/zero rating is provided in a non-discriminatory and transparent manner.”
- **Airtel:** “Furthermore, enterprises world over for a long time have been trying to get more customers on-board by providing a method to connect with them. Some of these examples are: toll-free voice, business paid postage, etc. Similarly, free sampling mechanisms for the Internet will certainly play an important role in bringing more and more customers on board for Internet services.”
- **Idea:** “The demand for internet will be built up as it happens in every sector, through the process of trial packs bundled with applications, content and promotion/price offers. The trial pack and acquisition offer in the voice era was directly controlled by the telecom service provider, but in the internet world, as we transition the customer from the physical to a digital way, pure price discount on mobile data or on applications/content will not deliver the desired results. Combo or bundled packs like watching first 10 minutes of a movie free, first 10 songs free, 2 days of mobile banking services at no data cost or Education sector and health services trial packs at discounted or subsidized data rates will have to developed and promoted to consumers as they try and discover these internet services.”
- **Idea:** “Telcos can provide their distribution reach especially in hinterlands and deep interiors to promote and support young mushrooming digital startups in the country who have limited geographical reach and financial muscle to compete with established players. The new startups by definition have innovative and unique ideas and only through discovery and partnership process of working with telcos’ diverse, large base and wide reach can these new ideas reach the target segment of the startups.”
- **Idea:** “Majority of people are still adopting to mobile technology and are in early stages of the Internet learning curve. They have to be taught the relevance of Internet and encourage adoption. Developed markets had access to computers and fixed line networks; their movement to wireless was only a shift in technology. In Indian market majority of people are still adopting to internet. **Unless we adopt differential pricing and create relevant proposition/offerings for non-users, the adoption will not accelerate as much as we want. Internet adoption can only be driven by non-standard offering – flexible, differential pricing approach to pricing of services.**”



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**Answer:**

- Consumers are using newer apps without Zero Rating. In the recent earnings conference call, Idea Cellular CEO Himanshu Kapania said:

“What we are observing is that there is all round improvement in usage, and the applications that consumers are expecting are far more varied, and a lot more newer applications are being accessed. The largest application accessed are the video apps, across various sites. Other time is being spent on social media. There is significant usage of e-commerce, mobile banking and specialised services. In terms of handsets, primarily the lower end of 3G handsets are fueling the growth, 4-4.5", in a price bracket which is Rs 4,500 to Rs 7,000 . More and more consumers are upgrading their Rs 1,500 2G phones.”

- **Free sampling, try or buy and toll free do not foreclose competition, unlike differential pricing, which is discriminatory by nature.** This is particularly important when there are large online oligopolies that are trying to become gatekeepers for access to information on the web. By allowing programs such as Free Basics, which position themselves as sampling or an “on-ramp” to the web, we run the risk of users remaining on that ramp, because of differential pricing. Zero rating by definition prevents access to competition. Therefore, zero rating, running data packs which exclude the rest of the web, cannot be equated with free sampling.
- Secondly, it's important to note that toll free access is not a marketing innovation for a startup, and cannot be equated with toll free numbers: toll free numbers are support mechanisms, and not a means of delivery of the service: ability to access determines whether the service (commercial or noncommercial) gets used. The ability to enforce price discrimination gives disproportionate power and control to carriers.
- There are non-discriminatory approaches to sponsored data, like Gigato's. There are net-neutral options for providing free access to the web. Many of these are mentioned in both IAMAI, MediaNama and Mozilla's submissions. There is no rationale behind the idea choosing *between* universal access and Net Neutrality, when we can have both.
- For free sampling, telecom operators can offer free Internet access for a limited period of time. This was done when introducing SMS services, and we're confident that free data (with access to the entire web) will also find takers.
- Zero Rating of a service, in case of Airtel Zero is not sampling, since there is no limitation in terms of free usage, and firms with deeper pockets can zero rate themselves permanently, to the detriment of competition.

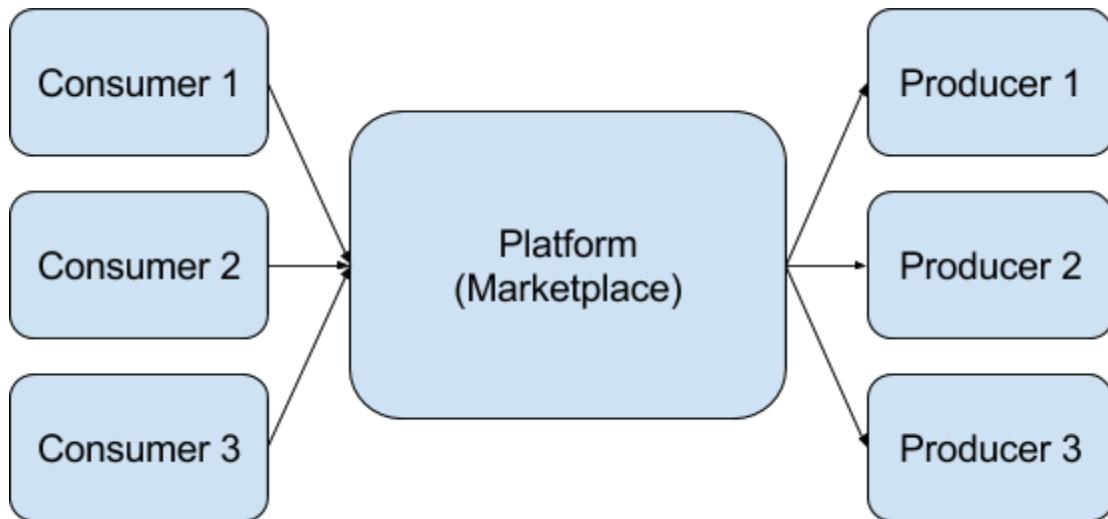
## 10. On VoIP and Same Service Same Rules



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- **Airtel:** “At present, there is a huge pricing arbitrage, of the order of 1:6, between VoIP (data services) and Voice Services. Differential charging for VoIP is required to eliminate the arbitrage which leads to subsidization of rich data customers using smartphones by the customers using voice through ordinary feature phone. VoIP/OTT Voice also creates a non-level playing between licensed TSPs providing voice services and OTT Communication Service Providers providing same services. Therefore, we believe that any regulation on OTT communications and/or charging of underlying data services should follow the principle of ‘Same Service, Same Rules.’”
- **Vodafone:** “The above mentioned ‘same service same rule’ principle is required for communication services. For data content (other than communication services), internet being a two-sided market, payment can come from either side of the market.” “The above mentioned ‘same service same rule’ principle is required for communication services. For data content (other than communication services), internet being a two-sided market, payment can come from either side of the market.”

**Answer:** However, the Internet is *not* a two-sided marketplace and this is precisely what Net Neutrality seeks to ensure. A two-sided marketplace looks like this:



In a two-sided marketplace, the platform or marketplace is always a mediator between a producer and a consumer, setting the rules by which any engagement may take place. Common examples of two-sided marketplaces:

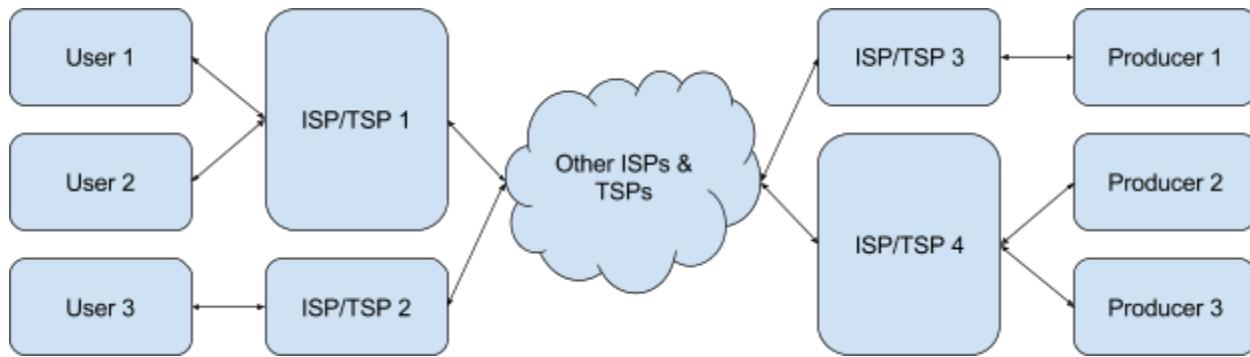
- Uber, Ola and other app-based taxi companies: Driver and Rider
- Amazon, eBay, Flipkart, Snapdeal and e-commerce marketplaces: Seller and Buyer
- Google, Facebook, Twitter and ad networks: Advertiser and Reader



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- Apple App Store and Google Play Store: App Developer and User

The Internet looks like this:



Please note there is no central platform or marketplace in this picture. The cloud in the middle represents a vast network of interconnected internet service providers, not a single controlling entity. This does not look anywhere like a two-sided market as Vodafone asserts.

Further analysis of the two-sided marketplace model:

[http://www.stern.nyu.edu/networks/Economides\\_Tag\\_Net\\_Neutrality.pdf](http://www.stern.nyu.edu/networks/Economides_Tag_Net_Neutrality.pdf)

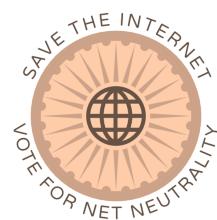
**Title:** Network neutrality on the Internet: A two-sided market analysis

**Authors:** Nicholas Economides, Joacim Tåg

**Publication:** Information Economics and Policy 24 (2012) 91–104

**Abstract:** We discuss network neutrality regulation of the Internet in the context of a two-sided market model. Platforms sell broadband Internet access services to residential consumers and may set fees to content and application providers on the Internet. When access is monopolized, cross-group externalities (network effects) can give a rationale for network neutrality regulation (requiring zero fees to content providers): there exist parameter ranges for which network neutrality regulation increases the total surplus compared to the fully private optimum at which the monopoly platform imposes positive fees on content providers. However, for other parameter values, network neutrality regulation can decrease total surplus. Extending the model to a duopoly of residential broadband ISPs, we again find parameter values such that network neutrality regulation increases total surplus suggesting that network neutrality regulation could be warranted even when some competition is present.

Previous analysis: <http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.23.3.61>



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**Title:** Subsidizing Creativity through Network Design: Zero-Pricing and Net Neutrality

**Authors:** Robin S. Lee and Tim Wu

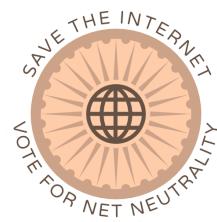
**Publication:** Journal of Economic Perspectives—Volume 23, Number 3—Summer 2009—Pages 61–76

**Conclusion:** At its broadest, the net neutrality debate in the United States and around the world is a reincarnation of an age-old debate about the duties of firms that supply infrastructure services essential to the economy, or—in the old common law phrase—firms “affected with the public interest.” In the nineteenth century, trains and canals were the focus of this debate; in the twentieth century, it was the telephone and the electric systems; and in the twenty-first century, the Internet has seized center stage.

This paper has highlighted a potential benefit of the zero-pricing aspect of net neutrality, which prevents Internet service providers from levying termination fees on content providers. The theory of two-sided markets provides an underlying rationalization for how this practice can subsidize the creation of new content and spur innovation while avoiding fragmentation of the Internet. Several open questions remain, including how close the optimal subsidy for content creation is to a zero-price rule, and to what extent welfare gains from increased content production due to a zero-price may be offset by potentially higher access or usage fees charged to consumers.

At the same time, a more fundamental question that underlies this paper is what, if anything, sets the Internet apart from other networks, past and present? This question suggests a much broader agenda for research: namely, understanding in a more parsimonious manner how different pricing rules and other features of information networks affect their influence. We have mentioned two differences—a de facto ban on termination fees, and a rough proportionality between content popularity and bandwidth usage—that set the Internet apart from the other networks of our time, including telephone, cable TV, and broadcasting networks. Yet while this much may be clear, we do not have anything close to a full vocabulary for understanding the different choices implicit in the designs of different networks. And we have an even weaker understanding of what the larger effects of such choices will be. Although in this paper we have isolated one interesting effect—namely, than a ban on termination fees can be used to encourage market entry by creators and innovators—this point is far from a full understanding of networks and their larger effects on society and the world.

**(NOTE:** Despite the confusing vocabulary, this article is describing the positive impact of having zero rating *banned* under net neutrality, not allowed)



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## 11. On M2M

- **Airtel:** “Further, M2M requires a creation of a differential quality network to meet the technical requirement of M2M/IOT. Therefore, any disallowance to such differentiation would stifle innovation in M2M domain and will disincentives TSPs to upgrade their network to meet requirements of M2M.”

**Answer:** All internet connected devices work in the same way, using Internet Protocol (IP), no matter where in the network they are connected. There is no requirement for specialised treatment for M2M because the entire Internet is M2M already.

Further, most performance sensitive IoT devices such as security cameras operate on WiFi with users also on the same local network, and the ISP/TSP has no involvement in this.

For M2M/IoT networks, TSPs might set their pricing in return for a higher QoS. This can all be done without the need to restrict access on the basis of destination. For example, it be violative of net-neutrality of a user can access her devices in their from her mobile device but not another because of differential pricing TSP serving the device. Similarly, it will be violative of net-neutrality a mobile device TSP allows access to one set of user devices at a certain IP address but not another. See point 10 (**On VoIP and Same Service Same Rules**).

IoT devices such as the Spark Electron, which operates on a global SIM card and a flat worldwide rate<sup>12</sup>, have shown that it is possible to innovate under current conditions without requiring specialised treatment from TSPs.

## 12. On comparisons with differential tariffs in voice:

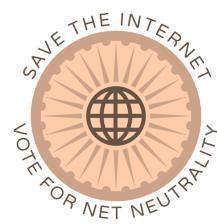
- **Airtel:** “The voice tariff plans of TSPs allow differential charging to the customers based on type/destination. Such voice differential charging is done based on local call, STD call, ISD call, on-net and off-net, day and night, national roaming and international roaming. If TSPs are mandated to offer a uniform tariff for all types of voice call (local, STD and ISD), it will increase the tariffs of local calls, and local call users will end up subsidizing the users of STD and ISD calls.”

**Answer:**

- Price differentiation is independent of net-neutrality. It can always be implemented transparently without violation of net-neutrality principles.

<sup>12</sup>

<https://www.kickstarter.com/projects/sparkdevices/spark-electron-cellular-dev-kit-with-a-simple-data/description>



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- We agree with Airtel about the legitimacy of price differentiation cited under point 3 of their response. Similar price differentiation for data (such as cheaper night-time browsing) are also perfectly legitimate as it does not hinder access to competitors. See answer to point 5 (**On regulatory approach (light touch etc)**).

### 13. On FRAND & regulatory approach that TRAI should take

- **Airtel:** “Any concern of market abuse/discrimination to any specific party, should be addressed on a case to case basis rather than imposing a blanket ban on any particular business model/pricing innovation.” “An appropriate and reasonable approach would be to outline certain broad principles (Fair, Reasonable and Non-Discriminatory (FRAND), which not only foster the growth of Internet eco-system and innovative business models, but also empower TRAI to address any genuine concern related to competition, level playing field, transparency, etc. TRAI may prescribe that the business practices of TSPs adhere to these broad principles, and their differential tariffs are tested against these principles on a regular basis (as already being done by TRAI under the existing tariff regime).”
- **Vodafone:** “As long as such arrangements are not anti-competitive and transparency is ensured for informed consumer choice, they will encourage consumers to explore and experience the internet as much as possible and promote Internet growth.”

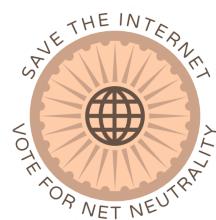
**Answer:** This is the opposite of light touch regulation. ‘FRAND’ is a term originating in patent law. Patenting is an act of exclusion; FRAND rules ensure that the law isn’t unfairly used to exclude competitors from essential processes that have been patented. The internet is in contrast inherently inclusive, but especially due to recent advancements in technologies from content delivery to deep packet inspection, ISPs now have immense power to exclude rivals. Defining violations by intent<sup>13</sup> is extremely difficult in practice, requiring a huge investment in resources and expertise both by the regulator as well as the ISP for collecting, processing and analysing data. The inherent opacity of such highly technical processes as well as the discretionary power a FRAND approach gives the regulator will expose it to allegations of graft.

### 14. Claim that sponsored data is a marketing spend

- **Airtel:** “As per our estimates, sponsored data allows Internet companies to cut their marketing budgets to 30%, especially since such arrangements are cheaper than direct advertising.”

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<sup>13</sup> See section “Defining violations by intent” in  
<https://internenz.nz/content/network-neutrality-discussion-document>



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**Answer:** We are very doubtful of the estimates provided by Bharti Airtel as it fails to provide any supporting evidence as to how it has arrived at these estimates.

Any company endeavour to provide access to free data or direct advertising efforts must be done in a transparent manner that preserves net-neutrality. We have in our response demonstrated multiple business models that already do the same such as free internet being provided after the user watches an advertisement or with a ‘brought to you by’ attribution.

Like Bharti Airtel, we are all in the favour of pricing-flexibility and innovation – but without the introduction of access barriers and not to the detriment of innovation and social welfare.

## 15. On the toll Free data argument

- **Airtel:** “Toll free or zero rating enables first-time users and marginal customers, who cannot afford Internet services, to experience them for free, and later on such users become regular data users, which is good for both the government and the industry. There is evidence to show that if structured appropriately, Zero Rating may drive innovation and competition in the Internet economy”

**Answer:** It has been pointed out in a number of responses as well as in the wider media<sup>14</sup>,  
<sup>15</sup> to the Consultation Paper that the equivalence of zero-rating platforms to toll free telephone numbers is fallacious.

- The essential argument is that unlike toll free numbers, zero-rating platforms necessarily lead to fragmentation of the internet. A zero-rating platform of a TSP is exclusive to that TSP and its customers will never be able to access the zero-rating platform of another TSP. All toll free numbers are freely accessible to all telephone consumers irrespective of their choice of carrier.
- Furthermore toll free numbers are only used to augment a business. This is unlike the CSP business where the entire business may be built on the internet itself. Unlike not having a toll free line, not participating in a zero-rating platform will lead to direct exclusion of a large customer base.

## 16. Claim regarding direct Benefit Transfer

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<sup>14</sup> The broken analogy — Toll free vs zero rating, Economic Times Tech, 14 April 2015  
<http://tech.economictimes.indiatimes.com/news/internet/toll-free-zero-rating/46917448>

<sup>15</sup> Zero Rating: Slows down innovation, distorts competition & fractures the Internet, MediaNama, April 17, 2015  
<http://www.medianama.com/2015/04/223-zero-rating-slows-down-innovation-distorts-competition-fractures-the-internet/>



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- **Airtel:** “We firmly believe that Direct Benefit Transfer (DBT) has the potential to be misused for bypassing the non-discriminatory nature of zero/differential rated content.” “A DBT done by TSPs is no different from zero rating. While DBT also achieves zero rating, it comes with one significant disadvantage, i.e. it only targets digitally enabled customers. Whereas in case of zero ratings provided by TSPs, customers are allowed to see zero-rated content without being Internet customers. Therefore, zero rating is a better way to promote digital inclusion.”

**Answer:** This is patently untrue. Any phone capable of zero rating is also capable of internet access through any other means, such as DBTs. The FCC has a certain set criteria for users to be eligible for lifeline telephone services<sup>16</sup>. India can take a similar approach to both telephony and data.

From the point of view of access, DBTs have all the advantages of zero rating minus the restrictive, exclusionary and anti-competitive effects. To cite the submission by Nandan Nilekani and Dr Viral B. Shah:

We propose one solution – one that respects net neutrality, aligns incentives, can be rolled out swiftly, and which allows private sector to also participate. We propose that the government take the approach of a Direct Benefit Transfer (DBT) for internet data packs. This idea is based on the success of LPG DBT or Pahal, where over 100 million families receive LPG subsidy in their bank accounts.

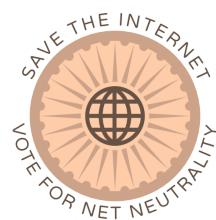
Suppose the government announces a Data Pack DBT scheme that offers 120MB annually to every subscriber with the first 10MB free every month. A scan of various existing data packs suggests that 1MB data over 3G conservatively costs 25 paisa. At government’s scale, this could be much lower, and even 1.2GB per user (100MB per month per user) can be made sustainable.

Please note that this can be even less expensive. The government can identify other models:

- Offer 200 MB to only those users who upgrade to data capable handsets
- Offer 50 MB to only those users who use less than 50 MB each month.
- Identify districts with low data consumption, or where internet access will be much more beneficial, and give all users within those circles 50 MB free per month for six months.

## 17. Claim that there is competition in the telecom market:

<sup>16</sup> <https://www.fcc.gov/consumers/guides/lifeline-affordable-telephone-service-income-eligible-subscribers>



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- **Vodafone:** “We believe that given the intense competition in the market with the presence of at least 8-10 established operators in each telecom circle and the presence of strong regulatory and legal safeguards, the concerns around discriminatory or anti-competitive behavior can be addressed through existing mechanisms.” “The competitive intensity of the market has resulted in largely self-regulatory mechanisms that have ensured the protection of consumer interests and have in fact created various innovative tariff offerings for consumers, all of which have significantly contributed in making the Indian telecom market one of the most competitive, innovative and affordable markets in the world.”
- **Idea:** “Also, in US and Europe there is competition amongst 3-4 well capitalized telecom players **while in India there is hyper competition between 7-8 players who are financially stretched and operate on significantly lower quantities of spectrum as compared to US and European operators.**”
- **MTS:** “The Indian telecom market is highly competitive and MNP being in place customers have the flexibility to migrate to another telecom service provider. The measures to ensure that the principles of nondiscrimination, transparency, affordable internet access and innovation are automatically addressed.”

**Answer:**

1. Competitive intensity could not address market harms in the cases of mobile VAS and SMS spam. TRAI had to come in and address issues of large scale corruption, cartelization, and stealing from customers in the case of mobile VAS. We would also refer you to Viren Popli’s submission<sup>17</sup>, and his experience as the former head of Mobile for STAR TV during the differential pricing regime (revenue share / interconnection charge / carriage fee) that existed in case of MVAS. Mr Popli says, while criticising differential pricing:

“This was also a space for collusion. In the case of MVAS, in order to be allowed to deliver mobile content to those users who wanted it and were willing to pay for it, a provider would have to go and negotiate with the telecom operator, who would play gatekeeper, and try and squeeze as much revenue share out of content providers as possible.”

For smaller content owners, there was pressure to offer content exclusively to one of the largest mobile operators, on their terms. **Once a deal was negotiated with one telecom operator, content providers would find that others were made aware of the terms with one: it was clear that there was collusion between telecom operators, thus ensuring that the content provider gets the worst possible deal. Many content providers were forced to partner with specific aggregators, who had their own terms. Because of this,**

<sup>17</sup> [http://trai.gov.in/Comments\\_Data/HTML/93.%20\\_Viren%20Popli\\_.html](http://trai.gov.in/Comments_Data/HTML/93.%20_Viren%20Popli_.html)



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**the consumer got the worst possible deal, and the content provider had no freedom.**

This is why, despite being amongst the largest mobile subscriber base in the world, most innovation on the mobile content consumption via MVAS was not happening in India.

2. There is low competition, given that the top four telecom operators account for 76% of India's active user connections. Competition reduces even further with Reliance Communications buying MTS<sup>18</sup>, and potentially also buying Aircel<sup>19</sup>.

**Mobile Connections in India - August 2015**

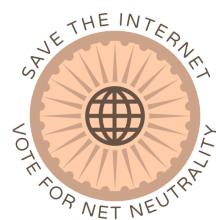
	Market Concentration			©MEDIANAMA
	Top 3		Top 4	All Telcos
	Airtel Idea	Vodafone	Airtel Idea Vodafone RCOM	13 Telcos
Total Connections	583,485,962		693,436,743	988,688,593
% of Total	<b>59%</b>		<b>70%</b>	<b>NA</b>
Total Added	3,606,986		3,115,232	5,479,925
% of Total Added	<b>66%</b>		<b>57%</b>	<b>NA</b>
Active	570,147,392		676,755,670	885,963,848
% of Total Active	<b>64%</b>		<b>76%</b>	<b>NA</b>
Active Connections Added	4,258,745		3,649,409	781,084
% of Active Added	<b>545%</b>		<b>467%</b>	<b>NA</b>

3. There is no self regulatory mechanism in existence for telecom operators, and the industry has no common norms, no self regulatory mechanism for addressing complaints and consumer issues (such as the ASCI or News Broadcasters Association).
4. Contrary to what MTS says, there isn't sufficient consumer choice. Judging by their submissions, every telecom operator (Airtel, Idea Cellular, BSNL, Vodafone, MTS, Telenor, Aircel, Tata Teleservices, Reliance Communications, Videocon) wants the power to do differential pricing. If a consumer wants to switch to a telecom operator which doesn't do differential pricing, they have nowhere to go. On this issue, they are collaborating to force a regulatory change, and then compete. The equilibrium that might be reached owing to competition, is not necessarily one that is as beneficial as the status quo which exists in terms of online access with Net Neutrality.

<sup>18</sup> <http://www.medianama.com/2016/01/223-rcom-sstl-merger-stock-exchange/>

<sup>19</sup>

<http://gadgets.ndtv.com/telecom/news/reliance-communications-aircel-in-talks-to-merge-mobile-business-781036>



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5. The COAI believes there is no true competition in 3G:

“We have seven possible bands in which the two major broadband access technologies, namely HSPA (3G) or LTE (4G) can be deployed. These are 900 MHz and 2100 MHz bands for HSPA (3G) and 700 MHz, 800 MHz, 1800 MHz, 2300 MHz and 2500 MHz bands for LTE (4G). The present situation is that there is no pan-India 3G operator and the maximum 3G spectrum any operator has is 5 MHz. In the case of LTE, there is only one operator with pan-India allocation of 20 MHz spectrum. **In short, at present there is hardly any true competition in 3G services** and when LTE (4G) service is launched by the single pan-India spectrum holding operator, there still will not be any real competition.”<sup>20</sup>

**18. Claim that differential pricing increases access to the Internet**

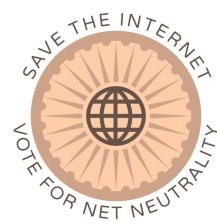
- **Vodafone:** “Differentiated pricing for data content expands participation in online content and applications to the underserved, while also increasing mobile wireless penetration. Increasing internet access has been shown to increase productivity, support enterprise and innovation, increase employment and economic growth.”

**Answer:** Increasing number of wireless subscribers does not mean increasing access to the Internet, given that the Internet is not a collection of services that is being provided a carrier, or a service like Free Facebook or Free Basics. There are harms of taking this approach, since users may mistake the service for the Internet, or worse, remain on the platform that is Zero Rated. To quote a Quartz survey (“Millions of Facebook users have no idea they’re using the Internet”<sup>21</sup>:

Quartz commissioned surveys in Indonesia and Nigeria from Geopoll, a company that contacts respondents across the world using mobile phones. We asked people whether they had used the internet in the prior 30 days. We also asked them if they had used Facebook. Both surveys had 500 respondents each.

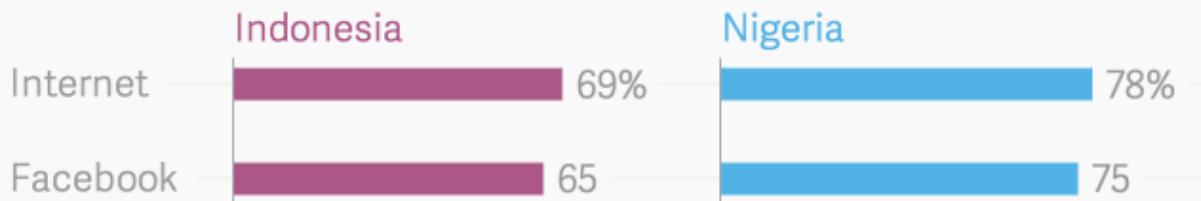
<sup>20</sup> <http://www.thehindubusinessline.com/opinion/india-lacks-the-bandwidth/article6238396.ece>

<sup>21</sup> <http://qz.com/333313/millions-of-facebook-users-have-no-idea-theyre-using-the-internet/>



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### In the past month, percent of respondents who used...



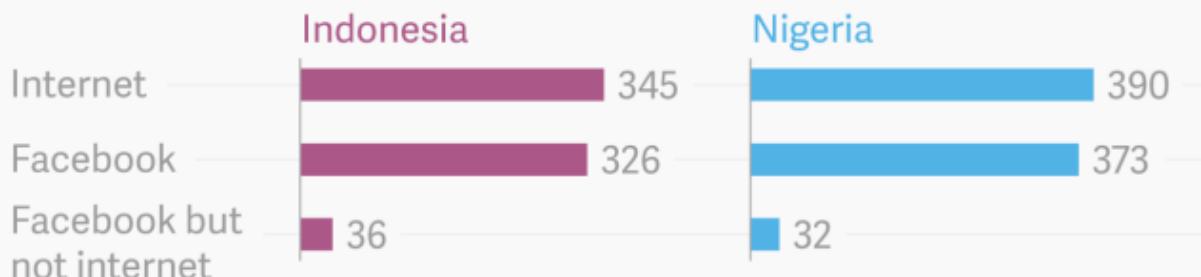
Quartz | qz.com

n = 500 | Surveys conducted Dec. 2014 | Data: Geopol survey, Quartz analysis

It would appear, on the surface, that more people use the Internet than use Facebook, a perfectly sensible outcome.

But a closer look at the data (available in full [here](#)) shows that 11% of Indonesians who said they used Facebook also said they did not use the internet. In Nigeria, 9% of Facebook users said they do not use the internet. These are largely young people; the median age of respondents with this combination of answers is 25 in Indonesia and 22 in Nigeria.

### In the past month, respondents who used...



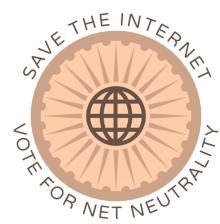
Quartz | qz.com

n = 500 | Surveys conducted Dec. 2014 | Data: Geopol survey, Quartz analysis

It would be silly to extrapolate this to the entire population of Nigeria or Indonesia.

## 19. Claim that People still mostly use 2G

- **Idea:** “However, due to the ubiquitous nature of 2G services, a large proportion of Indian internet users continue to use the 2G platform to access internet services. 2G technology has not been designed for providing broadband access to users and therefore attracts a lot of casual users of internet, with negligible monthly usage between 1 to 100 Megabytes.”
- **Idea:** “In comparison, the Indian market is price sensitive, and possibly misses the significance of buying a monthly data pack, which explains Internet being limited to 93 million elite users, while the rest remain casual users or do not access internet.”



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**Answer:**

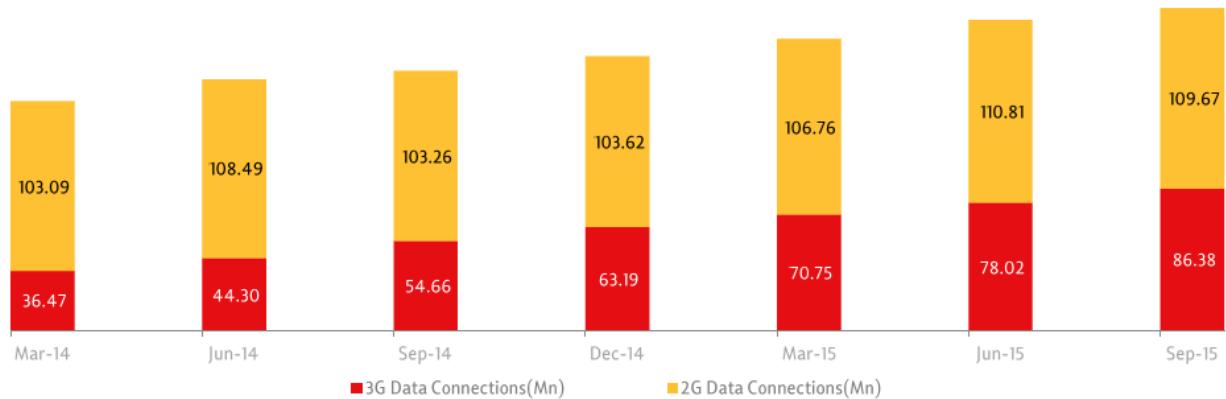
Growth in 3G is outpacing growth in 2G, this behavior is mirroring the switch that users made from dialup to broadband. If people see value, they will switch. 2G can be used as a gateway to higher speeds.

## September 2015

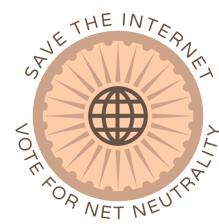
### Mobile Internet In India

#### 2G Vs 3G Connections (in Millions)

The growth in Mobile Internet connections in India is entirely on account of the growth in 3G connections, possibly because of 2G users converting to 3G.



Note: Airtel, Idea , RCOM removed incidental Customers in March 2014. This chart includes Airtel, Vodafone, Idea and Reliance Communications.



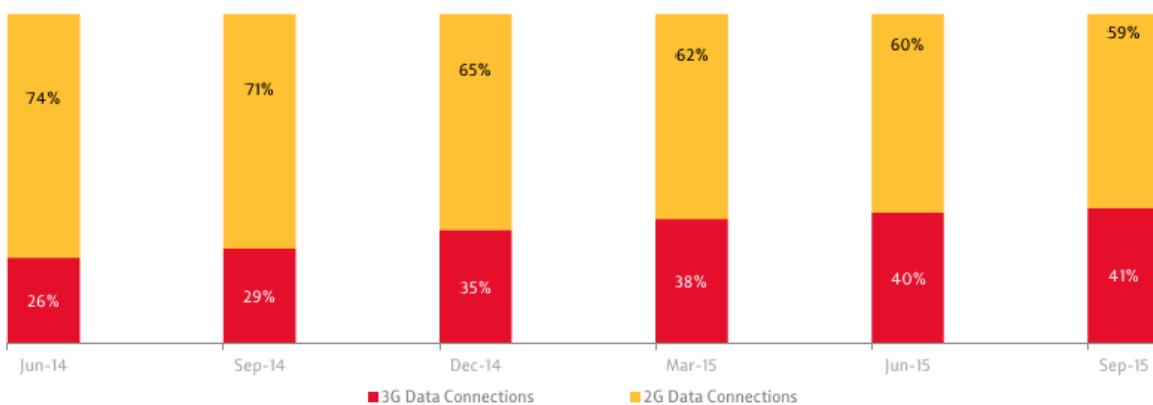
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## September 2015

### Mobile Internet In India

#### 2G Vs 3G Connections

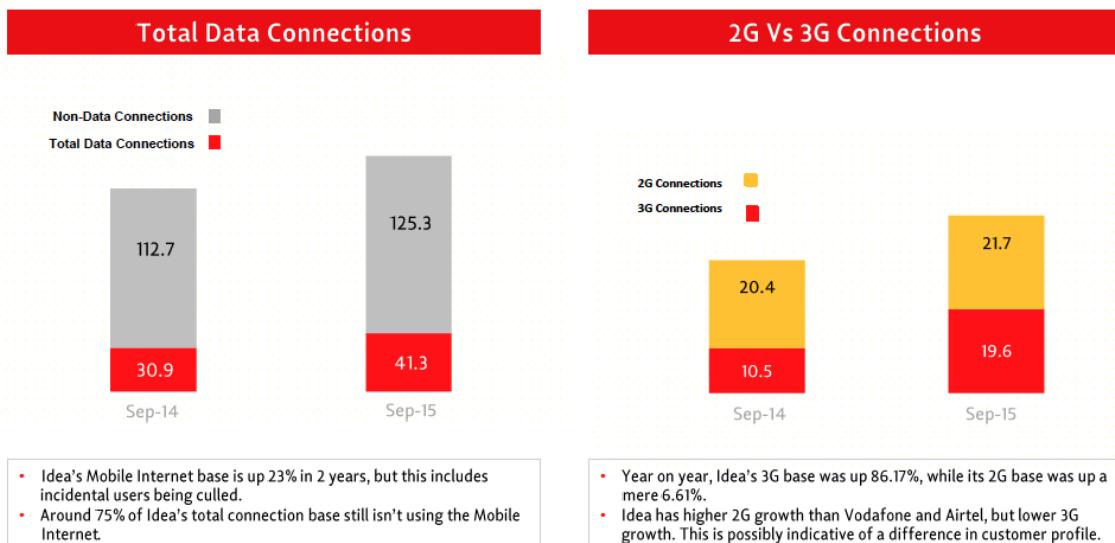
From being just 29% of the total mobile Internet base in September 2014, 3G connections are now 41% of total for the top 4 telecom operators.



Note: Airtel, Idea, RCOM removed incidental Customers in March 2014. This chart includes Airtel, Vodafone, Idea and Reliance Communications.

2. If there are only 93 million “elite” Internet users in India, as Idea Cellular suggests, and not almost 300 million, perhaps SEBI should indicate to that telecom operators, including Idea Cellular, that they should be more accurate with disclosures about their Internet user base.

## Idea Cellular



Market forces will address low broadband penetration. Lowering of cost of 4G handsets has resulted in a reduction in the cost of 3G and 2G handsets.



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Airtel CEO Gopal Vittal said<sup>22</sup>

“The 4G ecosystem has suddenly switched over”, on the company’s earnings conference call. “Two quarters ago, a million handsets were being shipped on 4G. Last quarter it was close to 5 million, and we believe that this quarter it will be close to 10 million. The ecosystem is evolving rapidly.”

Idea Cellular MD Himanshu Kapania said<sup>23</sup>,

“Our big worry when we started to value launch of LTE in 2014 was that then the equipment prices were far in excess to the equipment prices that were available on 3G. With almost 170 operators coming on board with the technology, the equipment prices are now tending towards to 3G prices. So when we see the sum total of devices, equipment, as well as consumer acceptance we felt there is no point delaying our LTE launch to 2017 and we have preponed our launch by one year in a phased manner launching in 2016.”

Similarly, with low cost 4G services, market forces will put downward pressure on the cost of 3G and 2G connectivity. In the past, competition has worked towards consumer benefit and telecom operators have survived this. There is no indication that telecom operators such as Airtel, Idea and Vodafone, with their experience in telecom and vast resources available to them, made irresponsible decisions that would make their businesses unsustainable because they bid too high for spectrum and/or spent irresponsibly in rolling out telecom infrastructure. In fact, their submissions to their investors in conference calls indicate otherwise. Airtel’s Global CFO Srikanth Balachandran said<sup>24</sup>,

“This auction (March 2015 auction) has been defining in many ways. It paves the way for increased certainty and stability over the next 20 years. At this stage one must take stock of the economic realities of the telecom sector. Since 2010 operators have sunk \$50 billion just on spectrum. As Internet penetration moves up month-on-month, operators are also continuously investing in network. Hence, revenue development accompanied by cash generation is the only way forward for sustained investments in the sector, which we believe can be sustained by top players thereby further consolidating market in favor of top players. In

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<sup>22</sup>

<http://www.medianama.com/2015/11/223-the-4g-ecosystem-has-now-suddenly-switched-over-airtel-ceo-gopal-vittal-key-learnings-from-airtels-q3fy16-concall/>

<sup>23</sup> <http://www.medianama.com/2015/07/223-idea-cellular-concall-kapania/>

<sup>24</sup> <http://www.medianama.com/2015/07/223-idea-cellular-concall-kapania/>



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the auctions Airtel not only renewed its spectrum but also acquired more across bands to augment voice and data delivery.”

Idea Cellular appears to be making a different pitch to its investors (regarding fast paced Internet growth, hence nothing to worry about) and a different pitch to TRAI (regarding lack of broadband growth, hence help needed). We would urge the TRAI to read Idea Cellular's submissions to its investors in its earnings calls to get the whole picture. In Idea's Q4-FY15 earnings conference call, MD Himanshu Kapania said<sup>25</sup>:

“We're very pleasantly surprised. It gives us a lot of confidence to go ahead and make the investment now. We have seen that there is sufficient RoI... There is significant usage of e-commerce, mobile banking and specialised services. In terms of handsets, primarily the lower end of 3G handsets are fueling the growth, 4-4.5”, in a price bracket which is Rs 4500 to Rs 7000. More and more consumers are upgrading their Rs 1500 2G phones.”

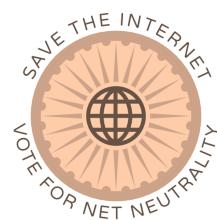
## 20. Claim that Infrastructure left idle

- **Idea:** “Besides providing mobile broadband coverage and making affordable handsets available to users, consumers need to be educated about the benefits of internet with relevant vernacular and regional content made available for their consumption.”
- **Idea:** “If the internet adoption in the country remains weak, and middle and bottom end of Indian consumers do not see relevance of internet in their lives, not only telcos' massive broadband infrastructure investment would be left idle, the digital vision of Government of India would not accelerate at the pace of objective articulated by Prime Minister and Telecom ministry.”
- **Idea:** “To attract such a large investment, freedom / flexibility in pricing and continued forbearance policy are essential since any TRAI intervention/ control on differential pricing would have adverse impact on TSP business models leading to greater uncertainty of investment return.”

### **Answer:**

1. Idea cellular is a demand-led operator, as indicated by the company to its investors. Infrastructure capacity is only being added as required. Please see answer to Point 4 (**On investment made in Data networks**) for a statement from Idea Cellular MD Himanshu Kapania on how the company plans investment in infrastructure.

<sup>25</sup> <http://www.medianama.com/2015/05/223-idea-earnings-call-q4-fy15-voip/>



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2. In addition, in January 2015, Mr Kapania indicated how Idea Cellular decides to upgrade its infrastructure, saying that it depends on returns:<sup>26</sup>

"I am referring to our 11 circles where we have existing spectrum. We are hoping to do that over 2 to 3 years depending on volume of demand and where we can find as I said the condition for the site to be upgraded is that there are at least 300-500 3G device users there who had upgraded their handset and the total volume of 2G data is a reasonable enough for us to get returns."

3. Internet adoption is increasing. At one level telecom operators complain about not enough bandwidth being allocated in auctions, which strains their capacity, at another, they complain about potential for insufficient adoption. Lack of consistency suggests that they're merely seeking to justify rent-seeking behavior.

"We have seven possible bands in which the two major broadband access technologies, namely HSPA (3G) or LTE (4G) can be deployed. These are 900 MHz and 2100 MHz bands for HSPA (3G) and 700 MHz, 800 MHz, 1800 MHz, 2300 MHz and 2500 MHz bands for LTE (4G). **The present situation is that there is no pan-India 3G operator and the maximum 3G spectrum any operator has is 5 MHz. In the case of LTE, there is only one operator with pan-India allocation of 20 MHz spectrum.** In short, at present there is hardly any true competition in 3G services and when LTE (4G) service is launched by the single pan-India spectrum holding operator, there still will not be any real competition."<sup>27</sup>

## 21. Claim that only non standard offering will grow Internet adoption:

- **Idea:** "Internet adoption can only be driven by non-standard offering – flexible, differential pricing approach to pricing of services. This activity cannot be driven by one single entity and can only be done when both telecom operators and application providers work together to create innovative product offerings and motivate the non-users to use internet and applications."
- **Idea:** "As such differentiated broadband data tariffs are a critical need to grow this segment of the user. Any restriction on this could be detrimental to the growth of data in the country, and the eventual vision of a Digital India will become more difficult to achieve."

<sup>26</sup>

<http://www.ideacellular.com/wps/wcm/connect/e5b8d0b4-a2c2-419d-aea1-b1f51b7c96a3/Transcript+Q3FY15.pdf?MOD=AJPERES&CACHEID=e5b8d0b4-a2c2-419d-aea1-b1f51b7c96a3>

<sup>27</sup> <http://www.thehindubusinessline.com/opinion/india-lacks-the-bandwidth/article6238396.ece>

<sup>19</sup> [https://www.itu.int/net/pressoffice/press\\_releases/2015/17.aspx](https://www.itu.int/net/pressoffice/press_releases/2015/17.aspx)



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**Answer:** Data indicates otherwise. There are 3.2<sup>19</sup> billion people online, who have been brought online with standard offering, wherein telecom operators do not have the flexibility to do price differentiation. 300-400 million Internet users in India have come online without price discrimination<sup>20</sup>. Both data consumption and user base is growing rapidly for Idea Cellular, Airtel and Vodafone, without price discrimination.

#### Number of subscribers:

- **Idea Cellular** reported 41.3 million mobile data subscriptions for the quarter ended September 30, 2015. In the preceding quarter, the telco had 37.2 million data subscribers showing a growth of 11.02% sequentially.
- **Airtel**: In the quarter ended September 30, 2015, Airtel's total mobile Internet base saw a 3.11% increase quarter-on-quarter (QoQ) to 51.01 million connections, from 49.47 million connections in the previous quarter, while it increased 27.19% year-on-year (YoY) from 40.108 million in the same quarter last year.
- **Vodafone**'s total data connections stood at 66.5 million for the quarter ended September 30, 2015. This was a 16% year-on-year increase from 57.2 million.

#### Data consumption:

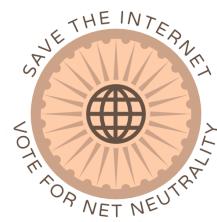
- **Idea**'s total mobile Internet data consumption grew significantly to 72.01 billion MBs, up 14.89% from 62.68 billion MB in the previous quarter.
- **Airtel**'s total mobile Internet data increased by 12.69% QoQ to 114.96 billion MB and increased by 69.89% YoY from 67.668 billion MB.
- **Vodafone**'s total data usage increased by 74% year-on-year (YoY). Data revenues now represent 18.9% of the company's service revenue (Quarter ended September 30, 2015).

#### 22. Business Case for Free Basics:

- **Idea**: “Such programs expect Telcos to bear the full cost of running the program, making telecom offer free data services. There is no business case for telcos to offer free data services for any platform or program. The same is apparent by the fact that most major telecom service providers in India have chosen to distance themselves from such programs. Also, in our view, the Regulator should not link the decision on Differential Tariff with any current event as no leading Indian telecom operator has joined such a program.”

#### **Answer:**

- While we support Idea Cellular's stand on the lack of a business case for Free Basics, we disagree with them when they say that this isn't a differential tariff issue. Reliance Communications has the fourth highest number of active telecom users in India, has



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been a data focused telecom operator for the past few years, and accounts for the highest amount of data consumption among Indian telecom operators. Its policies have a bearing on the telecom market in India. Free Basics, Free Facebook Friday (free access to Facebook every Friday on Reliance Mobile), free WhatsApp are all instances of differential pricing very simply because these bits are being served at a different price (free) when compared to other data.

- Idea Cellular's comment on not linking the decision on Differential Tariff with any current event is unrealistic, bizarre and inexplicable, especially since the regulator has indicated that there are instances of problems that consumers have faced with differential pricing - especially with disclosures and billing - with existing differential tariff packs. For the regulator to ignore the current scenario would set a dangerous precedence in regulatory consultations. We would urge you to consider complaints from consumers regarding billing in case of differential tariff programs (not just Free Basics) while forming an opinion.

The TRAI has received around 12,292 complaints against telecom operators relating to billing tariff, wrong charging and value added services (VAS) from 2010-2014. Then IT and telecom minister Milind Deora said in a written reply to Lok Sabha that a total of 8,756 complaints were received in TRAI during 2010-11, 2011-12 and 2012-13 whereas 3,566 complaints were received for the current year 2013-14 up to February 7, 2014.

DoT, in its clarification, had said that just because a billing complaint against the Department of Telecom, which used to provide telephone facilities to consumers, has been dismissed under the act, telecom companies cannot seek refuge under the judgment and must be subjected to the Consumer Protection Act.

### Examples:

1. Main balance deducted under 3G charges<sup>28</sup>
2. Rs 1,200 deducted without refund<sup>29</sup>
3. Vodafone incorrect charges<sup>30</sup>
4. Complaints under comments section<sup>31</sup>

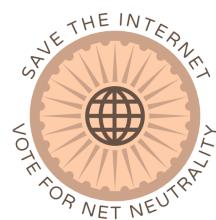
<sup>28</sup> <http://forum.indiacomplaints.com/Thread-Main-balance-deducted#.VpdhCZN94b0>

<sup>29</sup> <http://forum.indiacomplaints.com/Thread-deduction-of-account-balance-of-rs-1200-for-without-any-reason#.VpdhD5N94b0>

<sup>30</sup> [http://ccrc.in/complaint\\_detail.php?cid=76684&page=5&cn=&kw=&cc=&c=&s=&sdate=&edate=31](http://ccrc.in/complaint_detail.php?cid=76684&page=5&cn=&kw=&cc=&c=&s=&sdate=&edate=31)

<http://www.indiacomplaints.com/consumer-complaint-redressal-procedure-telecom-complaints#.Vpdcb5N94b0>

<sup>31</sup> <http://www.complaintboard.in/complaints-reviews/reliance-communications-l6867.html>



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5. "WhatsApp and Facebook plan not working"<sup>25A and 25B</sup>
6. Facebook usage charged to data, not free<sup>26</sup>
7. Unlimited WhatsApp usage charged to data usage and balance<sup>27</sup>
8. Main balance deducted for free WhatsApp usage<sup>28</sup>
9. No data after unlimited data recharge<sup>29</sup>
10. Airtel offers a data recharge for **WhatsApp text only**, as seen in the image below:

Browse plans of Airtel Maharashtra	TalkTime	Validity	Data Benefits	Price
<b>Maharashtra</b>				
Full Talktime	0	2 Days	55 MB 2G Data	Rs. 14
Special Recharge <b>2G Data</b>	0	3 Days	100 MB 2G Data	Rs. 25
3G Data	0	28 Days	180 MB WhatsApp only for text; does not include media (image/video) downloads	Rs. 45
Roaming	0	6 Days	185 MB 2G Data	Rs. 46
Top Up				

11. Airtel also offers its Wynk music, movies and games service for free:

Browse plans of Airtel Maharashtra	TalkTime	Validity	Data Benefits	Price
<b>Maharashtra</b>				
Full Talktime	0	20 Days	500 MB 3G Data + WYNK	Rs. 289
Special Recharge	0	28 Days	1.2 GB to 10 GB 3G data	Rs. 298
<b>2G Data</b>	0	28 Days	1024 MB Data + WYNK	Rs. 308
3G Data	0	28 Days	1280 MB 3G Data	Rs. 347
Roaming	0	28 Days		
Top Up	0	56 Days	1024 MB Data	---

### 23. On claim regarding need for B2B2C

- **Idea Cellular:** "Differential pricing is the stepping stone for various Internet stakeholders to come together; without this key initiative, there is no scope for any partnerships to

<sup>25B</sup> <http://www.consumercomplaints.in/complaints/reliance-communications-fb-and-whatsapp-plan-not-working-c782518.html>

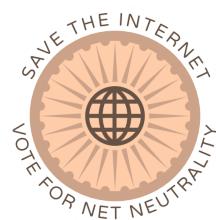
<sup>26</sup> <http://www.complaintboard.in/complaints-reviews/reliance-gsm-l28417.html>

<sup>27</sup> <http://www.grahakseva.com/complaints/196019/uninor-whatsapp-galat-plan>

<sup>28</sup> <http://www.complaintboard.in/complaints-reviews/reliance-16-whatsapp-pack-l290749.html>

<sup>29</sup>

<http://www.grahakseva.com/complaints/257978/internet-not-working-after-recharge-of-unlimited-data-package>



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take Internet forward. In short, adoption of B2B2C model would be essential for bringing relevant and cost effective solution for attracting the masses to the use of internet and helping the cause of digital India.”

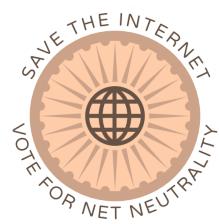
**Answer:** The Internet is not a managed service. It's a global public commons, and telecom operators provide access. A differential pricing regime would be a means of converting access to a global public commons into a B2B2C model, thereby influencing users towards accessing a few services (with B2B2C), instead of the global commons. Our focus should be on bringing tariffs for Internet access down. Increasing access to one service: whether it is Facebook or Ola, does not increase Internet access. The Internet is largely C2C (consumer to consumer), and to some extent B2C. By inserting itself in the middle of these direct relationships, telecom operators seek to create a role for themselves beyond provisioning of access to consumers.

#### 24. On Free Market Mechanisms

- **Idea Cellular:** “The Authority also needs to appreciate that all input costs for the telecom companies are based on a free market mechanism. Even spectrum, where the rights are given by the Government is given through an auction mechanism, which represents the highest form of free market pricing (in fact prices have been higher than fair market prices due to artificially constrained supply and auction designs which have caused predatory bidding in many cases). In such an environment, when all input costs are based on free market principles, it is essential that market forces are allowed to determine pricing and if the market accepts differential pricing, then that should be allowed.”

**Answer:** It is imperative for the operations of free markets for restrictions to be placed on the activities of licensed oligopolies. Telecom operators control user access to other users and online products and services, many of them created by users, others by businesses. While online oligopolies are also a cause for concern, a majority of the Internet is user generated. Licenses are given with limitations, and tariff regulations (including the option to exercise forbearance) are contained in those regulations. Thus, the regulator has the right to ensure Net Neutrality by ensuring that a differential pricing regime isn't allowed. For free markets and indeed, freedom, to sustain online, it is essential for telecom operators to not be discriminatory. This will also ensure access to new products and services for users. Which developer or online business, upon launching in, say, Estonia (where Skype originated), will come especially to India to become a part of the zero rated package in India? Positive discrimination, as Tim Berners Lee, the creation of the World Wide Web said, is a step backwards.

#### 25. On Case by case approach:



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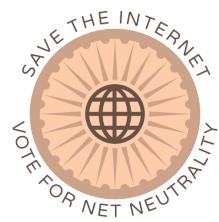
- **Telenor:** “Hence, we recommend a principle based case to case approach towards differential pricing which does not restrict the flexibility of market oriented pricing. For example one operator may decide to provide free weather updates (application), another example can be free access to annual matriculation Board results on a specific day (website), yet another example can be night data packs for chatting designed specifically for student community (platform / market segmentation).”

**Answer:**

A case by case approach clearly disadvantages all Internet users, apart from putting additional regulatory burden on the regulator. Internet users are also content and service creators. Both creators, which could even be a student from a university, lack the resources, know-how, and wherewithal to participate individually in the regulatory process. Similarly, small startups, which are typically thin on resources, and compete in hyper competitive global markets, lack the time, resources and knowhow to participate in the regulatory process. The success of some startups, in that they have become billion dollar “unicorns” should not be reason to tax the entire ecosystem, a majority of which are working towards reaching similar scale. Policy should be focused on making innovation permissionless and less burdensome, and ensuring that no gatekeeping is allowed by either telecom operators, ISPs or content platforms like Free Basics. A similar treatment is important for everyday Internet users, many of whom contribute towards sharing knowledge, code, services and tools to the global commons that is the Internet. Gatekeeping or a permission-based system will have a chilling effect on the ability for all to create or contribute. That loss will be difficult to quantify.

**26. On Precedence and No evidence of harm in the market**

- **Telenor:** “Non-predatory – found no adverse evidence in market till date””At best, the regulatory principles in force may be reiterated in the context of data. In case, if any such scheme / bundled offer is found non compliant to the principles of tariff regulations by TRAI, same should be disallowed with immediate effect.”
- **MTS:** “The operators have been offering free access to popular services such as Wikipedia, Facebook and WhatsApp etc. in a bid to encourage users to start using their mobile broadband services. The free access to these popular services is pitched to the customers based on the factual data. The proponents of zero or discounted tariffs take cognizance of the high price sensitivity of Indian consumers. The zero or discounted tariff could also make an impact in driving the adoption of mobile broadband, especially in a country like India.”



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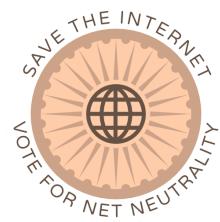
**Answer:**

- Preliminary Research into differential pricing of data do not support these claims. Research<sup>32</sup> by Amba Kak for the Oxford Internet Institute shows that:
  1. Less experienced, low-income users prefer an open, unlimited Internet with data limits. This preference is strong enough for most to have rejected zero-rated plans in favour of all-access plans – even when the latter are costlier.
  2. Other existing innovations in data pricing had been more successful in responding to the needs of these financially constrained users compared to limited access/zero-rated bundles and
  3. Those with low clarity on mobile data pricing complained that zero-rated plans would imply heightened risk of unexpected charges, a risk they were unwilling to take.
- There is evidence of harm in case of Mobile VAS, as indicated in answer to point 17 (Claim that there is competition in the telecom market)
- There is evidence of harm to consumers, because of unclear billing practices in answer to point 22 (Business case for Free Basics)
- Vertical integration with foreclosure has been established as being harmful across multiple industries. While we're just beginning to observe their long-term effects on the Internet, economic literature<sup>33</sup> comparing the effects of vertical integration on the cable industry, whose content/distribution dynamic is closely related to that of the Internet, indicates that the likelihood of harm is serious. While the authors advocate for increasing competitiveness within ISPs, it has been established that competitiveness in the Indian Internet ecosystem is sparse and oligopolistic, and no magic bullet for its increase is forthcoming, leaving regulation the only choice. We'd like to point out here that vertical integration has given a competitive advantage to Airtel's Wynk Music service, in competition with other players like Saavn, Gaana and Rdio/Dhingana. Airtel was able to bundle data with its Wynk Music, as indicated in point 22. This forces other players to seek similar deals, and as such, allows a situation where Airtel can either deny them similar deals, and hence gain a competitive advantage, or it can launch services with bundling with the intent of forcing other companies to buy data from it. The latter might give it the appearance of being non-discriminatory, but this is merely a means of

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<sup>32</sup> A. Kak, "THE INTERNET UN-BUNDLED: Locating the user's voice in the debate on zero-rating," Oxford University, August 2015 <http://www.savetheinternet.in/files/amba-kak-thesis.pdf>

<sup>33</sup> "Non-discrimination rules for ISPs and vertical integration: Lessons from cable television" by David Waterman and Sujin Choi, [http://www.indiana.edu/~telecom/people/faculty/waterman/Network\\_neutrality\\_TelecomPolicy.pdf](http://www.indiana.edu/~telecom/people/faculty/waterman/Network_neutrality_TelecomPolicy.pdf)



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instituting a carriage fee via bundling or zero rating and in the recent past, “telecom operators have been mercenary when it comes to revenue, taking the lion’s share of end user price.”<sup>34</sup> This kind of cross-media ownership and marriage between content and carriage leads to anti-competitive behavior. Telecom operators need to remain neutral and not use their competitive advantage of being in both content and carriage businesses to either advantage themselves, disadvantage others, or institute a carriage fee.

## 27. Comments on Free Basics

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<sup>34</sup> “Trai Regulations on Vas Need More Teeth” by Amba Kak,  
<http://www.medianama.com/2015/03/223-trai-regulations-on-vas-need-more-teeth-amba-kak/> - quoting

# Annexures

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## Facebook has a history of being non-transparent: Vishal Misra

Source: [Governance Now](#)

Interview: Vishal Misra, associate professor, department of computer science, Columbia University  
Pratap Vikram Singh | New Delhi | January 6, 2016

### **How do you define net neutrality?**

Internet is a platform where (access) ISPs provide no competitive advantage to specific apps/services, either through pricing or quality of service (QoS). It is important to note that net neutrality is not about how you treat individual packets, but how you treat competition. Internet provides a platform where ideas can compete on an equal footing, and that is the essence of net neutrality.

### **How is it going to impact Digital India and Start Up India?**

It is critical for the Startup India campaign. If we let the principles of net neutrality be compromised, then it makes it very difficult for entrepreneurs and startups to compete against established players, who can close off the market for upstarts by schemes like differentiated pricing and zero rating. If some sites are cheaper to use than others, then even if they are lower quality consumers will have a preference for them, making the job even harder for startups.

In a related issue, there is evidence from European countries that if you implement a ban on zero rating, that applies a downward pressure on telecom companies to reduce prices to increase usage and adoption. So, contrary to what proponents of zero rating would like us to believe, access is not increased by zero rating.

Critics say net neutrality is obsolete and a utopia. They demand for greater flexibility for the TSP/ISP for network management.

I would say that is misdirection. Reasonable network management is fine as long as it does not benefit or impact specific players. For instance, if you prioritise all voice over IP traffic (including WhatsApp, Skype, telcos own VoIP), then that is fine. But if you prioritise only the telcos VoIP offering or only WhatsApp, then you are hurting competition in the VoIP sector/service. If the telcos talk about pricing flexibility, that is just another way of them saying that they want to extract revenue out of their ability/position to distort the market in favor of certain players. Since they have that capability, being the last mile provider, they want to monetise that ability. Net neutrality says they should not be allowed to do that. Telco revenues seem very healthy from all the earnings reports, so I don't believe their arguments.

Telcos say zero rating gives internet access to large unconnected population and the revenue they earn is further invested in building network. Your view?

If the telcos are truly interested in connecting the unconnected population, then they can give limited time access for the entire internet to them, rather than market distorting walled gardens like Free Basics or Airtel Zero.

Do we have any study to show whether first time users prefer accessing zero rated websites versus full internet?

It is basic economic theory, and zero rated sites get a price advantage. There are studies that show customers stay within the world of zero rated sites and never venture outside or are aware of the full internet.

What model do you suggest for India or any other developing country (where a large section of population doesn't have access to internet) from the perspective of digital equality and net neutrality?

Access is important. There are many ways of increasing access without giving up on the principles of net neutrality. We can have a limited time access to the full internet. Or bandwidth limited access to the full internet (I think Aircel is experimenting with that). We can have ad-supported free access. Google is talking about Wi-Fi hotspots (starting with railway stations) that give access to the entire internet.

#### **What is your argument against Free Basics?**

That it creates a walled garden controlled by a corporation, a corporation that I might add has a history of being non-transparent with their motives. The walled garden distorts the market and is not good for the ecosystem, is inconsistent with the way the internet has evolved.

There are platforms like mCent and Gigato which reimburse data fee to users accessing partnering apps. Do they violate net neutrality?

I think it is a gray area. On the surface it seems to be just like Free Basics, however Gigato is making no pretense that what they are doing is philanthropy of increasing access. It still distorts the market in favor of the partners of Gigato but since it is an app and not the ISP, it is ok at least under the definition of net neutrality I have proposed. As Gigato reimburses the users in megabytes users can now venture out of the walled garden.

#### **What are the other concerns that you have related to neutrality?**

All the debate so far has been about mobile ISPs. As we move forward, wired broadband is going to become important. We need to make sure that there is enough competition in the wired broadband space, and is not going to get dominated by a single player. This story is being played out in the US, and it is important that India avoids the pitfalls. If needed, the government should step in and lay out the last mile infrastructure to ensure that the wired broadband space remains competitive. A monopoly ISP can control the quality and price at which services can be accessed and that is dangerous. Currently, JIO is aggressively laying out fiber and I fear they might emerge as the monopoly.

(The interview appears in the January 01-15, 2016 issue)

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## The business of ZeroRating: Vishal Misra

Source: [Vishal Misra's Academic Review Blog: Peer Unreviewed](#)

Saturday, December 26, 2015

ZeroRating conversations are dominating Network Neutrality issues these days, whether it is the [FreeBasics controversy](#) in India, [Binge On](#) by T-Mobile, or [Verizon's recent announcement](#) of a plan similar to AT&T's sponsored data. Here are a few thoughts to consider about ZeroRating and why it makes no sense (to me).

If ISPs Zero Rate content, somebody has to pay for the bandwidth. Suppose the Content provider pays for it. Then there is a pricing problem:

- ISPs **cannot** charge the content provider a price **above** the price they charge consumers. Suppose they charge consumers X per MB of data, and they charge content providers X+Y per MB of data. Then, for sufficient traffic where overheads are accounted for, it is *cheaper* for content providers to send recharge coupons back directly to the customers who used their services. Long term, pricing above the consumer price is not sustainable.
- ISPs **cannot** charge the content provider a price **below** the price they charge consumers. Suppose they charge consumers X per MB of data, and they charge content providers X-Y per MB of data. Then if the plan is truly open, a company like [Gigato](#) can come along, buy data in volume and become a virtual ISP. They can funnel traffic to services via their servers (they can remain good guys and not decrypt or store private data), sell the bandwidth to consumers at X-Y/2 and pocket the difference. The ISPs lose out.

Or alternately, the ISP pays for the bandwidth of the content.

- This opens the possibility of [vertical integration](#), where ISPs ZeroRate their own content, and that is **extremely** bad for competition. Or ISPs ZeroRate only a select group of content providers, for non-transparent reasons (FreeBasics or Binge On "technical" requirements that make the walled gardens implicitly closed), leading to a fractured experience/Internet for their consumers.

It is not clear to me what the business model is for ZeroRating, where the ISPs make money and provide an Open and Neutral Internet experience for their consumers. Economic issues are really the

core of Network Neutrality, and nobody has explained to me how the economic model of ZeroRating remains consistent with Network Neutrality.

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## **Half the equation and half the definition: Vishal Misra**

Source: [Vishal Misra's Academic Review Blog: Peer Unreviewed](#)

There is a lot of confusion over what constitutes Net Neutrality, so much so that parties fiercely on the opposite side of issues both claim to be for it. As an example, the current controversy over Free Basics has been between Facebook, whose CEO penned an Op-Ed entitled "[Free Basics protects net neutrality](#)", and on the opposite side of it is a volunteer coalition, SaveTheInternet (STI), whose entire charter is to protect Net Neutrality. As the Op-Ed from the volunteers [suggests](#), the basic contention between Facebook and the volunteers is a different definition of Net Neutrality. While the concept of Net Neutrality was coined by Tim Wu back in 2003, the definition of what constitutes Net Neutrality has been evolving.

Let me walk you through the evolution of the definition that the STI coalition is going with, which is widely accepted and which I have arrived at after years of researching the issue. I will explain why Facebook (amongst countless others, they are not solely to blame here) only consider half the equation and thus end up with half the definition.

I'll start with the folk-definition that we started hearing, around 10 years ago:

### **Folk Definition: All packets must be treated equally**

As networking researchers we knew that this definition was not practical and it made little sense to us. Without getting too much into boring details, we knew routers on the Internet did not treat all packets identically (TCP-SYN packets are treated differently from TCP-Data or TCP-Ack packets, UDP packets are treated differently, packets in the tail of the queue are dropped during congestion etc. etc.). However, we also knew what the principle of Net Neutrality was trying to say, and that was the network did not discriminate. So the folk definition needed to be made crisper. The FCC adopted Net Neutrality rules last year and the definition broadly laid out the following principles:

### **FCC: ISPs will not block or throttle any traffic and will not implement any paid prioritization (no fast lanes)**

This definition changes the abstraction from how packets are treated, to how services are treated which is a logical progression. However the FCC missed out in one crucial aspect, and that is not incorporating the concept of differential pricing in its Net Neutrality Principles. Zero Rating, which is a special case of differential pricing, was not a big problem in the US when the Open Internet order was

voted upon, and the FCC preferred a wait and watch approach to it (as a refresher, Zero Rating is the concept where consumers don't pay for the bandwidth of some or all services, and instead the cost of the bandwidth is borne either by the ISP or the content provider). The FCC definition focused on *quality of service* (QoS) as the determining factor for Net Neutrality, and insisted that all content on the Internet received the same quality of service from ISPs. The intent was to not provide competitive advantage to any service on the Internet, as that was in the best interest of both consumers as well as entrepreneurs. However it missed out in the following way:

As a brief background, in game theory (the mathematical tool we have used in our work on analyzing the issue), the quantity that we focus upon is called *Consumer Surplus*. Surplus is defined as Utility derived from a particular service *minus* the *cost paid* to obtain that service. The Utility is a mathematical quantity that models the impact of the QoS obtained for a particular application, and the FCC was absolutely correct in enforcing neutrality there, but the FCC did not model the *cost paid* in its definition of Net Neutrality (and it is the definition Facebook uses to justify Free Basics as being consistent with Net Neutrality). How much an application costs changes the surplus a consumer obtains, and applications with similar utility (quality) but with differing costs provide different surpluses. In game theoretic models higher surpluses get competitive advantages, thus it is *crucial* to model the cost aspect of an application to get to a definition of Net Neutrality that works. Differential pricing or Zero Rating of select services absolutely violates the principle of Net Neutrality if we consider the impact on consumer surplus.

Thus, if we only model half the equation, we end up with a definition of Net Neutrality that focuses *only* on QoS, however if we model the equation fully then the price of the service comes into play. A lot of people only model half the equation (Facebook included) and thus claim that differential pricing (Zero Rating specifically) is fine under Network Neutrality, but that is not true. If we are talking about a true level playing field, then the other half of the equation cannot be ignored.

Access Now, a global non-profit aimed at protecting the digital rights of citizens, has adopted a definition that states the following:

**Access Now: Net neutrality requires that the Internet be maintained as an open platform, on which network providers treat all content, applications and services equally, without discrimination.**

This definition implies that differential pricing cannot be adopted, but it does not say so explicitly and people (usually differential pricing advocates) can easily ignore the pricing aspect of a service and say Zero Rating is consistent with this definition. To fix this minor issue, and make things explicit, I have proposed the following definition which has received acceptance from academics, policy makers, entrepreneurs and activists alike, and I announced it publicly sometime back:

Internet is a platform where ISPs provide no competitive advantage to specific apps/services, either through pricing or QoS

#NetNeutrality

— [Vishal Misra on twitter](#)

This definition has the following properties:

1. It incorporates both QoS and Pricing in the definition of Net Neutrality, thus correctly modeling consumer surplus.
2. It makes explicit the notion that Net Neutrality is not how we treat packets but how we treat competition.
3. It allows for reasonable traffic management by ISPs without violating Net Neutrality.
4. It allows *differential* QoS and/or pricing as long as it is allowed in a non-discriminatory way. ISPs can prioritize *all* real time traffic (e.g. all voice or all Video Conference traffic in a provider agnostic way) over all non-real time traffic. Similarly all emergency services or health monitoring apps can be prioritized.
5. It allows creating and differentially pricing entire class of services. For instance, an ISP can create an extremely low latency service and offer it to all games/gamers without discrimination, and that should be fine. The definition permits differentiation between services, but prohibits discrimination within a service.
6. It ensures a level playing field on the Internet, where upstarts can come in and compete on the basis of ideas.
7. Lastly, and this is only half in jest, the definition fits in 140 characters including a hashtag.

I am a big believer in the power of capitalism, as I think humans are largely selfish with varying degrees of altruism. However, for capitalism to work for the greater good of society, it is critical that the selfish interests of corporations align with public interests. And that's where regulators step in, using the concept of [mechanism design](#), to introduce a minimal set of regulations that incentivize corporations to act in societal interest. I think the concept of Net Neutrality, defined in the way above, provides the mechanism for the Internet economy to work in the public interest. I hope the right regulations get passed.

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## The basics of what's free: Vanita Kohli-Khandekar

The questions that Free Basics raises go way beyond net neutrality

Source: Business Standard

January 5, 2016

Imagine for a moment that the estimated Rs 7,500-crore Star, India's largest broadcaster, wants to reach the country's entire billion-plus population instead of the 650 million it currently does. To this end, it offers [Star Plus](#) and maybe Life OK, its popular Hindi channels, and a couple of channels from

other broadcasters, along with a free cable or [DTH](#) connection. If you want anything other than Star TV's chosen bundle, you pay for both the connection and the channels you want.

This, in effect, is what the \$12.5-billion Facebook seeks to do with Free Basics. The programme, launched in several countries in 2014, offers limited internet services, along with Facebook, on mobile phones, for free. Anything beyond that incurs data charges.

In India, where [Free Basics](#) was launched 10 months back, the angsting over [net neutrality](#) has been loud. The issue, however, goes beyond neutrality. It raises the question of whether the internet is a necessity. Should its access be subsidised or incentivised and what are the economics of doing that? It is not just about a large American corporation out to get poor people's data, the way the naysayers have painted it. It is also about people, who have had internet access for more than a decade or so, talking on behalf of those who have never had it. These questions are part of the flux in India, one of the world's largest internet markets with 319 million subscribers. Drawing a parallel with TV might help.

Neutrality is forced on the TV business. All channels have to be offered to all distributors (cable or DTH). DTH operators have to offer set-top boxes that are "technically interoperable" so that consumers can shift when they want. Meanwhile, the regulator, Telecom Regulatory Authority of India (Trai) caps pricing, which has become a convoluted mess in the TV business. Add to this, carriage fees that have killed programming innovation. For all the focus on neutrality, consumer choice -whether on pricing or programming -remains limited in the world's second-largest TV market because too many other elements queer the pitch. That is the first point of this column.

If Star, a dominant entertainment broadcaster, offers a free connection that is predicated on consumers viewing only its channels, this creates an entry barrier for others. Hence, it is discriminatory. And transparency and non-discrimination are the two regulatory principles the [Trai](#) claims are key. This was made clear in a consultation paper, Differential Pricing for Data Services, released in December last year, in the wake of protests over Free Basics. Strangely, carriage fees, which hugely discriminate against small and niche broadcasters, continue to thrive in the TV business. There are ways, though, of easing up the bandwidth shortages that give rise to carriage fees - by pushing for a fatter pipe to carry TV signals through digitisation, having several competing technologies and incentivising investment into the last mile.

That brings us to the second point: Instead of focusing on differential pricing why not focus on the bigger question of how to get more internet access to people? Could it be done by incentivising the building of the expensive infrastructure needed or through fostering competition among different technologies to help push down data prices? There are other ideas. Nandan Nilekani and Viral Shah, who together led the design of the government's subsidy platforms using Aadhaar, suggest the government offer 120 mega bytes (MB) free to every subscriber. They recommend dipping into the Rs 40,000-crore corpus of the Department of Telecommunications' Universal Service Obligation Fund to finance this. The fund was created (surprise!) with contributions from telecom operators.

And here is the last point. Africa has seen the fastest rise in data usage since the launch of Free Basics in 2014. Therefore, it is working. But according to much of the research done after that, more than two-thirds of the people using data services think Facebook is the internet. If the idea of a Star TV-created walled garden that allows it to become the context of TV for millions of Indians seems

wrong, so is that of Facebook or any other app becoming the same for millions of Indians using the internet for the first time.

As John Naughton, professor of the public understanding of technology at the Open University in the UK, said (in a piece in The Guardian last year), "The goal of public policy everywhere should be to increase access to the internet - the whole goddam internet, not some corporate-controlled alcove - for as many people as possible."

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## After My Cable Massacre, I Punch For Net Neutrality: Raghav Bahl

Source: [The Quint](#)

April 16, 2015

About a year ago, I had to exit from Network18.

Almost a year before that, Ronnie Screwala sold his founder's stake in UTV to Disney. Both of us had set up billion-dollar broadcast companies from scratch. We were among a handful of creative, hard-driving, first generation entrepreneurs, which also included people like Prannoy Roy and Rajat Sharma.

Before I make any assertions, I must disclaim that I have not spoken to any of them before writing this; so I have no way of knowing whether they would subscribe to my views.

Why were we forced to sell? Why have the others struggled? Of course there are several reasons which would be specific to each one of us. But there is one common thread which runs through all our tribulations, viz a set of regulations which handed brutal, 'non-neutral' power to cable companies. India's cable industry has been a beastly non-neutral and controlled-access industry, which simply slaughtered first generation entrepreneurs who did not have the family capital to absorb its violent indignities.

Just take a look at the bare facts.

I had to offer our channels to the cable companies under a 'must provide' clause, so my bargaining power was severely crushed (Strike 1 - one hand tied behind my back.)

The cable companies had no such 'reciprocal must carry' obligation, so it became utterly non-neutral (Strike 2 - now my second hand too was tied behind my back.)

Then, I was told that there was a price cap on my channels, ie, I could not freely price my service to the consumer (Strike 3 - my leg was buckled at the knee and tightly tied to my thigh.)

Finally, I was told that the cable company was free to extort any price it wanted to sell scarce bandwidth to me. With 300 channels clamouring for 90 fixed frequencies, and no fair price or free access regulation on the cable guy, he simply swindled me for absurd carriage fees — about 30 per cent of my news channels' revenues! (Strike 4 - my second leg too was trussed, and my helpless torso became fair game for cable companies).

That's how cable non-neutrality destroyed our broadcast operations.

Now I am launching a digital media outfit. The same predatory vultures are gathering overhead, demanding curbs on free access, trying to create scarcities which can be used to blackmail start-ups. I don't want to die again.

And that's why I punch for Net Neutrality.

First generation start-ups need a level playing field.

Monopolists, beware!

PS: For terrific clarity on this subject, [read Vanita Kohli Khandekar's excellent piece in Business Standard.](#)

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## Let Us Tell TRAI: We Want Net Neutrality in India: Deepak Shenoy

Source: [The Capital Mind - Deepak Shenoy's Blog](#)

April 4th, 2015

[Capital Mind](#) supports Net Neutrality in India. You do not understand what Net Neutrality means, you say? Let me explain.

### **What is Net Neutrality**

Net neutrality means equal opportunity access to the Internet. To understand this, let's first see what is NOT equal in terms of net access.

You see those ads that say, "**Airtel offers free access to Youtube on it's data plan**". That is not Network Neutral.

Why? Because it offers free access to Youtube, but **not to Vimeo, or CNBC** or if we ever get to doing it, **Capital Mind TV**. You will not use these other services that compete with Youtube simply because you have to pay Airtel to access them, whereas Airtel does not charge you for Youtube. This drives traffic to a Youtube who is happy to pay an Airtel so that people will come to it and not to their competitors. This is harmful because tomorrow you may get a faster, better and more useful video service - like say Meerkat - which allows you to directly stream content from your video phones to online video. But it gets a massive disadvantage as Youtube is given cheaper access by your telco.

You might say, so what, let Meerkat pay Airtel? But that's the point: if everyone on the service end paid Airtel, they will protect their turf and disallow other players to come in, even if they wanted to pay. You'd have to have rules that say anyone can pay and make their offerings free, which is a regulation that is as good as saying no one is allowed to pay to make their traffic cheaper or free. That way, a totally free service like perhaps a Salman Khan academy, which is purely educational can be accessed by anyone for no extra charge. Net neutrality means equality of access.

This is a little like saying “If you drive a Mercedes, no toll on this highway for you, because Mercedes has paid the toll operator already”. It will be unacceptable, specifically as a toll operator on public infrastructure to do this.

And then you could say “**Youtube is faster on Airtel than other web sites**“. This again, is a hidden advantage to a Youtube. What Airtel is really telling you is: Access the guys who paid us, otherwise we will slow down the internet for you.

This is also harmful to the neutrality of the network. In the road example, assume there was one special lane only for Mercedes vehicles that was much smoother than the rest. Would you be fine with that? You'd want to use the same lane - after all, you paid to enter the tolled highway - but you can't if you don't own a Merc. Unacceptably divisive, and therefore, not Neutral.

Finally, you could say “**Here's a data pack, but we won't let you use Skype on it**“. Not Good. This is equivalent to saying, “on this toll road, we will not allow you to use Mahindra Reva Electric cars, because we have a deal with oil companies”. As you can see, this is unacceptable. In what is public infrastructure, what you drive cannot be a differentiator. You can charge tuition fees in a school, but can you deny access to Assamese students? That would be blatant discrimination. In that sense, if all traffic is equal then no traffic can be banned (with the exception of “banned” illegal websites, but that is equivalent to saying you can't drive into this road because this car is marked stolen, which is a fair restriction).

### **What The Telcos Say**

The number one argument by Telcos is that Over the Top (OTT) Services like Whatsapp cause them to **lose revenue** (on SMS, and even on voice). Which means they should be compensated.

This is bunkum. The Airtels of the world don't give you data for free; they charge you for it. These charges may be low or high in comparison with their costs, but no one asked them to price things too low. And in any case, it looks like data revenue is far better than voice, because you seem to be able

to get more revenue through the same fixed cost (of spectrum and all that) than you can with voice. Basically, you as an end user are charged for data when they use Skype or Whatsapp - their argument about losing revenue is completely null and void.

The second argument is that the telcos **spend money on security and on tracing calls and on KYC**, whereas there is no such cost for the OTT players. The KYC bit is illogical - if they access the OTT service through a telecom provider, and they pay the telecom provider data charges, then the KYC is the responsibility of the Telco, not of the OTT provider. I can't be expected to have a KYC for every person reading Capitalmind.in.

But there is something to be said about tracing calls and security. India already has a framework where it can demand contents of emails or text from internet providers in case of security. Tapping Skype calls - we believe the infrastructure already exists with the Indian authorities, and with foreign players too. In general, you will need to trap all data to actually see what's happening internally, and if that is actually required, the only place to do it is at the telco end. If this costs more, they will need to increase their data charges, rather than try to foist it upon a Skype.

The third argument is that Telcos **do not want to be a “dumb pipe”** and want to make money off the fact that they bring the customer online. In a very Apple-ish kind of way, where any revenue generated through an App used in an iOS Product needs to pay Apple a share, the telcos believe they have a right - even a divine right - to such revenue generated effectively through their network.

This is illogical. If you have built a tolled road, which is effectively public infrastructure, you do not have the right to all the commerce generated on that road. You can't say that if a farmer takes his produce to sell somewhere, that you must get a part of it because you enabled access.

Another argument is that **OTT Services don't pay the government**. No entry fee, no revenue share and no spectrum charges.

The answer: Because they shouldn't. A website or service should not be licensed (we go back to license raj?) but the provisioning of a public resource - like spectrum - should and will be auctioned or provided to telcos for a fee. If Google were to own fiber and become a telco, it would also be charged similar license fees and spectrum charges (and Google does own a lot of dark fiber which it will undoubtedly use some of these days to provision services for end users).

### What The TRAI Says

The industry regulator, TRAI, wants to say something, but wants you to tell them what you think, first.

They've put a very complex paper out there asking for questions. ([Click here](#))

There is a more understandable abridged version. ([Click here](#))

The basic questions are:

1. Do you think it's time to regulate internet services? This means everyone from Flipkart to Skype and possibly, even Capital Mind.
2. Should specifically messaging services like Skype or WhatsApp be regulated?
3. Does the growth of internet/OTT services impact revenues of Telcos?
4. Should OTT/Internet service providers pay Telcos over and above what Telcos charge users for access?
5. What about Security, Safety and Privacy in OTT Services? Should that be regulated?
6. Do we need Net Neutrality?
7. Are there any instances where discrimination is okay? Can we have differential pricing for services like Skype?
8. Who should pay for network upgrades by Telcos if their revenues are down?
9. What else?

All of these questions have simple answers - it's not right to regulate internet services as TRAI (there is police and fraud and consumer regulation anyhow). Revenue impact is there, but so what; is a regulator present to only protect the profits of the ones they regulate? That is an asinine argument - if that was the case, the airline regulator should have drowned in a small cup of water by now.

If the response by telcos is to raise tariffs then pray tell us what is stopping them? We'll just choose the cheapest among the reliable, thank you, because they all just deserve to be dumb pipes. (These are my views on banking as well)

**Net neutrality is not negotiable.** We cannot be okay even with free access to Wikipedia. That everyone is the same means everyone should be the same. Discrimination is not okay in any circumstance. If two players decide they want ultra-secure, ultra-fast access, in which case they draw a leased line between each other (brokers on the NSE/BSE have to do this), but on the generic internet, the quality remains what it is for everyone, at least at the telco end.

**Should the TRAI Have Such Powers?**

In the very essence of this topic, the concept of Net Neutrality is also about the very existence of a TRAI as a heavy handed regulatory body. At some level, they are unnecessary; for instance mandating extremely heavy KYC requirements without a common framework is extremely stupid. A common KYC for all telco services - from DTH to fixed line broadband to mobile services - would have been easy to establish for the TRAI.

But no, they didn't do it and now to even get a prepaid SIM card, one has to submit all sorts of documentation, with a signature on each copy, a photo and address/id proofs. This is TRAI being an extremely pompous regulator - the very industry you regulate had the ability to consolidate KYC details and house them securely with perhaps SMS or email based verifications, but no, you wouldn't even think of it. Instead, you fine the CEOs when you find minor errors on KYC. It's so bad that if your photo isn't crystal clear on a photocopy of your ID card, your application gets rejected.

And yet, they did a reasonable job curtailing SMS spam, though that stuff took years to finalize and implement. Ironically, that one regulation resulted in the death of more VAS services than any of these OTT services.

Do you want your data fees looking like this?

# Internet A-la-carte

Base Pack: Rs. 150		Online Shopping		Email	
<b>Search Packs</b>		Amazon	Rs. 50	Gmail	Rs. 20
Google	Rs. 30	Flipkart	Rs. 50	Outlook	Rs. 20
Bing	Rs. 20	SnapDeal	Rs. 40	Yahoo Mail	Rs. 15
Yahoo	Rs. 18	Myntra	Rs. 50	Reddit	Rs. 15
DuckDuckGo'	Rs. 18				
<b>Social Network</b>		<b>Entertainment</b>		<b>News</b>	
Facebook	Rs. 30	YouTube	Rs. 50	Firstpost	Rs. 10
Twitter	Rs. 30	DailyMotion	Rs. 30	NDTV	Rs. 10
LinkedIn	Rs. 35	Vimeo	Rs. 30	IndiaTimes	Rs. 10
Google +	Rs. 20	Saavn	Rs. 45	dnaindia	Rs. 10
		Gaana	Rs. 45	reddit	Rs. 4
		Hungama	Rs. 45		
<b>Messaging</b>		<b>Cloud</b>		Terms and Conditions	
WhatsApp	Rs. 75	OneDrive	Rs. 60	1.	For every site you want to access, add the the price against it to the base pack.
Hike	Free	Google Docs	Rs. 60	2.	For every site not listed , you will have to talk our consumer care to activate your access to the site. And an application have to be sent to our offices. May take more than 2 business days.
WeChat	Rs. 75	Dropbox	Rs. 60	3.	All other sites will be accessible at 5kps depending on network load.
Viber	Rs. 80			4.	All VPNs and SSL will be charged at Rs. 500 per month.
Skype	Rs. 80				

This is what your Internet pack will look without Net Neutrality. To know how you can help prevent this, visit [www.netneutrality.in](http://www.netneutrality.in)

(From the FAQs created by Nikhil at Medianama and added by excellent commenters)

The important thing to note here is: the new wave of internet services are actually going to be better than the local ones. With 4G and perhaps 5G in the future, we will pay more for data anyhow, but that payment will be small in comparison with the fact that we can have a lot more done on the network. Productivity is key, and we will NEVER go back to paying Rs. 16 per minute for a phone call, and that is a good thing.

In this new era, TRAI will have to reinvent itself and become a regulator that provides neutral and equal access to the internet. It will need to be told that **Net Neutrality is not just good for us, it is a stated goal.**

We must ask our parliamentary lawmakers to ensure this happens. With Net Neutrality in all its forms as a pure and stated goal, TRAI will be required primarily to ensure that no Telecom operator can discriminate based on type of application on what it will charge the end user or the speed the user sees. This will benefit our country tremendously, even if data charges were to increase initially.

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## Telecom Companies are NOT Losing Money To Data Services: The Net Neutrality Debate: Deepak Shenoy

Source: [The Capital Mind - Deepak Shenoy's Blog](#)

April 15th, 2015

The arguments by Telecom Operators against “Net Neutrality” - or their desire to not just charge users but also website and application owners for allowing users to access that content - is also financial. They say a lot of things about their revenue being cannibalized, that they have to make spectrum investments and so on. Let’s meet their financial fears head on.

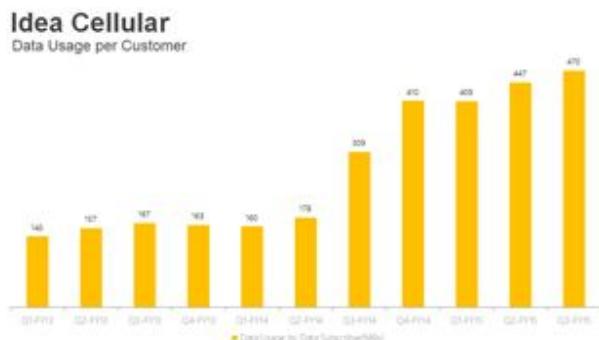
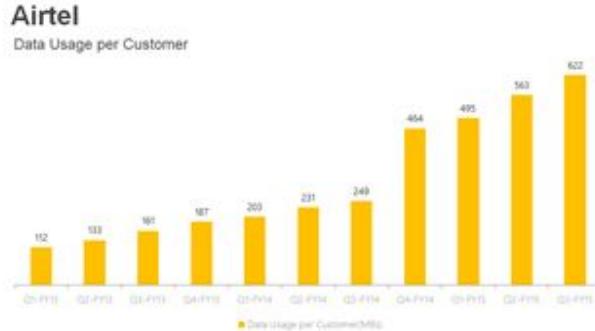
The basis of this article is to state that:

- There is **no loss** to telcos on account of Whatsapp or Skype increased usage, or for that matter, any application. Their “loss” will get converted to profits in data, and with way more usage, substantially higher profits and revenues.
- Data is in fact driving their revenues up, far more than anything else.
- Regulatory changes in anti-spam regulations have already dropped SMS and call volumes.
- The investments in spectrum and infrastructure by the telcos is a function of their regular operation, is amortized over many years, and realizes revenues in a back-loaded manner.
- There is no restriction on telecom operators from increasing data charges. However, they are restricted by competition, which is healthy because other players are happy to provide data at lower costs, should one operator decide to hike rates.

### **Data Cannibalizing Voice and SMS Revenue: “Cannibalizing” is False, Operators Welcome It**

Firstly, we have to understand that **by nature, revenue mixes will change**. Telecom operators all over the world are seeing a substantial increase in data revenue versus voice and SMS. All technology will make one thing obsolete while other things take their place.

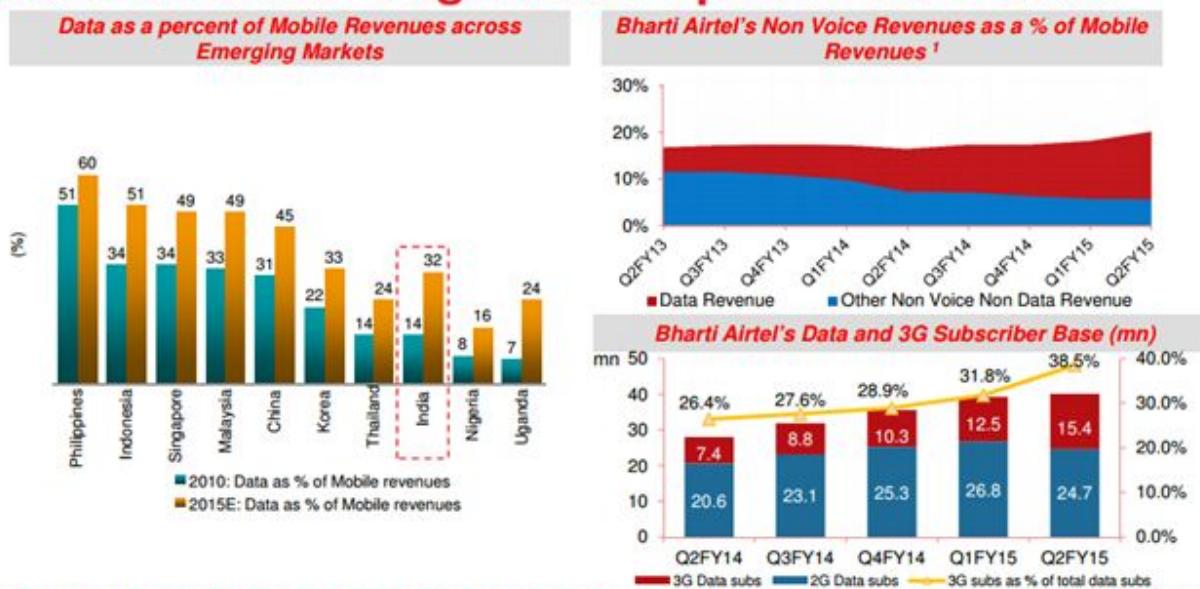
Secondly data revenue is also **growing exponentially**. As you can see below data connections and usage per customer is going up dramatically, as is average revenue per customer. (Note: Airtel's number of connections went down in Q4-FY14, or March 2014, as they culled incidental users from the count. )



These charts are from [Medianama's excellent report](#). (Click to enlarge)

From Airtel's own presentation ([Nov 2014](#)) we have them saying that data revenues will drive their future:

# India Wireless – Significant Upside From ‘Data’



**India is expected to have one of the fastest growth rates in the data segment over the next 5 years, to be driven by low cost mobile handsets and new technologies (3G/4G)**



Source: Informa, Company filings

Note:

1. For Mobile Services India

15 of 34

Note the specifics:

- Data revenues are expected to go to 32% for India as a % of total revenue. This is even before they had the crazy idea of attempting to charge internet companies for people using their data.
- Other developing nations like Philippines, Indonesia and Malaysia have a significantly higher data revenue proportion, closer to 50% or more!
- Bharti Airtel by itself is seeing non-voice revenues scale upwards because of data.

This means Bharti Airtel EXPECTS data to cannibalize voice and SMS revenue, regardless of charging websites for their business. Since no other country mentioned has anti-Net-Neutrality, meaning they don't charge Skype, or Whatsapp, or any other provider for their users coming through, it is obvious that data can be a significant revenue source EVEN if we are Net Neutral.

**Financials: There is NO Loss to Telcos Because of Increased Use of Data, Data Charges Make Up For It**

Indeed, people are using more data than voice, or SMS. But the increased use of data means that by and large, people are paying for that data. Let's not get caught in per message or per call metrics, and look at the overall wallet-share of all users on average. We collated data from TRAI for India as a

whole, and we separately got data for SMS revenue per user per month, and similar metrics for data and voice calls. Here's the evidence:

Qtr Ended	Monthly Metrics		Monthly Per-User Revenue Split		
	Number of SMS per user	Average Revenue Per User	SMS	Revenue from Data	Calls
Jun-13	27	111	3.99	10.02	72.53
Sep-13	29	109	4.09	12.41	70.97
Dec-13	28	112	4.20	14.96	71.71
Mar-14	27	113	4.08	16.19	72.67
Jun-14	25	119	3.94	18.29	74.05
Sep-14	24	116	3.75	20.48	69.35

*Data from TRAI's quarterly reports*

**From Jun 2013 to Sep 2014:**

Change In SMS Revenue	₹	-0.24 per month, per user
Change in Call Revenue	₹	-3.18 per month, per user
<b>Change in Data Revenue</b>	₹	<b>10.46 per month, per user</b>
Change in ARPU	₹	5.00 per month, per user

**Capital Mind**

You see the picture?

From Jun 2013 to Sep 2014 - a 15 month period prior to which data revenues were not separately disclosed - we can see that:

- Average revenues per user have gone up from 111 to 116, a Rs. 5 increase. (per month)
- Of that, Call Revenue per user is down by Rs. 3.18 per user per month, and SMS revenues have fallen by 24 paise per month.
- But Data revenues are up by Rs. 10.46 per month per user!
- This is not cannibalization, this is a new business model!

And then will you believe that telcos think they actually LOSE revenue to data? They make revenue on data, and a heck of a lot of it.

## Financials: Are Telcos like Airtel and Idea making losses?

Sure, this is revenue. But the top operators in the country: Airtel, Vodafone and Idea - are they losing money? Answer: not by a long shot! We have figures of Idea and Airtel, who are public. (Airtel loses money in Africa, but let's ignore that)

### Annual Results Consolidated - Figures in Rs.Cr. / Standalone Results

Narration	Mar 05	Mar 06	Mar 07	Mar 08	Mar 09	Mar 10	Mar 11	Mar 12	Mar 13	Mar 14	Trailing
Period	12 months										
Sales	8112.30	11664.09	18420.20	27012.24	37352.08	41829.46	59467.20	71505.80	80359.00	85863.50	91355.80
Operating Profit	3021.10	4161.20	7435.24	11380.84	15440.20	16996.50	19971.40	23704.90	24870.40	28298.10	30517.60
OPM	37.24%	35.68%	40.36%	42.13%	41.34%	40.63%	33.58%	33.15%	30.95%	32.96%	33.40
Other Income	31.10	64.36	124.28	263.10	280.53	235.19	488.20	264.30	0.00	0.00	--
EBIDT	3052.20	4225.56	7559.52	11643.94	15720.73	17231.69	20459.60	23969.20	24870.40	28298.10	30517.60
Interest	317.80	238.56	302.44	396.16	631.49	769.70	2534.90	4082.80	4384.40	4838.00	3530.30
Depreciation	1044.15	1481.92	2448.66	3471.42	4672.77	6199.41	8698.00	13368.10	15496.40	15649.60	15635.40
Profit before tax	1521.95	2368.98	4637.18	7437.54	10125.34	9907.59	7718.10	6518.30	4989.60	7810.50	11351.90
Tax	359.54	290.89	566.69	752.89	546.83	1533.92	1817.50	2542.80	2715.10	4844.90	5679.80
Net profit	1211.57	2027.95	4062.12	6395.39	7858.95	9163.13	7167.30	2217.10	2266.90	3019.40	4889.80

## Annual Results Standalone - Figures in Rs.Cr. / Consolidated Results

Narration	Mar 05	Mar 06	Mar 07	Mar 08	Mar 09	Mar 10	Mar 11	Mar 12	Mar 13	Mar 14	Trailing
Period	12 months										
Sales	1625.42	2007.07	4366.40	6719.99	9857.08	11850.24	15332.80	19275.32	22043.44	26110.40	29871.75
Operating Profit	594.33	770.49	1613.98	2491.33	3118.60	3244.11	3617.46	4857.56	5113.01	7254.25	8895.61
OPM	36.56%	38.39%	36.96%	37.07%	31.64%	27.38%	23.59%	25.20%	23.20%	27.78%	29.73
Other Income	9.67	3.71	20.32	88.43	238.94	237.53	74.01	17.57	43.44	69.07	240.67
EBIDT	604.00	774.20	1634.30	2579.76	3357.54	3481.64	3691.47	4875.13	5156.45	7323.32	9136.28
Interest	255.04	308.25	478.26	695.85	1206.35	982.44	894.82	1488.39	813.46	624.79	808.14
Depreciation	237.78	262.88	563.67	756.85	1096.72	1366.61	1723.00	2019.46	3054.36	4093.24	4518.57
Profit before tax	26.69	118.40	484.24	1007.14	908.33	947.99	823.64	823.97	1288.64	2605.28	3809.57
Tax	0.00	2.90	6.99	72.50	85.65	115.08	61.72	265.72	470.38	915.98	1332.65
Net profit	26.69	125.60	502.06	1044.36	1001.21	1053.66	844.60	576.54	818.26	1689.31	2476.92

(From the awesome [screener.in](http://screener.in))

The financials in terms of profits were ridiculously high earlier for Airtel, but the fact is that they fell and are recovering smartly.

Some people say that this is bad because of their low “Return on Capital Employed”. ROCE for Idea and Airtel are around 13% and 16% respectively (Earnings before interest and taxes, divided by Equity+Debt).

But if you use a better term for utilities, which is what telcos are (like power providers or highway toll companies) they are measured on RoE, or Return on Equity. If you take debt, and then you pay back the interest on the debt, how much return are you left with, on your total equity?

For Airtel the RoE is 20% (for India standalone) and for Idea, around 20% too. This is higher than bank FDs by a considerable margin, and utilities are expected to have RoEs of 15% or whereabouts. Plus their debt costs are coming down, as interest rates fall. (Vodafone’s traded short term debt went below 9% a year, lesser than the base rate of most banks!)

If you look worldwide, this is exactly how it works. Verizon has a 10% ROCE, but a 70% ROE, as they have a lot of debt. AT&T too, has only 5% ROCE but 10% ROE. This is how the industry works everywhere else; high debt, and juiced up ROEs.

### **SMS and Call Revenue : Anti Spam Regulations Would Have Already Cut Them**

SMS revenue will have dropped anyway because of TRAI's anti-spam rules. (They created the [Telecom Commercial Communications Customer Preference Regulations](#) in 2010) Before that, Bulk SMS providers were offering rates as low as 1 paise per SMS, because they were getting these deals from telecom operators. Today, because of TRAI's timely action, SMS packs cannot be sold in an unlimited fashion and costs of non-compliance of anti-SPAM rules are very big. Therefore, revenue from spammers, which was not earlier bifurcated but would have formed a significant chunk of the SMS revenue earned by telcos, has fallen.

(Proof - when SMS regulations came about, SMS volumes )

This timing has also impacted call minutes as the anti-spam regulation also applied to unsolicited voice calls. With the India-wide Do-Not-Call registry, telecallers who would earlier call at odd hours for advertising or marketing were no longer allowed to, and that would crimp telco revenues anyhow.

These points mean only one thing: Telco revenue from SMS and Voice would have anyway come down even without “data” coming in.

### **Data is more efficient, Costs Less and Increases Usage**

It is simply that data is more efficient in delivering messages compared to SMS. You can't trust SMS to actually be delivered. But you are more likely to be convinced that a Whatsapp message was read, or that a twitter message was sent. Their technology tells you when the other side has been reached, and sometimes even when the other side has read your message.

This will obviously make traffic gravitate towards data based messaging.

While this imposes a lower cost per message on the user, the increase in messaging frequency will result in larger data revenues in comparison. Which means revenues in total have to be seen, not just as a function of “per-message” revenue, which is a false metric.

Data is charged to the user on a per-kB basis, or as packs with a limited cap (effectively a per kB cost). This ensures that the larger the usage of data, the operator is paid more. If the user would send 10 SMS

messages a week, he may send and receive 1000 Whatsapp messages in the same week. Even if the cost of data is Rs. 0.01 per kB, and each message is 5 kB, then the user spends Rs. 50 per week, versus his SMS usage at Rs. 0.5 per SMS would give the telco only Rs. 5 per week. Effectively, increased usage increases his messaging bill by 10X!

(And most data based messaging involves pictures or video which are more data heavy)

You can see this by the rapid increase in revenue, as shown above.

### **Servicing Debt Requires Money, They Say**

Who's going to pay for the spectrum auctions of 100,000 cr., they tell you. Answer: Wait a minute, boss. You don't have to pay Rs. 100,000 cr. today - it is over 20 years. And if you see the growth they expect, then the cost per user will be even lesser and reduce as they grow!

While companies will pay about 30% upfront now, they pay the rest in the next 12 years. Idea has to pay Rs. 30,000 cr. in total, so its upfront cost is Rs. 8000 cr. with a moratorium of 2 years before it needs to pay the rest in 10 installments. Take the next three years, where Idea's debt grows by 8,000 cr.

Idea's debt currently is about 18,000 cr. so it will increase its debt by about 45% for the next three years. Or, put another way, 15% a year, which is how much its interest costs will increase. Idea's data usage is up by 100% in the last year, and number of users too, by over 33%. With more spectrum, they can attract far more users, and that will make their revenues jump way above any impact of increased debt!

What we mean is: Their increase in debt is not as substantial as their increase in data revenues from consumers, which will more than make up for it. Even if you considered investments in infrastructure and reach, the increased revenue potential is massive in comparison.

### **The Financial Angle**

[Capital Mind](#) is biased towards Net Neutrality, not against it. So our opinion comes from that angle. But it is time to debunk the defence of the Telecom Operators who say it is time to now charge internet companies for using their infrastructure.

It is the telecom operators who are making awesome revenue by users increasingly paying for data to access internet applications like Whatsapp, Skype and Flipkart.

It is the telecom operators who stand to make the maximum profit from people using videos and large data applications.

It is financially better for them to be great pipes to the content we want to use. If that today is Facebook, Skype and Twitter, so be it. If tomorrow it is Meerkat, Vimeo and IndiaTV, so be it. The end-website or application doesn't have to pay the telco - the telco is effectively piggybacking the Internet Applications' popularity by making money off the data it charges its customers for.

It's time to make the Net Neutral. It's time to debunk the propaganda that ooh, our Telecom Operators are losing money. They're not, and in fact, they're raking it in. They say one thing to investors: Data is the future. It is, and it is so because of the great apps out there, on which the telcos have made so much money charging for data already; attempt to charge those apps, and like VAS, the telcos will destroy it for us.

Charge us for data, but you can't tell us how we can use the internet. You are making a lot of money that way, telcos.

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## The dangers of a rogue social network: Amod Malviya

Dec 22, 2015

Source: [Amod Malviya on Medium](#)

Facebook [is at it again](#). It's a shame that a company that I used to respect, has degenerated to a degree where I'm no more surprised at their malicious & outright misleading campaigns.

### **When you can't convince 'em, confuse**

In its effort to get people to support FreeBasics (a renamed Internet.org), it[created a page](#), designed to have two complementing effects:

1. Equate digital equality with FreeBasics. The truth is there are many other ways to address it without breaking NetNeutrality — look at [STI's response](#) to Question #3). People are being tricked into supporting FreeBasics under the guise of digital equality
2. Discredit the critics of FreeBasics. Notice the language on the page? It makes any critic of FreeBasics appear to be an enemy of digital equality. People will listen to the critics' arguments much lesser when there's a question mark on their intent.

Instead of addressing the TRAI's questions, it goes about a modern twist to what essentially used to be the white man's burden — that India's poor need Facebook's FreeBasics to free them.

### Questionable ethics

Then [there are reports coming in](#) about how Facebook is asking even non-Indians to show support. It ultimately issued an apology, but only after this was discovered. However, there's an even bigger issue here.

What does one do when a social network goes about abusing its monopoly status, to manipulate the psychology of the masses for its vested interests?

The critics of FreeBasics certainly can't use Facebook's graph in as seamless a fashion as it did. One could argue that the virality of a social network is available to all. But is it available in as seamless a fashion as their own campaign, with all the unsolicited notifications, and prompts?

There's something fundamentally wrong with a social network that actively manipulates mass psychology, and this campaign just illustrates the tip of the iceberg.

A conspiracy theorist can be forgiven to fear that this position of power, this capability, can be abused to manipulate even elections. For the time being, I'm not going to make that claim, but simply let our leaders & politicians assimilate this fact, and think about reigning in a company that by every single metric, has gone rogue!

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## The broken analogy — toll free vs zero rating: Amod Malviya

Apr 12, 2015

Source: [Amod Malviya on Medium](#)

During the whole debate about Net Neutrality, we've heard, multiple times, the analogy between toll free numbers and zero rating — that if the former is legal, why not the latter? This analogy is fundamentally flawed, and at the core of this flaw is the assumption that the two industries are identical. They're not, and here's why:

1. Lock-in: The Internet is about always-on data consumption, the presence of which is very pervasive into our lives. How many times in a day do we use toll free calls? By corollary, the lock-in effect of services that are on zero rated platforms is orders of magnitude stronger than lock-in effect of toll free numbers. As an example, see this study that found [millions of Facebook users don't even know they're on Internet](#)
2. Potential for abuse: Data business for telecoms as a percentage of total revenue is significantly more than toll free business. Thus, the incentive for telecoms to abuse their privileged position is huge. As every service, including voice, moves online, there will be every strategic reason for telecoms to decrease their risk of becoming a dumb pipe, and the only way they can do that is by taking up a more controlling position in the Internet

3. Conflict of interest: Telecoms have rarely ventured into businesses that compete with their toll free clients' businesses. But the Internet world is different. It's a pure online play, and falls in the same ecosystem where telecoms are playing. [Reliance Jio launching messaging & calling app](#) and [Airtel's Wynk](#) — how is that not a conflict of interest? Telecoms, of course, have every right to get into different services, but not when controlling the zero rating platforms simultaneously.
  4. Criticality (Credit [@nitinmisra](#)): Unlike, Internet access, toll free numbers are not fundamental to consumption of a product/service — they're ancillary.
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## Digital Revolution Needs Offline Help to Realize Its Potential: World Bank

January 13, 2016

Source: [World Bank News & World Bank's 2016 World Development Report on the internet](#)

### STORY HIGHLIGHTS

- *Digital technologies are spreading across the globe, but 4 billion people still do not have access to the Internet.*
- *A new report says closing the digital divide should be a global priority to generate growth, jobs, and improve services.*
- *Countries are more likely to reap “digital dividends” if they pay as much attention to offline factors as technological ones.*

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More people around the world have access to mobile phones today than to electricity or water. Does this mean the digital revolution has truly dawned?

The answer to that question is no, not yet, says the World Bank's 2016 World Development Report on the internet, “[Digital Dividends](#).”

The spread of digital technologies over the last two decades has been rapid and generated a lot of excitement about the possibilities of the digital age. But the hoped-for benefits — greater productivity, more opportunity for the poor and middle class, more

accountable governments and companies – have not spread as far and wide as anticipated, says the report.

“Clearly, the potential is massive,” says [Deepak Mishra](#), a World Bank economist and one of the co-directors of the report, a flagship publication of the [World Bank](#).

“We share the optimism of Silicon Valley when it comes to the transformative potential of digital technologies. But not the expedient view that the benefits are both assured and automatic,” Mishra said. “We think translating digital investments into dividends is much more difficult than many experts have reported before.”

Digital Dividends, a survey of the latest research, data, and literature on the digital economy, says greater efforts must be made to connect more people to the Internet and to create an environment that unleashes the benefits of digital technologies for everyone.

While Internet users have tripled in a decade to an estimated 3.2 billion, nearly 60% of people globally – some 4 billion people – are still offline, says the report.

And despite the rapid adoption of mobile phones, nearly 2 billion people do not use one. Almost half a billion people live outside areas with a mobile signal.

People without access to digital technology and the education and skills to adapt will be increasingly left behind as the rest of the world advances, warns the report.

“Connecting everyone is a priority,” says [Uwe Deichmann](#), the other Digital Dividends co-director.

Digital technologies, however, are not a shortcut to development, though they can accelerate it if used in the right way, Deichmann adds.

“We see a lot of disappointment and wasted investments. It’s actually quite shocking how many e-government projects fail,” says Deichmann.

“While technology can be extremely helpful in many ways, it’s not going to help us circumvent the failures of development over the last couple of decades. You still have to get the basics right: education, business climate, and accountability in government.”

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**“ We must ensure that the benefits of new technologies are shared widely, particularly for the poor. ”**



**Jim Yong Kim**

World Bank Group President

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The report covers the Internet’s role in promoting development, including growth, jobs, and delivering services. It also examines the risks of the digital age – the growing concentration of the industry, increasing inequality as some types of jobs get automated and disappear, and the threat that the Internet will be used to control information instead of sharing it.

A key message is that “analog,” or non-digital, factors such as policies and regulations are needed to ensure the digital market is competitive and the Internet expands access to information, lowers the cost of information, and promotes more inclusive, efficient, and innovative societies.

Digital technologies amplify the impact of good and bad policies, so any failure to reform means falling farther behind those who do reform, says the report.

“If regulations don’t promote competition, markets will become concentrated, and you’ll have digital monopolies, and divergence of fortunes across countries,” says Mishra.

Likewise, “If people have the right skills, digital technology will help them become more efficient and productive, but if the right skills are lacking, you’ll end up with a polarized labor market and more inequality.”

In developed countries and several large middle-income countries, technology is automating routine jobs, such as factory work, and some white-collar jobs. While some workers benefit, “a large share” of workers get pushed down to lower-paying jobs that cannot be automated, says Deichmann.

“What we’re seeing is not so much a destruction of jobs but a reshuffling of jobs, what economists have been calling a hollowing out of the labor market. You see the share of mid-level jobs shrinking and lower-end jobs increasing,” he said.

Improving and rethinking [education](#) will be critical to prepare people for future job markets, says the report.

The report says it is important to keep in mind that job displacement from technological change is part of economic progress and that fears of “technological unemployment” go back to the industrial revolution.

While the [information and communication technology](#) sector is still a fairly modest part of the global economy (about 7% of GDP in the United States, home to eight of the world’s 14 largest technology companies by revenue, but much less in developing countries), it has produced some extraordinary benefits in the rest of the economy.

Access to digital technologies has provided opportunities that were previously out of reach to the poor. Some 8 million entrepreneurs in [China](#) use e-commerce to sell goods, one-third of whom are women. Digital identification in [India](#) has reduced corruption and increased access to services. And simple SMS messages remind people living with [HIV](#) in [Africa](#) to take their medications.

“The world’s greatest digital revolution is transforming businesses and governments, but the benefits are neither automatic nor assured,” said [World Bank Group President Jim](#)

**Yong Kim.** “We must ensure that the benefits of new technologies are shared widely, particularly for the poor. Evidence suggests that we can do this by improving competition among businesses, investing in people - starting with pregnant mothers, to ensure that all children have the cognitive ability to later connect to the digital revolution.”

#### [World Bank's World Development Report 2016: Digital Dividends](#)

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## **It's a battle for internet freedom: Nikhil Pahwa**

December 28, 2015

Source: [Times of India](#)

One critical question [Mark Zuckerberg hasn't answered about Free Basics](#)

Among all the questions we've raised about Free Basics, if there was one that I would pick to ask Mark Zuckerberg, it would be this: Why has Facebook chosen the current model for Free Basics, which gives users a selection of around a hundred sites (including a personal blog and a real estate company homepage), while rejecting the option of giving the poor free access to the open, plural and diverse web?

Research done by Amba Kak at the Oxford Internet Institute has found that less experienced, low income groups prefer access to an open and unrestricted Internet, and while “some access is better than none”, the trade-off they are willing to make is how much they use the internet, not necessarily how much of the internet they get to use. That is, they would rather be given the choice of deciding what they want to access, with millions of websites and apps to choose from, for say, three days, over being given unlimited access to a limited selection.

All access is priority.

Why hasn't Facebook chosen the options that do not violate Net Neutrality? For example, in India, Aircel has begun providing full internet access for free at 64 kbps download speed for the first three months. Schemes such as Gigato offer data for free for surfing some sites. The Mozilla Foundation runs two programmes for free and neutral Internet access: In Bangladesh, Grameenphone users get free data in exchange for watching an advertisement. In Africa, Orange users get 500 MB of free access on buying a \$37 handset.

Perhaps the answer behind why Zuckerberg is ignoring these options lies in how Professor Vishal Misra of Columbia University, one of the foremost researchers on Net Neutrality, defines it: Net Neutrality is about the ISPs (and telecom operators) not giving a competitive advantage to any particular website or application.

Today, Facebook, in partnership with Reliance Communications, reserves the right to reject applications from websites and apps for Free Basics, and forces them to conform to its technical

guidelines. Services which compete with telecom operator services will not be allowed on Free Basics. It would need Facebook's permission (and hence, time), for a citizen powered crisis-response effort such as Chennairains.org to be made available to those on Free Basics, and the flexibility and freedom with which such an effort can evolve would be restricted or limited by Facebook's guidelines. Facebook is being disingenuous – as disingenuous as the company's promotional programmes for Free Basics to its Indian users – when it says that Free Basics is in conformity with Net Neutrality.

While Facebook argues for Net Neutrality laws in the US, and supports permission-less innovation in that country, in India, it wants a permission-based Internet through its partnership for Free Basics. The perpetuation of Free Basics, would justify similar models such as Airtel Zero. With Idea Cellular and Vodafone also supporting Airtel in its lobbying, we would end up with each telecom operator carving out its own private bubble from the Internet. Different people in India would get access to different information and knowledge, depending on the deals that their telecom operator strikes with online service providers.

FreeBasics and its peer telecom operator models are not open, plural or diverse, and can be harmful for India's democracy. It is a form of vertical integration that is anti-competitive and is inimical for India's fledgling startup ecosystem. It gives Reliance Communication and Facebook the power to pick winners and losers online. With telecom operators making money from websites and apps instead of from consumers, their focus will shift to meeting the needs of their business clients, over the needs of consumers. The incentive to invest in better, faster and cheaper access to the entire Internet will be replaced with one of providing better, faster and cheaper access to its websites and apps. Telecom operators would have a perverse financial incentive to get users to consume more of their partner services over the less lucrative open web: it could mean more expensive access to the open web, or poorer quality of service.

Orissa chief minister Naveen Patnaik, in a letter to the TRAI supporting Net Neutrality, said, "If you dictate what the poor should get, you take away their right to choose what they think is best for them." If Free Basics and its peer programmes are allowed to continue, it would leave us all with poorer access to the Internet, and take away our right to choose. Tim Berners Lee, one of the founding fathers of the Internet and the creator of the world wide web, said that "giving people data connectivity to part of the network deliberately" is a step backwards. It is sad to see Facebook spend millions of dollars lobbying for a stand which is against the innovation of the Open web, after benefiting from its openness.

India is expected to have 500 million Internet users by the end of 2017, and what kind of an Internet they get access to is important for our country. This is why the battle for Net Neutrality, with the last and current TRAI consultations included, is the battle for our Internet Freedom.

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## [Facebook is misleading Indians with its full-page ads about Free Basics: Mahesh Murthy](#)

Dec 24, 2015

Source: [Mahesh Murthy's post on LinkedIn Pulse](#)

Today it has ads around India saying "**What net neutrality activists won't tell you**".

I'm a net neutrality activist and I'm happy to tell you anything you'd like to know. In fact, we're a small group, working unpaid, taking breaks from our regular jobs, and we've always been happy to tell you anything at all you wanted to know.

We don't have a business axe to grind, we're not working for Facebook's rivals, and if anything, we've been part of Digital India far, far longer than Facebook has existed. We're open to questioning.

Unlike Facebook, who tried to silently slime this thing through last year when it was called [Internet.org](#), and then are spending about Rs. 100 crores on ads - a third of its India revenue? - to try and con us Indians this year again. This is after we'd worked hard to ban these kind of products, technically called "zero rating apps" last year. (Remember the million signature campaign last year? That was us.)

This Facebook ad spend doesn't include the full-on Mark Zuckerberg love event put up for our Prime Minister when he visited the US, aimed again at greasing the way for this Free Basics thing through our government. (It worked. I think TRAI opened up this closed issue so Facebook could get another shot at pushing it through again.)

And the ad spend is above and beyond all the other ads and messages they've put on your timeline asking you to save "the free internet" etcetera that you may have even clicked on.

**I'll take on each of the 10 points that Facebook says that we don't tell you about in a bit.** But first you should know why we're making a fuss and going up against this billion dollar giant. What's it all about?

Simply it's this. Our airwaves and wireless spectrum belong to us, the citizens of India. The government of India temporary licenses this on our behalf to telcos under some terms and conditions, and those terms have always pushed for the development of all of India, including our poor.

In fact, India's telecom policies so far have produced a minor miracle, with over a billion connections in our country changing and improving all our lives. The basis for this has always our policies which have forced our mobile operators to offer a full and open internet, accessible by anybody. Many poorer countries look to us for inspiration on how to do things right.

It is because of these policies that you probably are reading this on the mobile internet, maybe even on Facebook on your phone. But Facebook has been spending millions of dollars to change our policies.

Imagine now that there's a new policy that could let a mobile company only offer you Facebook and nothing else on government spectrum? Not Google, not Naukri, not You Tube, no site you really need.

But instead all you can have is Facebook, and a bunch of other teeny tiny sites, and that's all you can ever use.

That's what Facebook wants to offer the poor of India who can afford a phone but not a net connection on it. Given that data packages cost as little as Rs. 20 a month while phones cost Rs. 2,000 and up, we think their thesis itself is flawed, and they're using it to justify a large internet user land grab, but let's roll with it for a moment.

**What Facebook wants is our less fortunate brothers and sisters should be able to poke each other and play Candy Crush, but not be able to look up a fact on Google, or learn something on Khan Academy or sell their produce on a commodity market or even search for a job on Naukri.**

An analogy is this: people need a balanced diet of proteins, fat, carbs, vitamins and minerals and the government has a distribution system called Sahakari Bhandars to get these to us. Facebook wants to use our government system to sell only its branded cocaine and nothing else, on special shops, to people who can't access any other shop. Something like that.

**In their ads, they've been claiming they want to bring "digital equality" when they're actually bringing digital slavery or digital apartheid to our poor. Unlike the rest of us who are all digitally equal, being able to access the full and complete internet which has more than a billion sites on it, Facebook wants to offer our poor, our young and our future a few dozen sites, that's all.**

[Internet.org](#) was their earlier attempt at doing this. We'd pointed out even the name was a lie, as it was neither the internet that was offered, nor was it done on a non-profit basis that dot orgs typically use. So they've changed the name to Free Basics and have come back to try shove it down our throats again. Same poison, new bottle but with big ad campaign.

**Here's the gist of the tussle.** What we're telling our government is this: On our airwaves, make sure that every mobile carrier in India offers every person in India the full internet and not just some small corner of it chosen by Facebook. That's it. No special Facebook landgrab on government property, our wireless spectrum.

What Facebook is saying is this: allow the mobile companies using government-owned bandwidth to offer just Facebook and Facebook-chosen sites and nothing else, and let them grab the land or users they want.

Facebook says it is doing this out of some charitable aim to get more of India online. (As though spending a large portion of your India revenues on full page ads pushing a so-called charity is apparently charity.) Its obviously business.

We've responded saying "**We love your idea of data for charity, but if you really mean to do charity then offer something that is the entire internet to people, not just your chosen sites. Like say**

**500mb a month free to every Indian".** They can, but no, they won't do that. They want use our government's bandwidth to get our poor using Facebook with no other real option in sight.

Now to counter the "10 clarifications about Facebook Free Basics" that we 'activists' have apparently hidden from you.

1. "Free Basics is open to any carrier." Sure it is. We never said it wasn't. Irrelevant point.
2. "We don't charge anyone for Free Basics." Sure we all know that. We never said they charged. Even more irrelevant.
3. "We don't pay for the data consumed in Free Basics." We don't say they do. Misleading again. They don't pay operators for the data to get free sign ups for Facebook - but they spend a huge sum of money (seen those Reliance Free Net ads?) on marketing that drives customers to these operators. Either way there's a gain for the operator. Why pay in cash when you can pay in ads?
4. "Any developer can have their content on Free Basics." Who said they can't? But the big sites don't. They don't want Facebook to own their customers, and they don't want Facebook to snoop on their customer data, because all traffic goes via Facebook servers.

Data is cheap enough in India and eventually everybody will be on the full and open internet, given time. Or our government could offer a neutral and free internet service to its citizens. There are other solutions to getting the poor online. Selling our people to Facebook doesn't need to be one.

5. "Nearly 800 developers have signed their support for Free Basics." We never said they didn't. Many, many more haven't. Still irrelevant.
6. "It is not a walled garden. 40% of our users go on to access the full internet within 30 days." **Which means 60% of their users are stuck in Facebook jail.** Why should even one Indian citizen be? The internet should be open for all our people, or the net should be neutral as we say, especially on public property, which the wireless spectrum is.
7. "Free Basics is growing and popular in 36 countries, which have welcomed the program with open arms and seen enormous benefits." This is a lie. This scam may have been pushed through in these poor, mostly helpless African nations who have no experience of anything better, like we have, and who have no 'activists' like us who tell their governments they're raising a generation of deprived children with no access to the real internet.

Also, tellingly, the more online-progressive countries like Japan, Norway, Finland, Estonia and Netherlands have outright banned programs such as Free Basics. With your help, and 12 lakh emails to TRAI last year, we'd helped to work towards a ban for it in India too - but Facebook has since spent a

large amount of cash in ads, lobbying, diplomacy and PR to try to get it unbanned here. They've managed to re-open a closed issue, again. With your help, we'd like to re-shut it.

**More to the point, this program, call it digital apartheid, if you will, has been roundly condemned by experts** ranging from Tim Berners-Lee, the gent who invented the world-wide web, to Ph. D. researchers to civil society officials working in the field, globally.

The fact that Tanzania didn't know how to say no to Facebook doesn't mean India has to say yes. In fact, we hope that India saying no to this digital apartheid will inspire the African and other poor nations to kick out this evil program that serves no one but Facebook at their government's expense.

8. "In a recent representative poll, 86% of Indians supported Free Basics." Guess what, if you've ever clicked "yes" on any misleading poll by Facebook apparently asking you to support "connecting India" or "free internet", then you too apparently voted for them. They never brought you both sides of the story, to take a fair decision.

9. "3.2 million people have petitioned TRAI in support of Free Basics." Let's again say it for what it is: 3.2 million people out of Facebook's base of 130 million people who were repeatedly shown a misleading petition by Facebook on top of their pages clicked yes and submit, without being told both sides of the story, and thinking they were doing something for a noble cause, and not to further Facebook's business strategy. A large number of them, shocked at realizing what they were conned into doing have since said no.

10. "There are no ads in the version of Facebook on Free Basics. Facebook produces no revenue. We are doing this to connect India and the benefits to do so are clear." First the unintentional lie. Facebook DOES produce revenue, about Rs. 12,000 crores worth globally. Then the intentional half-truth: It may not produce revenues from this Free Basics YET because the current version of Facebook on it has no ads YET.

(This lie has been caught too! Update on Dec 28: Chris Daniels of Facebook explicitly says they reserve the right to have ads on Facebook Free Basics in the future:

[https://www.reddit.com/r/india/comments/3ya52q/vp\\_internetorg/](https://www.reddit.com/r/india/comments/3ya52q/vp_internetorg/))

If they've spent a hundred crores rupees and a large chunk of their current Indian revenues kissing up to our politicians and telling our citizens they want to do charity, then there absolutely WILL be a monetary payoff. If a product is free then the user is the item being sold

11. Let's add a point here, and actually get to why Facebook is doing this. **Forget their lies about "wanting to connect India"** - if they really did, they would offer the open and full internet to everybody free. They can, easily, but they have repeatedly have declined to do so, saying first the poor person has to sign up for Facebook and then a few scraggly sites are also shown to them.

The real reason is something they have never denied: their rivalry with Google and their questionable stock price. We are no apologists for Google, but this might interest you:

Both companies have 1.5 billion users, but Google makes Rs. 70,000 crores while Facebook does less than one-fifth as well. In other words, for every new user that comes on the internet, Facebook makes Rs. 8, while Google makes around Rs. 48.

Facebook's stock is valued at a much higher multiple than Google, but people have begun to ask why they deserve this. With no reason to support the stratospheric price, it will fall.

**For Facebook to have a chance to keep their stock price high, and to keep Zuckerberg and wife as rich as they are, they need to find new users who sign up for Facebook, but at the same time do not use Google.** Enter the strategy: A program to offer Facebook but not Google at the mass, poor people level.

Who is outside the first 1.5 billion people? Mostly people in India and China. Facebook is banned in China. So who becomes essential to Mark Zuckerberg's balance sheet? Enter us Indians. **What's a hundred crores of ad spend, against tens of thousands crores of valuation?**

Now you have a second view of what's happening. A view they have never denied.

By the way, there's no NGO subsidiary or separate CSR effort at Facebook that runs Free Basics. It's part of their main business unit.

So let's sum it up.

**Yes, we net neutrality activists are opposed to Facebook's attempt to disconnect Indians from the full internet. Yes, we are opposed to the digital apartheid they want to bring about, giving the poor only Facebook but denying them other sites.**

And yes, we'll be happy if they just gave data free, without terms and conditions - after all, it's our wireless network they want to offer their service on. **It has to work for us the people of India, not just for the owner of Facebook.**

There are many other reasons why Facebook Free Basics Digital Apartheid is bad. Its bad for entrepreneurs - your business can't be discovered by these new potential users on the internet till you advertise on Facebook. The same goes for big businesses.

Also, if Facebook is allowed to get away with this then every other company will offer its own "free Basics" with other sites and we will grow up as a fractured country, unable to speak with each other because we are all on different, unconnected micro-networks.

The internet has been the biggest revolution of our times. The breadth and width allowed a Zuckerberg to become the businessman he is. Tragic that he is pushing for a micro network outside the internet where a future Zuckerberg can never realise his potential. It's imperialism and the East India Company all over again. Under the lie of "Digital equality".

**We are happy to support any effort that brings the full and unfettered internet to as many Indians as possible, as cheaply as possible. This is not that effort.**

We have a petition at <http://www.SaveTheInternet.in>

We don't have a hundred crores to spend.

All we ask is that you consider this view, decide for yourself what's best for our country, and see if you are inclined to agree with us.

If you are, please sign the petition above, and share this with as many people as possible.

Your sharing can overcome any billionaire's ad budget.

Thank you.

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## **Who needs Internet.org or Airtel Zero? There are better ways to bridge the digital divide: Baijayant 'Jay' Panda**

April 24, 2015

Source: [Quartz India](#)

The debate regarding Indian net neutrality has reached a fever pitch. It has now been accepted, even become an article of faith, that choking, slowing down or boosting internet access in exchange for any consideration (monetary or otherwise) is a clear no-no. Even the telecom companies have come around to this view in light of the recent [Federal Communications Commission's \(FCC\) Open Internet](#) order to ensure net neutrality.

What's becoming apparent is that the battleground for net neutrality has shifted to the concept of "zero-rating."

Zero-rating is essentially the practice of providing consumers with free access through sponsored data plans, arising out of the nexus between telecom companies and well-funded portals, websites and apps. While many may find nothing wrong with this practice, it's important to understand that this will fragment the internet into a free part of the internet, much akin to a [walled garden](#), and a non-free part of the internet from the perspective of users.

This actually goes against the very DNA of the internet and its egalitarian nature, which is about universal access to all sites without any limitations placed by the telecom companies, or the content providers trying to act as gate-keepers.

The strongest argument in favour of zero-rating is that it helps to broaden the access and get the hitherto excluded population on the internet. In India, this translates to 80% of the population, which underscores the huge digital divide that we need to bridge. While this is a noble goal, what needs to be understood is that the scope for abuse of market power through such zero-rated services is tremendous.

It is ironic that it is those websites, then startups, which benefitted from the level playing field of the internet implicit in the principles of net neutrality that are now engaged in a bid to expand their reach and in the process damage the internet as we know it, and skew the balance against current startups. This practice is akin to the eventually disallowed practice of Microsoft bundling its own browser, Internet Explorer, along with its operating system. The long-drawn legal fight in the US and the EU brought about the demise of Netscape Navigator, the pioneer of browser products.

Zomato, the online restaurant guide, [expressed with absolute certainty](#) that they couldn't have succeeded with their product if there was a competitor on Airtel Zero that had an exclusive reach to potential customers.

Solving the issue of access and bridging the digital divide can just as easily and cost-effectively be addressed through other transparent and competition enhancing methods. Here are two solutions:

### **Deploy USOF creatively**

The government may deploy the large sums collected from Indian telecom companies—a 5% levy on their revenues—by way of the Universal Service Obligation Fund (USOF) to incentivise telecom companies to bid for building networks for rural and unreach areas in a manner that ensures low internet access costs.

Here, the government could look at using the reverse bidding process like the one used successfully during the recent coal auctions and do viability gap funding from the USOF for any shortfalls to make these networks both commercially viable as well as low cost for the consumers.

### **Cash transfers**

The government could facilitate direct transfers to the users through Aadhaar for the purpose of purchasing recharge coupons for broadband. The success of the Pradhan Mantri Jan Dhan Yojana along with the move to link mobile numbers to Aadhaar makes this an efficient and transparent process to deal with issues of providing internet access to the unreach.

These cash transfers should be made available for purchase of both wired as well as wireless broadband and should not discriminate based on the technology, that is it should be technology as well as medium agnostic. Once the problem of access is solved, then companies such as Facebook and Flipkart etc. can provide coupons directly to these rural users to encourage them to purchase high-speed and larger data plans so as to access their services.

The internet by its nature has so far remained open and unbiased and it is this ecosystem that has encouraged innovation and access to breakthrough technological products and services benefitting billions. It is important that it remains so in the future, too.

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## **Zero Rating and the Open Internet: Mitchell Baker**

May 6th, 2015

Source: [Mitchell Baker's Blog - Lizard Wrangling](#)

One of the challenges of our time is how to make Internet access and use a realistic possibility for the billions of people who cannot afford the data charges. An attitude of “just wait, eventually this will work out” is not acceptable. Such an approach would reinforce the global digital divide; it would keep a large fraction of humanity from benefiting from the possibilities of the Open Internet.

An early response to address this problem has been various programs known under the name “zero-rating.” “Zero-rating” as practiced today means two things: First, someone other than the ultimate consumer covers the cost of their data charges. Secondly, the parts of the Internet that are available for citizens to choose from is limited, and predetermined by those entities with financial power.

The first part of “zero-rating” is clearly part of the long-term answer, and Mozilla applauds the work being done here. The second part of zero-rating as practiced today – the predetermined, limited access – is disastrous.

Selective zero-rating is unquestionably bad for the long term opportunities and inclusion for the people it is designed to serve. It pre-selects what’s available, directing people to where others want them to go. It is bad for economic inclusion. It is bad for the ability of new entrepreneurs to grow onto the global scale. It is bad for the long term health of the Internet. Zero-rating as practiced today is “selective zero-rating for a few apps and websites; exclusion for the rest of the Internet.”

The correct answer is that all data is transmitted at the same price, whether that price is “zero” or anything else. This way, consumers pick the content they choose to access based on the quality of that content, not the financial power and business partnerships of the provider. This way, new entrepreneurs can still reach any and all users on the Internet, even if they are a few people working in a co-working space with no ability to subsidize data charges. I’ll call this system “equal-rating for all” or “equal-rating” for short. (One could call it “zero-rating for all” as well. I haven’t done so to limit the chances of confusion.) There’s no question that this is a better answer.

The question is, how do we get there? Today “zero-rating” comes in a few flavors:

- 1) Network providers cover the costs to users of accessing certain hand-picked sites and apps;
- 2) A company pays to provide access to a suite of different services; or
- 3) a company pays to subsidize access to only their services.

In any of these cases there is a direct connection between a particular site and a cost. This is a well known model for the private sector, and it’s no surprise this is the first model to be explored. As recent protests in India and elsewhere are showing, however, selective zero-rating has massive unwelcome properties which threaten to make this model unacceptable. In an optimistic vein, we can see this as the dialog between the initial proposals from private industry being adjusted and improved by citizen engagement in the future of the Open Internet.

There are many cases where industry leaders gather together to resolve a problem shared across an entire industry. Could the private sector organize itself to provide a baseline “equal rating” for some amount of data necessary for modern life at discounted or no charge? Such a program would integrate the “version 1” private solution of limited access with the citizen demands for the opportunity and full inclusion of the full Open Internet. Perhaps those companies paying for the equal rating might get a “brought to you by” attribution that could bring brand value and network effects. [Orange and Mozilla](#) are experimenting with this sort of model in multiple African and Middle Eastern markets, where users purchasing a \$40 (USD) Klif phone receive unlimited talk, text, and 500 MB a month for 6 months.

Another possible way of “equal-rating” content so it is free-of-charge to the user is a model where people watch ads in order to access other sites. Mozilla has been exploring this model in a [partnership with Grameenphone](#) (owned by Telenor) in Bangladesh, where users can receive 20MB of unrestricted data per day after watching a short ad in the phone’s marketplace. One question is whether the model

makes sense economically when the audience has little disposable income, so testing and exploration here is important. This model may seem odd to Open Internet activists in markets where most can pay for data charges. However, this group isn't the target market.

In a related vein, an increasing number of companies, foundations and non-profit organizations around the world are interested in how we promote social benefit via the Internet. These organizations could join together to come up with creative approaches to make sure everyone has access to a certain amount of data that lets them participate in online activities. Could these organizations join together to organize and implement an "equal-rating" plan? What would that look like?

Immediate exploration into how to implement these "version two ("v2") solutions is important for two reasons. First, they are better for the people being served, economic inclusion and the health of the Open Internet as the platform for global inclusion and development.

Second, a growing number of people are advocating that their governments ban zero-rating. Such action would, of course, force the private sector to find some different solution. We agree that different market solutions must be found. If the private sector can react quickly and effectively, achieving these solutions without regulatory bans has two significant benefits. First, it would avoid any unintended consequences from the specific text of legislation. And second, once a government has the authority to ban zero-rating in general, it might decide to issue exceptions. We've seen this happen in Chile, for example, with Wikipedia Zero being granted an exception. We love Wikipedia and believe if there is going to be any exception at all, Wikipedia is a good one. However, this government ability to control content that is actually available so easily has some profound implications for free expression and censorship that have yet to be explored.

The correct answer for full opportunity of people coming online is to provide is "equal-rating" for all data. How we get there and how fast we can get there is a critical question. The opportunity level for billions of people depend on it. Mozilla will actively engage in this process. Our first formal action was to deliver a [letter dated May 5 to Prime Minister Modi of India](#) in support of the Open Internet, and stating that "Zero rating is not the right solution ... we do recognize the need for new and alternative market solutions ....we are committed to doing our part alongside the other actors in the Internet community to address these challenges."

You can follow the ongoing work at the Mozilla Policy Blog, which today has a [companion piece to this post](#), authored by our Policy team. And please jump in, either with Mozilla or elsewhere, to build effective, healthy solutions to Internet access for all.

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## [Mozilla View on Zero-Rating: Mozilla](#)

5 May, 2015

Source: [Mozilla Blog](#)

Our support of net neutrality is grounded in our belief that we all must fight to maintain an open, global, and growing Internet. Because of the scale and potential of the Internet, it must be an international effort. We see a growing focus on net neutrality around the world and believe that this focus is positive and necessary for the continued health of this valuable global asset.

In India, for example, the focus on net neutrality and the impacts of zero-rating have reached an important inflection point. This week, we sent [a letter](#) to the Prime Minister of India supporting net neutrality, in response to an open consultation by the Telecom Regulatory Authority of India on

Internet services. The Indian Internet community, including many Mozillians, has spoken out expressing concerns with zero-rating and its impacts on an open Internet. Not surprisingly, we too are concerned, and Mozilla's Executive Chairwoman Mitchell Baker [posted to her blog](#) to identify what those concerns are. The bottom line is that zero-rating may actually NOT connect the world's unconnected billions to the Internet, in India or elsewhere.

Zero-rating does not at first pass invoke the prototypical net neutrality harms of throttling, blocking, or paid prioritization, all of which involve technical differentiation in traffic management. Instead, zero-rating makes some Internet content and services "free" by excluding them from data caps that apply to other uses of traffic (which can result in "blocking" of sorts if a user has no available data left in a billing period).

The impact of zero-rating may result in the same harms as throttling, blocking, or paid prioritization. By giving one company (or a handful) the ability to reach users at no cost to them, zero-rating could limit rather than expand a user's access to the Internet and ultimately chill competition and innovation. The promise of the Internet as a driver of innovation is that anyone can make anything and share it with anyone. Without a level playing field, the world won't benefit from the next Facebook, Google or Twitter.

There are many things we still don't know about zero-rating. It's a relatively new business model and there is not a lot of data about its benefits or its harms, so we don't know with certainty what the long-term effects will be. We don't have data on substitutability - how many users will reduce or even stop their open Internet use because they have to pay, while walled garden offerings are free to them. But we do have data indicating that a significant percentage of people confuse "the Internet" and "Facebook," - in part because of Facebook's Internet.org initiative - notably including a global survey by Quartz where over half of respondents [agreed with a statement equating Facebook with the entire Internet](#).

There's also missing data on the other side of the equation. There may be markets where affordability hurdles to access remain so significant that mobile networks can't reach economies of scale to keep prices down. It may be possible that access to zero-rated services will help to give previously unconnected users a "taste" of the Internet leading them to demand access to the open Internet itself. The truth is we don't know.

Still, prohibition through legislation or regulation, a path some governments have taken or are considering, may not be the right answer. Taken to an extreme regulation could chill some innovation and could result in industry not taking collective action. Even worse, regulation could allow governments to determine which content could/should be zero-rated - and the benefit of net neutrality is that no entity should get to decide which content a user has access to. Different markets and political environments require individual analysis. In some contexts, such as Netflix's abandoned zero-rating plans in Australia, resolution may occur as a result of public pressure, without formal action.

We understand the temptation to say "some content is better than no content," choosing a lesser degree of inclusion over openness and equality of opportunity. But it shouldn't be a binary choice; technology and innovation can create a better way, even though these new models may take some time to develop. Furthermore, choosing limited inclusion today, even though it offers short-term benefits, poses significant risk to the emergence of an open, competitive platform that will ultimately stifle inclusion and economic development.

There are alternative approaches that could serve as solutions to the challenges that zero-rating seeks to address. For example, Mozilla has sought to create such an alternative within the Firefox OS ecosystem. Our [partnership with Grameenphone](#) (owned by Telenor Group) in Bangladesh allows users to receive 20 MB of data usage for free each day, in exchange for viewing an advertisement. Our [partnership with Orange](#) will allow residents of multiple African countries to purchase \$40 Firefox OS

smartphones that come packaged with 6 free months of voice, text, and up to 500 MB per month of data. Scaling up arrangements like these could represent a long-term solution to the key underlying problems of digital inclusion and equality.

Likely, the solution will be found in some combination of: new approaches and business models; potential increases in philanthropic engagement as Mitchell's post suggests; and technology and business innovations to reduce the costs of connectivity. But whatever the mix is, preserving the level playing field that drives innovation and competition on the Internet must be the baseline.

We've tried to outline here some of the positive and negative issues associated with zero-rating. More education about these issues, and affordability and accessibility challenges, will be part of working out the right solutions. Multi-stakeholder roundtables and incubation challenges around alternative solutions to affordability problems are also likely fruitful pathways. Or maybe solutions will come from academia and think tanks, through research driven white papers. Mozilla will be exploring these options further in the months to come.

We look forward to working with the Mozilla community, others in industry, civil society, governments and other actors to think through how best to provide everyone with access to the full diversity of the open Web. We hope you'll join us in [these conversations](#).

Denelle Dixon-Thayer, SVP, Business and Legal Affairs

Chris Riley, Head of Public Policy

Jochai Ben-Avie, Internet Policy Manager

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## [\*\*Facebook's new internet.org is evil: Mahesh Murthy\*\*](#)

Nov 15, 2015

Source: [techinasia.com](http://techinasia.com)

Why is Mark Zuckerberg so concerned about his 'charity' initiative that he had to re-jig it in the face of opposition, star in another breathless video about it, and start a misleading campaign about it among users in India? Bear with me, it's an interesting story.

Facebook is in a bit of a jam, and opposition to this one pet project in India is probably pointing to the seams of [a larger story worldwide](#). But it all starts with a simple pair of numbers.

### **A rocky road on Wall Street**

Facebook has about the same number of users as Google: about 1.4 billion. That's one out of five people on earth. And the social network made US\$12.4 billion off them last year - that's about US\$ 8.65 per person on their service.

While Google made \$66 billion off about the same number of people - almost \$46 per head - a revenue efficiency more than 5 times that of Facebook. And that gap isn't narrowing nearly fast enough.

Revenue growth to support Facebook's stratospheric stock price at 60 times earnings is a big challenge, I'd imagine. Oh, and even at 5 times the revenue efficiency, Google's Price-to-Earnings (P/E) ratio is less than half of Facebook's - so the pressure on the Facebook stock price can only increase with time. There's only so much you can squeeze out of the first world - the current billion or so people - even though Facebook has cut virality, decreased organic reach and tried every which way of getting someone, anyone to pay more for visibility on its once-open social network. A more desperate measure was probably needed.

What they realized they needed to do - for their own future and that of their stock price - was to look beyond these 1.4 billion people to find new users. And, at the same time, to stop these new users from going over to their rivals in Mountain View, California.

These new users are in China, India and the rest of the developing world. China has locked Facebook out. India, with a billion people yet to get on the net is probably seen as the great white hope for the future of this stock.

### **Hey poor people, please don't Google**

Enter Internet.Org. A clever strategy was announced with fanfare last year under the guise of an apparent not-for-profit mission “to connect the unconnected on earth”. The world welcomed the new face of Mark Zuckerberg, twenty-something billionaire philanthropist.

The Facebook CEO visited India, had the obligatory photo-op with the Prime Minister, and it was only a few months later that one figured out what the effort was all about.

Looking under the hood has actually shown a different reality. First, there's no NGO. This is just a division of Facebook. Second, it is absolutely for-profit in every way. There is no not-for-profit part of it whatsoever. Third, as you'll figure out: this is really the “Facebook Poor People Acquisition Department”.

And fourth, it's not just about pushing Facebook down the throats of the unwired - but it's also about making sure they don't get a taste of Google or any other big boy in the process.

So who's outside the first 1.4 billion?

These are mostly poor folks - but a growing number of them have mobile phones. Today, you get data-enabled handsets for as little as \$50 without a contract. And in India at least, the largest number of these users are on the pre-paid model - people topping up their phones with an average of \$2 or so a month to pay for voice and data.

One can convincingly argue that these folks are most in need of true, open internet connectivity.

If you want them to come out of their poverty in the fastest way possible, you'd want to make the widest and best resources of the internet open to them. Their education, careers and futures depend on having the same access to the information that we all - Zuckerberg included - have grown up on and take for granted.

You can imagine that a poor kid in a Chhattisgarh village in central India should be able to see Khan Academy videos, her Dad should be able to look up agricultural spot prices on Google or a commodity exchange and perhaps her Mom could look for a better-paying job at a top job board.

But natch, none of these are part of the so-called “Internet” that Facebook offers the poor. Videos in fact, are not available at all, presumably to conserve bandwidth so it can be retained for more important things like villagers sending each other Candy Crush requests.

### **Because internet.org isn't really about social service at all**

Internet.Org: a lie in name and in intent.

This Facebook effort is neither about the Internet, and nor is it a “.org” - the traditional domain for a not-for-profit.

It's just about acquiring folks from the bottom of the pyramid as Facebook users. So Facebook can, over time, get that \$8.65 more for each of them, while at the same time making sure that Google doesn't get their \$46 from each of them.

I'm no apologist for Google - but it's interesting that the world's gateway to the internet doesn't feature in 10 of the 11 countries this Facebook effort runs in. And in the 11th, it runs in a way the user can search Google from within the free-data service - but has to pay for data to see the search results. Quite pointless, really.

But it's not just Google. There's no Alibaba, there's no Amazon, there's no eBay. No place these folks can buy, or sell or trade. There's no Kiva or other bottom-of-pyramid money service. No loans they can receive. No government sites, no banks. No Coursera or EdX or Khan Academy - so it's not about education either.

Forget about entertainment - there's absolutely none of that. And no LinkedIn, of course. You name any possible site of importance to someone who needs information and opportunities, and it's not there. But, hey, I guess they you can always poke folks in the next village!

Earlier, there was no system to how Facebook picked the sites it would feature alongside itself in its so-called "free internet package". It was entirely arbitrary. They were raked over the coals for this crime among greater ones. But then, selectively facing only this criticism, Zuckerberg announced version 2.0 of the product - where all else remains the same, but where an app that wanted to be part of Facebook's cabal could submit itself through a lead form to be "considered for acceptance".

This is basically rearranging the deckchairs on the Titanic - not that this makes much of any difference to the basic problem.

### **It's the Splinternet!**

In reality, this is an effort to splinter the internet. To create a gulag of unimportant sites alongside the 800-pound gorilla Facebook. And to capture the poor and the needy for free inside, so they could be hooked on this free cocaine of chat and profiles forever; and not discover the actual internet that lies outside these walls.

So the real internet outside, where other sites that can be more useful to these users, or make more money from them than Facebook can, can never touch them.

That's exactly what's happened in Kenya and Indonesia - where people say they're not on the Internet, but they're on Facebook. Or worse, that yes, Facebook means the internet.

The internet by definition is a vast collection of interlinked sites - over a billion of them, at last count. And Facebook offers about 0.0000002% of this to the user. With none of the new ones that come up around the world virtually every minute being added to that list.

### **Where's the public interest?**

I've been asked - hey, what's your problem? It's capitalism. Let it be. 0.0000002% is better than 0%, right?

Actually, I don't believe so. Let Facebook pull its stunt. Then Google will. So will Twitter. And eBay. And each telco. And each e-com company. And soon we'll have hundreds of thousands of different so-called internets around the world used by a handful of people each who can't talk or connect to each other. Instead of one internet of a billion and growing sites, always connected to each other.

We can't give up the essentially connected nature of the internet - something I believe is critical to a thriving future for our planet - just because Zuckerberg needs to get his revenues up and stock price from crashing.

Further, this is public property we're talking about. My point is straight-forward. In most of the developing world, there is little landline- or cable-based internet access, which may be privately-owned and where, one could argue, the owner of the network can do damn well as they please. This was Comcast's defence, I believe, which was outlawed in the US anyway. Most of the access in this part of the planet is via the mobile phone. And these phones connect on spectrum owned by the government and the people of those countries.

Spectrum that is licensed by these governments to private and public telecom operators under certain terms and conditions. So what conditions should the government apply here?

The issue is new because these stunts are new. But a bunch of us are trying to lobby the Indian government to clearly demand that all spectrum users MUST allow equal and non-discriminatory internet access to all users to the fullest extent allowable by law. We believe if India legislates this, the rest of the world can learn from this and follow suit. And stop this dirty masters-of-the-universe type deed from happening.

We'd like the government to disallow differentiated internet experiences engineered by providers - so Comcast's roasting of Netflix' nuts over a fire till they coughed up money to get normal bandwidth speeds restored would never happen in India.

To not allow this, ever, on government-owned spectrum at least. And to not allow zero-rating services on spectrum either - which is what the Facebook Poor People Acquisition Program is, which denies users access to 99.9999998% of the world's websites.

A million emails were sent to regulators in India - unprecedented, in fact - to encourage them to make the right decision. The government seems to have woken up to the fact that the internet could be broken and fragmented under its nose and has started making somewhat conciliatory noises.

### **But the fight is far from over**

The telcos have fought back with a misleading consumer missed-call campaign, to try get some semblance of public support in their favour. Facebook has started a desperate effort - not called Internet.org any more here, but "Connect India" - and is pushing it to the inboxes and news feeds of all Indians on the service. It has also - oh mother of ironies - started a Change.org petition in its favour to counter the one started against it earlier.

They're the ones with the big bucks on their side. So we could yet lose.

All we have are a few words on screen, and perhaps the support of readers like you. Guess this might just be the time for me to request you to share or forward this piece 😊

### **No room for charity?**

So is there no room for a well-meaning act? I have absolutely nothing against charity - if done with good intent and with no strings attached. Or it just becomes the modern version of the missionary "I'll feed you only if you accept my God as yours too" Faustian bargain.

If Facebook's founder truly wants to be seen as a future Nobel Peace Prize winner, sure - then arrange with telcos to give away bandwidth. A half a gig or even a gig of net usage free to users every month where they can go wherever they want online. I understand Mozilla and other folks feel this way too. And to not restrict users to only sites that the Facebook tech team "considers for acceptance". In fact, to not even force people to use Facebook with their free bandwidth.

That would be an amazing act. Are you listening, Mark?

I do hope better sense - and failing which, public pressure prevails. Not this dirty bargain called Internet.Org version 2, where they're seducing the poor user into accepting a substandard and shoddy sliver of the internet. And denying them opportunities that they, like every other human being in the first world, truly deserve.

I do believe that, in the long run, the stock price of a company reflects what the public thinks of them more than just the discounted cash flow generated by future earnings.

From that point of view too, here's an appeal to Facebook: Shut this internet.org thing down, guys. It stinks.

Thank you.

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# Tim Berners-Lee urges Britain to fight 'snooper's charter'

29 May, 2015

Source: [The Guardian](#)

Tim Berners-Lee, the inventor of the world wide web, has urged Britons to fight the government's [plans to extend the country's surveillance powers](#), and act as a worldwide leader for promoting good governance on the web.

Berners-Lee said Britain had "lost the moral leadership" on privacy and surveillance, following the revelations of the former National Security Agency contractor, [Edward Snowden](#).

Speaking before the Web We Want Festival in London's Southbank Centre, which starts on Saturday, Berners-Lee expressed concern about the UK government's decision to reintroduce a beefed-up version of the "snooper's charter".

In an unexpected move announced in the Queen's Speech earlier this week, the government is to introduce an investigatory powers bill far more wide-ranging than expected. The legislation will include not only the expected snooper's charter, enabling the tracking of everyone's web and social media use, but also moves to strengthen the security services' warranted powers for the bulk interception of the content of communications.

"The discussion [in the Queen's Speech] of increased monitoring powers is something which is a red flag ... this discussion is a global one, it's a big one, it's something that people are very engaged with, they think it's very important, and they're right, because it is very important for democracy, and it's very important for business.

"So this sort of debate is something that should be allowed to happen around legislation. It's really important that legislation is left out for a seriously long comment period," and not simply rushed through into law.

Berners-Lee also warned about attempts to improve internet access around the world by offering cut-down versions of the web, such as Facebook's [Internet.org](#) project. Users should "just say no" to such proposals, he insisted.

On the 800th anniversary of the signing of Magna Carta, Berners-Lee and the Web We Want festival have convened to produce a [Magna Carta](#) for the 21st century. But while the document is intended to inspire change globally, Berners-Lee bemoaned the loss of Britain's "moral high ground", following the Edward Snowden revelations in 2013.

"It has lost a lot of that moral high ground, when people saw that GCHQ was doing things that even the Americans weren't," Berners-Lee said. "So now I think, if Britain is going to establish a leadership situation, it's going to need to say: 'We have solid rules of privacy, which you as an individual can be assured of, and that you as a company can be assured of.'"

That way, he said, "if you want to start a company in Britain, then you can offer privacy to your users, because you'll know that our police force won't be demanding the contents of your discs willy-nilly, they'll only be doing so under a very well defined and fairly extreme set of circumstances."

He accepts it was an uphill battle to get people in Britain to care, however. “This is a wild generalisation, but traditionally, people in the US are brought up in kindergarten to learn to distrust the government. That’s what the constitution’s for. Whereas people in the UK are brought up more to trust the government by default, and distrust corporations. People in America tend not to have a natural distrust of large corporations.

“So that seems to be where people are coming from. In the light of that, it’s not so surprising that UK folks tended to feel more comfortable with government surveillance - but they also feel less comfortable with surveillance by corporations.”

### **Just say no**

The Web We Want campaign is promoting five key principles for the future of the web: Freedom of expression online and offline, affordable access to the net, protection of user data and privacy, a decentralised and open infrastructure, and net neutrality.

But the campaign is insistent that the five principles are a minimum starting point, and that compromise on those points is not helpful to the goal. That puts it in conflict with more than just the usual suspects. When asked about Internet.org, Facebook’s non-profit organisation that aims to extend access to a few select websites in the developing world, Berners-Lee said people should “just say no” to the project.

When it comes to compromising on net neutrality, “I tend to say ‘just say no’, ” he said.

“In the particular case of somebody who’s offering ... something which is branded internet, it’s not internet, then you just say no. No it isn’t free, no it isn’t in the public domain, there are other ways of reducing the price of internet connectivity and giving something ... [only] giving people data connectivity to part of the network deliberately, I think is a step backwards.”

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## Unfree basics: Indian Express Editorial

Trai is right to ask telecom operators to put Facebook’s Free Basics on hold.

Source: [Indian Express](#)

December 27, 2015

This summer saw a full-throated battle over a notional toss-up between two goals: Network neutrality – the principle that internet service providers must treat all data on their networks equally – and access for those who cannot afford it, a battle that net neutrality advocates appeared to have fortunately won. But Facebook, having changed the nomenclature of its platform from Internet.org to Free Basics, has made a renewed push in recent weeks to persuade the telecom regulator, Trai, to frame net neutrality rules in a way that would allow mobile carriers to exempt certain applications from counting towards data usage. It has launched a massive publicity campaign that appeals to connected Indians to petition Trai to save Free Basics – arguing that the platform would bring those people online who find the cost of using mobile data prohibitively expensive.

In a country where the growth of fixed internet infrastructure has stalled and hundreds of millions remain offline, this is a persuasive argument. That a lack of internet access widens inequality and limits opportunity is an increasingly accepted notion, and a scheme that purports to narrow, if not bridge, the digital divide is likely to resonate. Yet, creating gatekeeping systems – which a programme like Facebook’s does, even if it claims all developers can be part of it as long as they meet certain criteria – has material consequences for how people perceive and experience the internet. The “free”

in Free Basics, for instance, is subject entirely to Facebook's, and its mobile operator partners', discretion.

The free-wheeling innovation so central to the spectacular growth of the internet was made possible in no small part by its openness and level playing field, which allowed once-upstarts like [Google](#) and Facebook to topple giants. With smartphones and tablets becoming the default gateways to the Web for more and more people, the design of telecom policy is crucial to ensuring India doesn't become home to a stratified, uncompetitive internet.

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## The net benefits of neutrality: Equal access to the internet is vital to create new entrepreneurs: Baijayant 'Jay' Panda

April 15, 2015

Source: [Times of India](#)

You don't pay for electricity based on which brand of appliances you use, so why should you pay for internet access based on which brand - that is, whose website or app - you access? That, in a nutshell, is the argument for net neutrality. The underlying principles are based on the desirability of providing universal access to the internet, while preserving the level playing field that everyone has on it today.

A debate has been building since last December when Airtel, India's largest mobile telco, tried charging extra for its users to access Skype, a popular internet service for voice and video communications. Meantime, the Telecom Regulatory Authority of India (Trai) has started examining net neutrality and has issued a consultation paper. More on that shortly, but first a disclosure: i have family interests in an Internet Service Provider (ISP), which like the telcos would benefit from the absence of net neutrality.

In developed countries, this debate has raged for years. With the advent of Skype and other "over the top (OTT)" services and apps like Whatsapp, YouTube, Facebook and Twitter, the telcos' lucrative voice and text services started coming under pressure. They, along with other ISPs, fought back by either choking access to some OTTs, or entering into deals with them to enable faster access by customers.

So what, you might ask. After all, having built their broadband "pipes" at huge cost - and the mobile telcos among them also having paid handsomely to buy spectrum at auctions - aren't they entitled to operate their networks as they please in order to maximise profits?

No, say a growing army of netizens who have been pushing back. They counter that whereas OTTs are largely unregulated, telcos and ISPs are regulated providers of "access" (and certain licensed services like voice telephony). This means they are entitled to charge consumers more for faster overall access speeds, for instance charging more for 2 mbps broadband connectivity than for 1 mbps. However, that should not entitle them to either suppress or boost the speeds of accessing specific sites.

Supporters of net neutrality - the term was coined back in 2002 by Columbia University law professor Tim Wu - have put forth many other compelling arguments. In India, too, support is growing. Besides

my fellow MP Tathagata Satpathy, who made that electricity analogy in a letter to Trai, many opinion makers are beginning to speak up.

Net neutrality provides individuals, small companies, startups and advocacy groups a level playing field with big corporates and brands. That is how companies like Google and Facebook could grow big from humble beginnings. If deep-pocketed corporates are permitted to make special deals with telcos and ISPs for exclusive or faster access to their websites and apps by customers, they could crush disruptive startup competitors. That would squelch innovation and be bad for consumers in the long run.

Freedom of speech is also crucially dependent on net neutrality. The preferential leveraging of certain websites by telcos and ISPs inherently implies reduced access to others. Taken to its logical conclusion, this could lead to blocking others, either fully or, with choked access, for all practical purposes. That would damage the egalitarian nature of the internet, where today even a lone blogger might outdo mainstream media in breaking big news.

The most advanced and contentious battleground for net neutrality is the US. After several abortive attempts beset with litigation its regulatory agency, the Federal Communications Commission (FCC), finally adopted comprehensive rules in February. These prohibit both wired and wireless broadband companies from “speeding up, slowing down, or blocking any legal online content or service”.

But even in the US, there remain aspects of net neutrality that are yet to be fully resolved. For instance, can a telco or ISP offer free access to consumers for only a limited number of websites, paid for by those sites? This would fragment and change the nature of the internet as we know it today, where anyone can technically access any site anywhere in the world.

This is being justified by service providers worldwide as a means of increasing internet access, especially to price-sensitive customers, in order to bridge the digital divide. The FCC has hedged its bets for now, stating that such “sponsored data plans” have the potential to benefit consumers, but that it is also “mindful of the concern that sponsored data plans have the potential to distort competition”.

That is precisely what India’s pioneering online restaurant guide Zomato has echoed, saying that it could not have succeeded if such service plans had existed earlier, enabling its bigger corporate competitors to have exclusive reach to potential customers. In India, Airtel and Reliance have started rolling out such services.

This battle is reminiscent of Microsoft’s heyday as a monopoly, when it bundled its late-to-market Internet Explorer browser with its dominant operating system. Though eventually disallowed by regulators in the US and EU, the years it continued under litigation dealt a fatal blow to its startup competitor, the pioneering Netscape.

The matter is coming to a head, with the looming April 24 deadline for Trai’s consultation paper. If you want to keep the whole internet accessible to all, and OTTs unregulated in the interest of innovation, the time to speak up is now.

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## In Facebook's world, you can agree with Mark Zuckerberg now or you can agree with him later

August 04, 2015

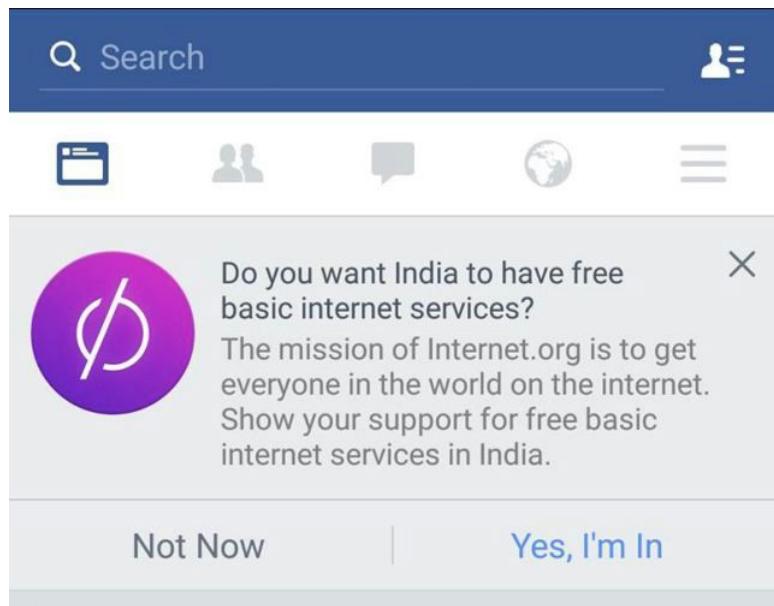
Source: [Quartz](#)

What would you do if you ran an advertising platform with the power to reach 1.4 billion people?

Would you take a [public policy defeat](#) in your stride, and accept that [a noisy group of activists](#) in one market may have scuppered your plans? Or would you use your immense power to persuade, influence, and reiterate your rather shaky argument?

If you're Mark Zuckerberg, you choose the latter option.

For the past few days, Indian Facebook users have been seeing the following prompt when they log into Facebook, whether through a browser or via the app:



The prompt asks users to "show your support for free basic internet services in India," a sentiment that is difficult to disagree with. Indeed, that must be why Facebook does not provide the option to disagree. The only possible responses are "Not now" and "Yes, I'm In".

Help connect everyone in India

Internet.org by Facebook July 31 at 11:42pm ·

Do you want India to have a free onramp to the internet? The mission of Internet.org is to get everyone in the world online. Soon India will decide on the future of services like Internet.org. Please comment on this post today to help us tell your MPs that you want to connect everyone in India. #connectindia #connecttheworld

243,094 Likes · 1,878,224 Comments · 6,838 Shares

I support Internet.org in India. #connectindia #connecttheworld

Comment Now

< >

Hit yes, and Facebook redirects users to [a page](#) asking them to support services like Facebook's internet.org, which, as Quartz and several others have written before, provides [a subpar internet experience](#) that restricts the poorest and least educated users in the world to a walled garden of Facebook-approved content. (A recent fracas in India over the service led to Facebook [accepting other services](#) into its garden.)

Facebook is hardly alone in using the power of its platform to persuade its users. Uber recently [included a message](#) in its app, for customers in New York City, lobbying against mayor Bill de Blasio and a bill that would have capped Uber's growth in the city. Google once [blacked out its logo](#) on its homepage to protest controversial internet regulations proposed in the US Congress.

It's unclear, though, what Facebook is referring to when it says India soon "will decide on the future of services like internet.org." While [a recent report](#) from India's Department of Telecommunication suggested that content providers should not be gatekeepers, there doesn't appear to be any pending legislation on net neutrality in India. A Facebook spokesperson said that the "campaign's goal is to create awareness of the value of connectivity", adding that "our goal is to help give [India's internet users] a voice with their government in sharing their support for programs like Internet.org that help overcome barriers to connectivity in their country."



Markku Makelainen

May 4 ·

Join me in supporting free internet for all of India. [#connectindia](#)  
[#connecttheworld](#)



Help everyone get access to free internet [#connectindia](#)  
[#connecttheworld](#)

The mission of Internet.org is to connect the entire world. Let the government know you support free internet and want to keep Internet.org in India.

[FACEBOOK.COM](#)

268 Likes 27 Shares

Like Share

Mark Zuckerberg and 267 others like this.

27 shares

The message Facebook would like Indian internet users to display, as seen on a Dubai-based Facebook executive's page.

According to Nikhil Pahwa, who runs a tech and policy website called medianama.com and was among the people who started savetheinternet.in to protest internet.org, this is not the first campaign Facebook is running to shore up support for its free service. "They ran an SMS campaign a couple of months ago with the same misleading message, asking [people] to either give a missed call or respond" to the message, he says. "All this is a reaction to savetheinternet.in; we got [a million \[letters of support\]](#) so they want more."

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## Free basics is a walled garden: Here's a much better scheme – Direct Benefit Transfer for internet data packs: Nandan Nilekani, Viral Shah

January 1, 2016

Source: [Times of India](#)

Whenever Sanjay Sahni, a school dropout working as an electrician in New Delhi, returned to his village, Ratnauli in Bihar's Muzaffarpur district, he would hear complaints that his fellow villagers had

not received their Nrega wages or job cards. One day in Delhi, he got his hands on a computer and simply typed: "Nrega Bihar". Among the many links he found was a list of job cards for his village that turned out to be riddled with discrepancies. Armed with 3,000 pages of data, he empowered the villagers of Ratnauli to fight for their rights.

Sahni's crusade was only made possible because he had access to an open internet. Sanjay could enter data into any search engine, visit any website and find the relevant information. What if Sanjay's first foray into the online world was not on the open internet, but through Facebook's Free Basics platform? Would the same, freely published government information be available on Free Basics?

The internet is a powerful poverty alleviation tool, offering unbounded opportunities limited only by imagination, whether it is a farmer looking for information on monsoon preparedness, artisans connecting with buyers in a marketplace or a college student from rural India enrolling for an online course. Against this backdrop, we have Free Basics, a Facebook-run programme where partnering telcos offer free access to specific websites. Free Basics' defendants are puzzled by the opposition to the programme. We think Sanjay Sahni's story makes the reasons for opposition obvious.

We have witnessed Facebook's massive multimedia campaign over the last few days - double spreads in newspapers, ad campaigns on television and heavy promotion on Facebook itself. While similar earlier attempts from telecom operators were stalled by the volunteer-run SaveTheInternet campaign, Facebook has mounted a multi-million dollar campaign powered by marketing muscle and its own platform to generate support for Free Basics without explaining all the facts.

The walled garden of Free Basics goes against the spirit of openness on the internet, and in the guise of being pro-poor, balkanises it. Only Free Basics-approved websites will be accessible for free. In theory, anyone meeting the technical guidelines today can participate. However, services that may potentially compete with telco offerings may not join Free Basics. Since Facebook does not currently subsidise free usage, telcos will have to foot the bill by raising prices.

The future is uncertain - the rules governing participation may change arbitrarily, there may be Facebook ads on the platform, or businesses may need to pay to be included. How can innovation flourish in such a claustrophobic space? In the next few years, government services at the central, state and local levels will go online. Must every government agency then submit its website to Facebook? With Free Basics, Digital India is as good as dead on arrival.

We propose a different solution - one that respects net neutrality, aligns incentives, can be rolled out swiftly, and which allows Facebook to also participate. We propose that the government take the approach of a Direct Benefit Transfer (DBT) for internet data packs. This idea is based on the success of LPG DBT or PahaL, where over 100 million families receive LPG subsidy in their bank accounts.

Suppose the government announces a Data Pack DBT scheme that offers 120MB annually to every subscriber with the first 10MB free every month. A scan of various existing data packs suggests that 1MB data over 3G conservatively costs 25 paisa. At government's scale, this could be much lower.

Even with all existing 400 million data users plus 400 million new data users being offered a free Data Pack DBT, the cost to the government would be  $30/\text{user} \times 800 \text{ million users} = 2,400 \text{ crore a year}$ . People may buy multiple SIMs for free data, but this problem is easily solved by linking mobile numbers to Aadhaar numbers (now held by 950 million people) so that one person can get access to only one Data Pack DBT.

This may sound like a lot of money, but we as a country can afford this cost to bring everyone online. The Department of Telecom's Universal Service Obligation Fund today has a corpus of 40,000 crore with contributions from all telecom operators over time. Facebook can simply contribute to the same fund and achieve its own stated goal of bringing all of India online without distorting markets. With our design, government can roll out Data Pack DBT nationwide within 3 months.

The Internet and Mobile Association of India reports 400 million internet users in India. All these users came online not through Free Basics, but because of the inherent value the internet has to offer. With the diversity of India, it is easy to imagine thousands or perhaps even millions of entrepreneurial experiments playing out over the next few years over the internet. Consider innovations like the India Stack which combines Aadhaar authentication, e-KYC, e-sign, Digital Locker and UPI interoperable mobile payments to provide cashless, paperless and presence-less transactions. All these innovations will be stifled if we as a society take the wrong road at this important juncture.

Our government must immediately announce and enact laws protecting net neutrality and preserving our right to freely access the full internet. Anything less, and India runs the risk of serving someone else's interests instead of our own, becoming a digital colony of the internet giants.

Nandan Nilekani was chairman of UIDAI and Viral Shah led the design of government's subsidy platforms using Aadhaar

Government could start a Data Pack DBT scheme that offers 120MB data annually to every subscriber with first 10MB free every month ... funded through Universal Service Obligation Fund, to which Facebook can contribute too.

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## #SaveTheInternet 2.0: What Facebook's Free Basics Campaign Means for Public Policy

29 December, 2015

Source: [The Wire](#)

While the Telecom Regulatory Authority of India (TRAI) has once again come out with [a consultation paper](#), this time on the issue of differential pricing on zero-rating services, Facebook has launched an aggressive campaign to muster support for Free Basics, the old Internet.org wine in a new bottle. Using full page ads, hoardings across cities, multilingual SMS canvassing and its social network, Facebook has shown it can flex serious campaigning muscle to expand into what is its second largest market in the world after the United States.

While critiques of Free Basics have emphasised the need for net neutrality from the perspective of users, content creators and app developers, we need to remember network neutrality also matters for political participation and discourse creation around public policy.

Communication theorist Marshall McLuhan's famous aphorism 'The medium is the message' tells us that controlling the medium of communication (like print, radio or broadcast media) gives the owner unprecedented control over the messaging that goes into the media. The reason many countries have

enacted laws against media concentration and cross-ownership is to prevent a hijacking of public discourse.

Facebook's attempts to push for Free Basics is a similar attempt to control the medium (the Internet) so that it can also control the messaging (content) that people consume. By controlling what content gets shown, Facebook can 'manufacture consent', to use Noam Chomsky's words, around issues of public policy. If that sounds like some alarmist conspiracy theory, let us consider some of Facebook's actions from the recent past.

Last year, Facebook conducted [a large scale study](#) without informing or taking consent from the over 689,000 participants - Facebook users - where it altered the news feed users saw on their accounts to manipulate how users felt based on what they shared on their profiles. The study, which was later published as a peer-reviewed article, was designed to see if the public mood could be manipulated using algorithms that favoured positive or negative keywords. The uncomfortable conclusion: it can be done.

Earlier this year, [a Quartz survey](#) revealed that in Nigeria and Indonesia, around two-thirds of the respondents thought Facebook was the Internet. At the World Economic Forum in Davos this year, Facebook Chief Operating Officer [Sheryl Sandberg said](#) "People actually confuse Facebook and the internet in some places." Such dominance of a medium like the internet can easily be translated into manipulating public opinion.

Just this month, Facebook Chief Executive Officer Mark Zuckerberg announced the creation of the Chan Zuckerberg Initiative, an ostensibly charitable initiative that is not registered as a charitable non-profit but as a limited liability company with the [stated goal](#) of 'participat[ing] in policy and advocacy to shape debates'. As the [New York Times](#) puts it, this will allow the company to 'invest in companies, lobby for legislation and seek to influence public policy debates'. Given that Free Basics is also being branded as a charitable initiative, it is not a stretch to imagine that it will be used to influence public policy further.

But perhaps the greatest evidence of Facebook's attempt at influencing policy discourse is the way it is pushing Free Basics itself. Employing a heavily political rhetoric in multilingual ads, the company is equating support of Free Basics with supporting a 'united India', and a 'Digital India'. Its attempt to dovetail the service with the Prime Minister's campaign for greater internet penetration is obvious. Further, Facebook's use of its 'platform power' to push for support - going to the extent of '[accidentally](#)' asking US users for support - should serve as a cautionary tale about how far it is willing to go to lobby for favourable outcomes.

The Digital India initiative has been (rightly) seen by many in Silicon Valley as an opportunity to work with the government to expand into a country which is already the third largest internet userbase in the world - even when over three quarters of its population is yet to go online. As a result, within the last year Prime Minister Modi has been courted by executives from the top Internet giants - the CEOs of Apple, Google, Microsoft and Facebook - all of whom are hoping to get a piece of the lucrative pie as western markets become increasingly competitive or stagnate.

Zuckerberg's gamble is bolder than the rest of the pack's in the way it has co-opted the very language of the Digital India programme by alluding to 'digital equality to one billion Indians', access to healthcare, education and promises of job creation in the millions. Mark the similarity with the Digital India's promise of 'digital infrastructure as a utility to every citizen' and [vision area 3](#) which promises

'digitisation and connectivity' of community health and education centres. TRAI's response to this campaign will determine if the hyperbolic, albeit smart, move pays off for Zuckerberg.

India represents a large, mobile-first market for companies like Facebook and Airtel. As smartphones become ubiquitous, more Indians will access the Internet from mobile phones and hand held devices than from laptops and desktop computers. According to [TRAI's latest figures](#), as on 30 September this year, Airtel (which offers the Airtel Zero service) and Reliance (which will carry Free Basics) together account for almost 35 per cent of all mobile phone connections in India - that is a total of nearly 350 million subscriptions. While it is hard to determine how many of these subscriptions are on internet-capable smartphones, it is easy to see why zero-rating services would want to capture such a vast market. Allowing Free Basics and Airtel Zero to continue would mean allowing gatekeepers to decide the content that goes on the phones of millions of Indians - citizens who actively and passively participate in and shape public discourse in the country.

As the Internet becomes a strong tool for political mobilisation and opinion formation, public policy surrounding it must err on the side of the public benefit. This isn't to say that expanding access to Internet isn't a policy concern, but as [several others have shown](#), there are net neutral ways of doing so. India's policymakers need not fall for market-expansion masked as altruism to do so. The essence of both democracy and the Internet is the plurality of opinions and aspirations that they allow. The business of democracy is transacted over multiple spaces - both mainstream media and alternative - and to concentrate the ownership of a medium is to limit the possibilities of a diverse public discourse.

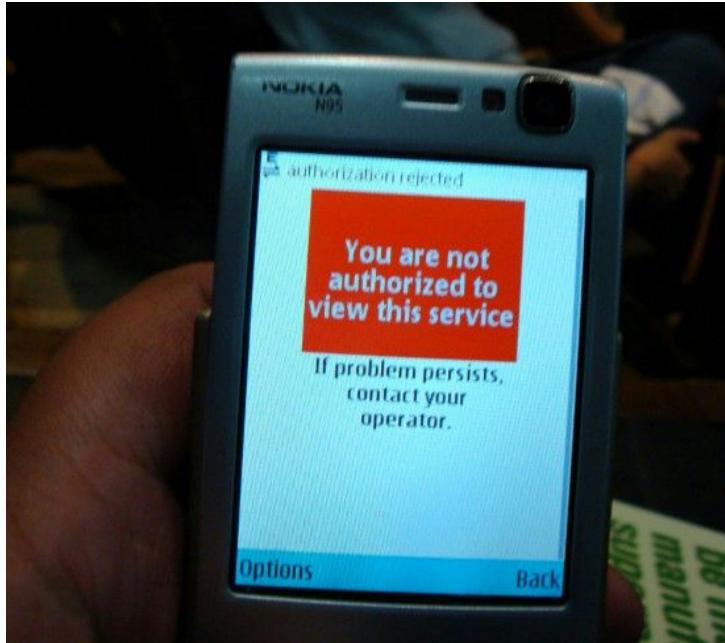
When stakeholders with a vested interest in public policy also control how and what content is consumed by millions of citizens who are also fellow stakeholders in the process, we open ourselves to targeted manipulation. This isn't unheard of in mainstream media conglomerates, and must not surprise us if it happens with the Internet. That is why public policy in a democracy should aim to ensure that a medium as powerful as the Internet is protected from such risks.

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## [The Airtel Zero idea: Splitting India's Internet into many Internets: Nikhil Pahwa](#)

April 7, 2015

Source: [MediaNama](#)



### *What it was like before Mobile Internet opened up*

Imagine what kind of an Internet you would have in India three years from now, once the Airtel Zero idea, of creating a free Internet by allowing Internet companies to buy data, becomes the norm across telecom operators. The top 4 telecom operators are adding around 9 million mobile Internet users a quarter. India is adding around 14-15 million a quarter, and that's around 60 million a year, probably more, with free. Where will the next 200 million users that will come online in India prefer to go? Will they buy a data pack, or will they use the free Internet?

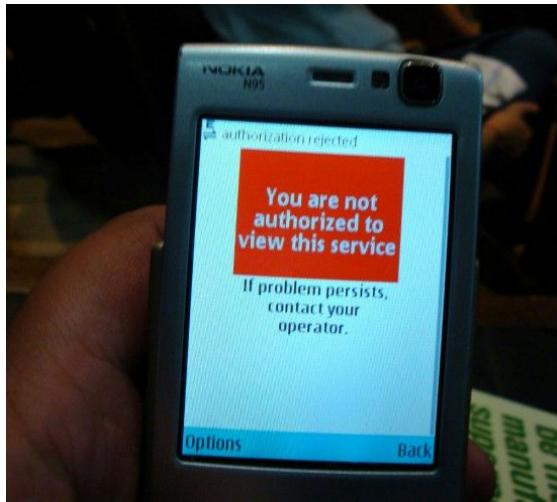
How Airtel Zero splits the Internet in India ([tweet this](#))

Airtel Zero, [which we wrote about yesterday](#), is a platform that allows Internet companies to pay money to Airtel, to allow users to get free Internet. On the face of it, for a user, this seems great. A few things to consider on how it splits the Internet:

- Free and paid: What will they use? Facebook's free Internet.org. Free Cricinfo. Maybe the free Indian Express (which calls "Net Neutrality" nonsense, [here](#)...do read the comments) instead of The Hindu or Times of India? Maybe YouTube will be free while Vimeo and Dailymotion will not be. Shopping from Flipkart at no data charges? Google, a part of the telecom lobby COAI and a serial violator of Net Neutrality in India ([read this](#)) will be free. With all the popular, favorite sites free, they'll choose free. They'll have to think before buying a data pack to access the freedom of the open web.

So, two Internets. Free and paid.

What will they see, when users who are on free try and go to a paid site? This:

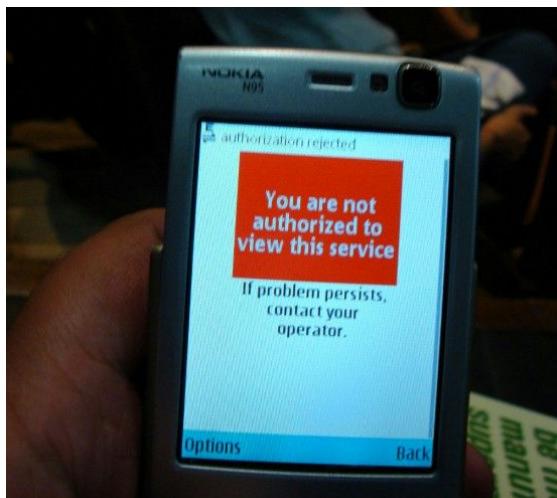


That's what happened to me when I tried to access the open web on an 'Airtel Live' (not Mobile Internet) connection back in 2008.

- Indian and global: When a new app launches globally, will they line up outside an Indian telecom operators office, so that they can reach that 200-300 million users in India? Imagine if YouTube had launched now as a startup, and it wasn't owned by net-neutrality-violating Google. Do you think they would have cared about being made available in India? Twitter - which has also violated net neutrality in India - recently launched a video streaming service Periscope. What if it isn't available to those users on the free plan? All the small little tools that can launch globally now will not be available to that user base, because they won't be able to roam the Internet freely.

So, two Internets: Indian and global.

What will they see, when users who are on the free Indian Internet, try to go to a global site that hasn't signed up with a telecom operator? This:

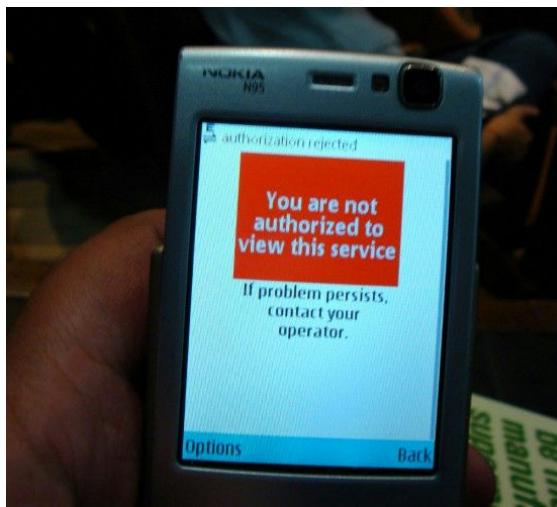


- Between big and small Internet companies: Indian Internet companies will need to raise higher funding, for their sites to be made available to free users who don't have a data plan. So, Flipkart,

with \$1.9 billion raised last year, will be free, but, maybe, DailyObjects with lesser funding, will not. So the users on the free plans will never find out that DailyObjects exists, unless DailyObjects raises more funding and also signs up. What will student startups do? MediaNama was started with Rs 500 for a domain name, Rs 500 per month for hosting and our biggest expense was registration for a private limited entity. What will happen when most of the Internet in India is inside a walled garden? Will not market forces ensure that this so called “marketing expense” isn’t optional. If Flipkart has signed up, do Snapdeal or Amazon have a choice? How long will they hold out?

So, two Internets: one for the big funded companies, one for the rest.

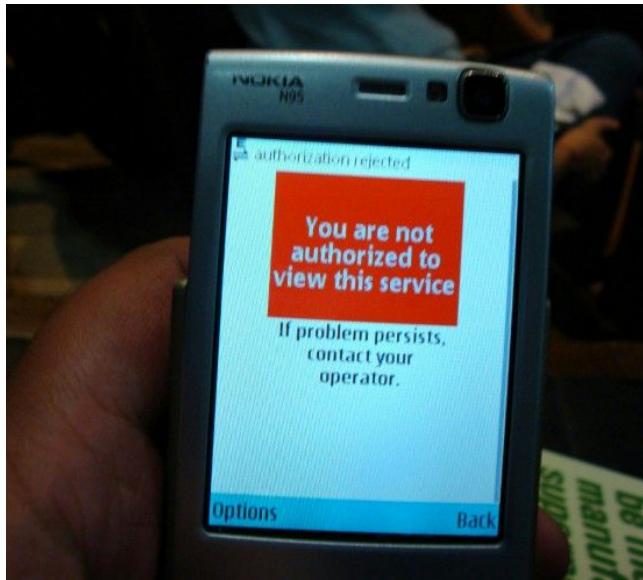
What they see, when users who are on the free Indian Internet, try to go to a site that hasn’t signed up? This:



- Between telecom operators: Now take this situation with Airtel, and replicate it across telecom operators. Different services free on different operators. Telecom operators could do exclusive deals with some sites (even though Airtel has said that it isn’t doing that now, it could, or others could), so some sites will be free only on one telecom operator, or available to those 200 million odd users from one telecom operator.

So, how many Internets? 26: Two Internets per telecom operator, and 13 telecom operators (including Jio). If ISP’s also go down this path (BSNL, Airtel and MTNL are the largest), and there are over hundred ISPs, then we would have hundreds of different Internets in India. Oh, just to clarify, that isn’t a good thing.

What they see, when users who are on the free Indian Internet, try to go to a site that hasn’t signed up with their telecom operator? This:



Maybe it won't be as bad as this

I'm giving you the worst case scenario. It might not be all that bad. All the telecom operators and ISP's in India could collaborate and create a free "India Internet", allows all apps and sites to make their product available to free across all telecom operators, maybe at a discounted rate. That still splits the Internet into two parts: free and paid. And there could be a single "Supply chain manager" (a role that exists in the mobile vas industry) which Internet companies, Indian or otherwise, have to negotiate with to make their app available, or negotiate with every year for the renewal as a vendor with telecom operators. Is that better? I don't know. Telecom operators could also charge on a pay per use basis for sites outside the free Internet, and not block access, keep in mind two things: Firstly, once that distinction is created in a users mind between paid and free - they will lean towards free. Secondly, Indian telecom operators have a history of manipulation of their platform. In Mobile VAS, there is a "Supply Chain Manager" who renegotiates deals, telling "Vendors" that they're making too much money, and more share needs to go the operator. Where have we heard that before? Well, in the TRAI paper, the telcos argue that Internet services are "free riding" on their networks, and that have very high valuations. That \$19 billion WhatsApp deal, which valued the company higher than Airtel, probably really made them angry about this "free riding".

Calling bullshit on Airtel's "marketing spends" spin ([tweet this](#))

Technically, Airtel Zero isn't a marketing or promotional platform. It's platform that allows Internet companies to buy data so their consumers have to pay for it later. It is essentially subsidizing Internet access. I can buy an iPhone and decide that it is available for free for anyone to take. If I don't tell anyone about it, how will they know? The promotional aspect is separate: either the Internet company or Airtel will have to promote the services and the platform. Allowing companies to buy free access for consumers is not promotion.

Also, Airtel, in the interview with us, didn't disclose rates, the list of companies that signed up, how this price was decided, or how different it is from what regular users pay. Srinivas Gopalan, Director -

Consumer Business, Bharti Airtel, said that “The way our pricing structure works, the pricing is transparent, but I can’t talk to you about the details right now.” Okay, then.

Disclosures: Readers should bear in mind that MediaNama has always taken a strong pro-Net Neutrality position. [Our coverage here](#). Personally, I’m helping create awareness of the issues that might arise from anti Net Neutrality regime.

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## **Zero Rating: Slows down innovation, distorts competition & fractures the Internet: Vishal Misra**

April 17, 2015

Source: [MediaNama](#)

The false equivalence of Zero Rating with Toll Free lines

The debate over Net Neutrality and Zero Rating rages on, and one common analogy that is brought forward by pro Zero Rating advocates is that “it is just like a Toll Free line”. I request you to stop making that analogy. I have already made the case [earlier](#) that Toll free lines are used as a support mechanism and entire businesses don’t run on it, and Amod Malviya has written an [excellent piece](#) as well pointing out the different nature of Telephony and Internet businesses. He also writes about the potential of abuse and conflict of interest by ISPs if they start offering services that compete with those offered by content providers. However, even if we assume that by regulation we make sure that ISPs remain “dumb pipes” and are not allowed to offer competing “OTT services” (e.g. Airtel Wynk or Reliance Jio Messaging), the concept of Zero Rating remains a problem and it has to do with the notion of “termination charges”. This is more subtle and nuanced and has much to do with how the Internet has evolved differently from the Telephony world and is especially relevant in a world where telcos (phone operators) have become ISPs. Let me elaborate:

Toll Free in the telephony world: Termination Charges

The telephony world has had this notion of a “termination charge”. The International Telecommunications Union, a regulatory division of the United Nations defined the rules by which telephone systems connected internationally. Not too long ago, when I called India, my local telephone company paid the telephone company in India to deliver the call and this is called a “termination charge”, regulated by ITU. This termination charge was actually the bulk of the price of overseas calls, and there were no real costs involved for the telephone companies. Domestically, calls between mobile operators work pretty much the same way. So when I setup a “Toll Free line” with my provider Airtel, it remains Toll Free for Vodafone customers as well, the termination charges are handled in the background by Airtel and Vodafone and are transparent to the customer. Domestically in India, TRAI has helped matters a lot by regulating the termination charges and so the cost of domestic calls in India have gone down significantly.

Zero Rating on the Internet

The advent of Skype, FaceTime etc. have meant that I rarely use the telephone line to call India and the “termination charge” revenue stream has dried up for local operators in India. The Internet has never had this notion of a “termination charge” and this has been a big part of its success and growth. As soon as Skype came out, people all over the world could start to communicate with each other and they did not have to wait for termination charge agreements to be hashed out. While this revenue stream is drying up, data usage and revenues for telcos have continued to grow significantly as Deepak Shenoy has shown [in detail](#).

However, the telcos want to have their cake and eat it too and they are promoting this scheme of Zero Rating where the idea is when a content provider has to send packets to you, the telcos set the rate and charge the content providers directly. This rate is unregulated and fills the coffers of the telcos. Unlike the Toll Free phone line example, now content providers have to sign Zero Rating deals with all telcos, as there is no regulated, background termination charge arrangement amongst the telcos. A Zero Rated service on Reliance is not Zero Rated on Airtel and vice versa. It is no longer the case that as a content provider you sign up for one Toll Free line with one provider and then the “free” part of it extends to the customers of all other providers. This is additional work for the content providers (or “OTT services”) in an unregulated, opaque market. Additionally, when you have to compete globally you will need to go around signing Zero Rating deals with telcos around the world if it became prevalent. Customers everywhere will naturally prefer a free (of bandwidth charge) service to a new one where you have to pay for bandwidth and every content provider will have to sign Zero Rating deals just to maintain viability. Zero Rating will create a fracturing of the Internet into a “free bandwidth” portion and a “non-free bandwidth” portion and it creates an artificial regulatory hurdle for Internet businesses to enter new markets. Stopping Zero Rating on the other hand, levels the playing field again where Airtel’s Wynk competes on quality with Saavn or Gaana.

I am paying for data per byte, isn’t that implicitly “Termination Charges”?

Yes, it is. So why is Zero Rating being pursued? The answer is not difficult to arrive at. Under the Zero Rating scheme, the termination charge is paid by the Internet businesses. Established players already know that they will get a return on investment on what they pay for the bandwidth. At the other end, for consumers it is not as easy to quantify the benefits or assess the value of paying for the bandwidth. Google and Facebook know exactly the revenue they are getting per byte, so the willingness for them to pay for the bandwidth is much higher than that of a customer trying out a new service. Even a startup that is trying to acquire customers will spend for bandwidth, but this is an encumbrance forced upon them that they can do without. The net effect is that the content provider paying termination charges is a much surer bet for telcos than getting the consumers to pay for bandwidth. Moreover, it is easy to show mathematically that under reasonable assumptions that the bandwidth usage will strictly increase with Zero Rating. So it translates to higher and more stable revenues for the telcos. The fact that it is unregulated and opaque makes it even more attractive. Saying that the platform is non-discriminatory and open to everyone including startups is just paying lip service to the concept of Net Neutrality. I daresay the PowerPoint presentations that executives at the telcos prepared internally pitching the concept of Zero Rated services to management were a lot more honest about the intent!

Please stop Zero Rating and do not equate it to Toll Free lines.

Zero Rating is not the same as a Toll Free line, it is a clever and benign name given to unregulated termination charge extraction. Just as the facade of Internet.org hides Facebook.com.

Internet has thrived because the speed of innovation on it has been breathtaking. Zero Rating is a bad idea that will slow down that pace, distort the competitive landscape and can fracture the Internet if nations start practicing tit-for-tat termination charge arrangements.

Please stop Zero Rating in its tracks. The short sightedness of Zero Rated plans will kill the goose that is laying golden eggs for the telcos via dramatic increases in data revenue. Let a thousand flowers bloom, let the next Facebooks and Googles emerge.

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About the author: Vishal Misra is a faculty in the Computer Science Department of Columbia University where he has been looking at the issue of Internet Economics and Net Neutrality for a number of years. He is also a serial entrepreneur, being part of the founding team of Cricinfo and is now the founder and chief scientist of the data center storage startup Infinio.

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## Differential pricing: Rarely anything free about our basic freedoms: Eben Moglen, Mishi Choudhary

December 30, 2015

Source: [The Economic Times](#)

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 rail-road and trucking companies in the twentieth 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 twentieth 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 FCC 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 commoncarriage rules for internet service providers is a victory for the public interest after a decade of attempts by the industry to capture the regulators, to prevent this very outcome.



Now Indian democracy is facing the same onslaught, by many of the same parties. “Differential pricing,” which is the camouflage name given to “let us price-discriminate among shippers and receivers,” is suddenly an exception to our basic hard-won principles. But the twenty-first century digital economy also requires that small businesses and individual suppliers of goods and services face precisely the same terms of common carriage from suppliers of transport to the public that are offered to larger businesses or favoured parties.

The Net, like the roads, carries people to learning and businesses. Everyone on the Net has to be able to reach everyone else at the same price per “packet,” the ever-present unit of all digital communication. If the parties, who move those packets over network connections, are allowed to discriminate among parties engaged in communicating with one another, distortion of the free market inevitably results.

A small startup business running a website today can be a giant provider of services to the public tomorrow. But only if it can be reached by the public. The moment a provider of “public” network services can, for example, give a “basket” of websites “for free” to consumers, all other businesses are at a disadvantage. If the provider of “public” network services takes a partner in “social networking” services, which wants to look inside every packet on its way – and which will happily take any “partner” for the “basket” of free websites that agrees to this surveillance – any small business that

doesn't agree to let its customers be under surveillance by the "social network" will lose all potential business from those who get only the "free" websites.

An internet made of "channels" in this way, structured by the telecommunications network operators in collusion with "content" providers – who are actually advertising sales platforms surveilling billions of people – will be very profitable to a very few. Those profits are earned at the expense of the market as a whole, in the way that anti-competitive practices in infrastructure such as transport always are. It sounds rational, as though the internet were another sort of television, which is what they want you to think.

The discussion on "network neutrality" positions taken not only by the US, but also by the Netherlands, Chile, and other societies around the world, has resulted in a backlash of privilege in India: Parties such as Facebook or telecommunication service providers who have the most to gain from the right to be anti-competitive have rushed to reinstate a "dialogue" over "differential pricing" with the government of India. The new consultation paper from Trai asks questions on differential pricing and gives us an opportunity to respond to explain that nothing whatever has changed.

Trai had it triumphantly right in 2015. Let us hope that 2016 is a year of progress, not regression.

(Eben Moglen and Mishi Choudhary are founding director and legal director of Software Freedom Law Center, respectively)

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## [Facebook is no charity, and the 'free' in Free Basics comes at a price: Mark Graham](#)

January 11, 2016

Source: [The Conversation](#)

Who could possibly be against free internet access? This is the question that Mark Zuckerberg asks in a piece for the Times of India in which he claims Facebook's Free Basics service "[protects net neutrality](#)".

Free Basics is the rebranded Internet.org, a Facebook operation where by partnering with local telecoms firms in the developing world the firm offers free internet access - [limited only to Facebook](#), Facebook-owned WhatsApp, and a few other carefully selected sites and services.

Zuckerberg was responding to the strong backlash that Free Basics has faced in India, where the country's Telecom Regulatory Authority recently [pulled the plug on the operation](#) while it debates whether telecoms operators should be allowed to offer different services with variable pricing, or whether a principle of [network neutrality](#) should be enforced.

Not content to await the regulator's verdict, Facebook has come out swinging. It has [paid for billboards](#), [full-page newspaper ads](#) and television ad campaigns to try to enforce the point that Free Basics is good for India's poor. In his Times piece, Zuckerberg goes one step further - implying that those opposing Free Basics are actually hurting the poor.

He argued that “for every ten people connected to the internet, roughly one is lifted out of poverty”. Without reference to supporting research, he instead offers an anecdote about a farmer called Ganesh from Maharashtra state. Ganesh apparently used Free Basics to double his crop yields and get a better deal for his crops.

Zuckerberg stressed that “critics of free basic internet services should remember that everything we’re doing is about serving people like Ganesh. This isn’t about Facebook’s commercial interests”.

Zuckerberg’s indignation illustrates either how little he understands about the internet, or that he’s willing to say anything to anyone listening.

### This is not a charity

First, despite his [claims to the contrary](#) Free Basics clearly runs against the idea of net neutrality by offering access to some sites and not others. While the service is claimed to be open to any app, site or service, in practice the [submission guidelines](#) forbid JavaScript, video, large images, and Flash, and effectively rule out secure connections using HTTPS. This means that Free Basics is able to read all data passing through the platform. The same rules don’t apply to Facebook itself, ensuring that it can be the only social network, and (Facebook-owned) WhatsApp the only messaging service, provided.



Would you buy a used car from this man? What about restricted internet access? EPA

Yes, Free Basics is free. But how appealing is a taxi company that will only take you to certain destinations, or an electricity provider that will only power certain home electrical devices? There are [alternative models](#): in Bangladesh, [Grameenphone](#) gives users free data after they watch an advert. In some African countries, users get free data after buying a handset.

Second, there is no convincing body of peer-reviewed evidence to suggest internet access lifts the world's poor out of poverty. Should we really base telecommunications policy on an anecdote and a [self-serving industry report](#) sponsored by the firm that stands to benefit? India has a [literacy rate of 74%](#), of which a much smaller proportion speak English well enough to read it. Literate English speakers and readers tend not to be India's poorest citizens, yet it's English that is the predominant language on the web. This suggests Free Basics isn't suited for India's poorest, who'd be better served by more voice and video services.

Third, the claim that Free Basics isn't in Facebook's commercial interest is the most outrageous. In much the same way that [Nestlé offered free baby formula in the 1970s](#) as development assistance to low-income countries - leaving nursing mothers unable to produce sufficient milk themselves - Free Basics is likely to impede commercial alternatives.

By offering free access Free Basics disrupts the market, allowing Facebook to gain a monopoly that can benefit from the network effects of a growing user base. Sunil Abraham, executive director of the Centre for Internet and Society, in India, has [aptly noted](#) that expanding audience and consumer bases have long been as important as revenues for internet firms. Against Facebook's immensely deep pockets and established user-base, homegrown competitors are thwarted before they even begin.

#### **Poverty consists of more than just no internet**

India will not always have low levels of internet access, this is not the issue - in fact Indian internet penetration growth rates [are relatively high](#). Instead the company sees Free Basics as a means to establish a bridgehead into the country, establishing a monopoly before other firms move in.

There is decades of [research](#) about how best to help farmers like Ganesh: access to good quality education, healthcare, and water all could go a long way. But even if we see internet access as one of the key needs to be met, why would we then offer a restricted version?

In presenting Free Basics as an act of altruism Zuckerberg tries to silence criticism. "Who could possibly be against this?", he asks:

What reason is there for denying people free access to vital services for communication, education, healthcare, employment, farming and women's rights?

That is the right question, but Free Basics is the wrong answer. Let's call a spade a spade and see Free Basics as an important part of the business strategy of one of the world's largest internet corporations, rather than as a selfless act of charity.

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## THE INTERNET UN-BUNDLED: Thesis by Amba Kak [PDF]

Locating the user's voice in the debate on zero-rating

[PDF](#)

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## INTERNET ASSOCIATION AMICUS CURIAE BRIEF IN SUPPORT OF RESPONDENTS: FCC [PDF]

[PDF](#)

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## Net neutrality: Avoid a collusion course: Eben Moglen, Mishi Choudhary

April 22, 2015

Source: [The Economic Times](#)

The plot between Airtel, Reliance and Facebook to steal the Internet from a majority of Indians under the guise of helping them has collapsed. An outpouring of effective truth-telling by media and civil society organisations has doomed this particular scheme, but ‘zero rating’ will recede into the shadows only to return in another form unless we learn the lesson from this fiasco: 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.

History reflects the role corruption by telecommunications oligopolists played in the death of the last government. The government now has an opportunity to undo the harms caused by the past. The Telecom Regulatory Authority of India (Trai) should be given a mandate to regulate telecom providers so as to ensure network integrity for everyone, everywhere and cease attempts to find a lopsided 'middle path'. In doing so, the government will put paid to the patently false argument that 'this is what we can afford to give them'.

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.

It's good that the 'zero rating' proposal has collapsed. We must remain vigilant. Violating network integrity is as wildly profitable as it is socially destructive. Our real task is helping to change the regulatory culture so that the real Digital India, where ordinary people can make extraordinary businesses from nothing, can flourish, rather than being strangled in the crib.

Eben Moglen and Mishi Choudhary are Founding Director and Legal Director of Software Freedom Law Center, respectively

# Counter Comments to Facebook's Response to TRAI's consultation paper

- Free Basics is an open and non-discriminatory platform. Any content owner can participate as long as it meets the same technical criteria, which are openly published.
- Free Basics is transparent. All of the technical standards are published and available online.

The technical guidelines being same for everyone doesn't mean they will play out the same for everyone. Technical Guidelines express the subjective technological opinions of Facebook and have not gone through the open standards process of the W3C. Same guidelines can intentionally or unintentionally harm one party and advantage others. We carefully read the technical guidelines of Free Basics and noticed that it **doesn't allow**:

- JavaScript/Video/Large and SVG Images/Flash
- Secured connection; HTTPS is allowed only with a "dual certificate", better known as a Man-In-The-Middle attack, where Facebook can read and tamper with Data Passing through the Free Basics platform and has access to private/sensitive data that it can potentially misuse, with no one to regulate the same.

The first requirement imposes that none of the new services on Free Basics can have interactive content(which hold the potential to compete with interactive services of Facebook owned companies). It should also be noted that the technical guidelines do not mention that services owned by Facebook will have the same restrictions.

The second requirement clearly says that secure communication is not possible with Facebook looking through and tampering with it. This means that services like social networks, messaging, email services and even **banking services** either have to share their secure data with Facebook or not participate in the Free Basics Platform. This is both anti-competitive and raises security risks.

Other requirements that we noticed are:

- It may take 8 to 10 weeks to receive a response from a member of the Internet.org team.

- A developer is required to have a Facebook account, and is required to agree to Facebook's Terms of Services in addition to Free Basics terms.

8 to 10 weeks is enough time to render crisis response applications and websites like chennairains.org useless. Moreover, such an approval time is detrimental to innovation as it slows down startups. The second clause excludes developers who refuse to have a Facebook account, some very plausible reasons for the same being that they were/are not comfortable with Facebook's Data Usage and Privacy Policy, or its secret co-operation with the NSA as revealed in the media.

- Facebook does not make money from Free Basics; it is not paid by content providers, carriers, or even advertisers, as there are no advertisements within the Facebook experience on Free Basics.

Free Basics is free for both users and content owners. No user is charged for accessing the content available on Free Basics on a participating network. No content owner is charged for participating in the platform.

With no payments by consumers to the carrier for their access to Free Basics, no payment by Facebook to the carrier for the cost of free access, and no payment to Facebook of any kind, all of Facebook's zero-rated services, worldwide, are truly non-commercial on all sides

It is important to note that directly earning money through access fees or ads is not necessary to give advantage to Facebook. The technical guidelines of Free Basics pointed above, provide clear advantage to Facebook and its services.

[Yochai Benkler](#) has illustrated how networks become more valuable as they gather scale. Hence every new sign up on Free Basics which is heavily tilted towards a signup on Facebook increases the commercial value of Facebook per user as a network.

Facebook already tracks the browsing behavior of both its users and non-users to sell them targeted ads(ref [EFF](#)). The Free Basics platform will give Facebook unprecedented amount of power to collect data about users and their behaviors online. Facebook doesn't claim that it will not monetize on the data or combine it with the navigational data of Free Basics with the data collected through Facebook and its other services. Since its whole business model revolves around data monetization it is unreasonable to assume that Facebook will not use it for its advantage.

Facebook's data collection, retention and monetization policy is controversial from both legal and ethical perspectives. In a recent case a Belgian court barred Facebook from tracking people who don't have Facebook accounts; Facebook continues to do so in other parts of the world. (ref [Ars Technica](#))

Issues of trust also exist with Facebook in which one sided and unilateral terms of service are interpreted, amended and changed at its sole discretion. It often does this to its own benefit with little

transparency. For instance, in 2010 researchers discovered that Facebook is transmitting data about users on 3rd party sites using its “Like” button. WSJ and NYT reported it and Facebook said don’t worry “it doesn’t use data from Like buttons and other widgets to track users or target advertising”. In 2014 when people weren’t looking, it started using browsing behavior for targeted ads. Same thing goes for its data retention policies, now they say they don’t store personally identifiable information but they don’t say will never do it. (ref [ProPublica](#))

Facebook is a for-profit company. FreeBasics or Internet.org have not been started under a non-profit organization but under Facebook itself. Facebook benefits, in real monetary terms, when advertisers are forced to come to Facebook for reaching all those users who are available on Facebook, but not on any other social network. The technical guidelines of Free Basics, for eg by decrypting traffic on Facebook’s proxy servers and allowing Facebook to keep usage data for ALL sites on Free Basics for up to 90 days, seem to disincentivize any other competing social network to make its service available on Free Basics. Therefore, Facebook benefits directly from Free Basics.

Additionally, Facebook themselves have said in their response that they DO indeed make payments to the participating networks for marketing and promotion of Free Basics. Despite repeated queries by the media, Facebook has never clarified the amount and extent of such payments, and how they compare with bandwidth costs of Free Basics borne by the network. Given that Facebook spent about INR 300 crore for public advertising of Free Basics, it is possible that payments of similar magnitude may have been made to participating networks. Even Airtel’s Sunil Mittal, who we disagree with on differential pricing, had said last year: “He (Zuckerberg) is saying that make Internet.org lite version of Facebook free of data charge, so that people will upgrade. People will come to internet for the first time. The point is that it is self-serving for them” (source:

<http://www.medianama.com/2015/03/223-sunil-mittal-calls-it-right-what-zuck-is-doing-with-internet-org-isnt-philanthropy/> )

Finally, Facebook has said that they may choose to enable advertising on FreeBasics in future<sup>1</sup>. This is exactly how Facebook started, and there is no reason to assume that FreeBasics would be any different. Therefore, such business plans should definitely be considered commercial in nature.

Facebook has witnessed first hand how zero rating plans can jump start Internet adoption.

More than 15 million people have been able to come online as a result of Facebook zero-rated offerings around the world. As a result, providing people with access to free basic services, new

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<sup>1</sup> Facebook’s Chris Daniels indicated that it’s not off the table,  
[https://www.reddit.com/r/india/comments/3ya52q/vp\\_internetorg/cybra12](https://www.reddit.com/r/india/comments/3ya52q/vp_internetorg/cybra12)

users in markets where Free Basics has launched are coming onto mobile networks at an average rate that is 50% faster than they otherwise would.

It is rather the promise of dramatic benefits for Indian consumers, that is speculative. Further, the purported harm is exceedingly real and initial research has backed this claim more than once.

In countries such as Indonesia and Nigeria, a survey has shown that where free Facebook is made available, consumers end up confusing Facebook as the Internet itself. Or even worse, they still assume that Facebook is independent of the Internet. This impacts access to diversity and plurality of content, especially on a platform which is widely believed to have a reputation for controlling the content users get to view in their newsfeed. We cannot let the same happen to the less experienced and under-privileged users in India.

As TRAI has observed first hand in its correspondence with Facebook, it is a master of manipulating and misquoting numbers. The beneficiary statistics that it promises are not independently verifiable. The only source of data for the claim that people convert 50% faster to full data usage is unsubstantiated, since it fails to establish a baseline figure for pace of Internet adoption. Furthermore, it is impossible to verify whether users “coming online through Free Basics” are new users or simply those buying new connections to just take advantage of it, to surf content for free. It is also unclear if these statistics apply to adoption in India, as research seems to indicate otherwise. Furthermore, it quotes opinions expressed in White Papers as “evidence” in support of the above claim.

Facebook even has the audacity to describe a paid-for investigation by NERA Economic Consulting (as admitted by themselves in point 1 in their response to TRAI) as “scholarly research”.

The terms of conditions of Internet.org explicitly used to deny its partners the right to share usage data related to their service on FreeBasics. Services on Free Basics are unable to leave the platform, owing to the competitive advantage that would give services which choose to remain. Thus, given a Prisoners Dilemma situation, Facebook stands to benefit, having gained access to usage data and patterns of other services. This is evidenced in the Times Group statement when it chose to withdraw some of its services from Internet.org, while continuing to keep others on the platform owing to competition:

<http://timesofindia.indiatimes.com/tech/tech-news/Times-Group-commits-to-withdraw-from-internet-org-ap-peals-to-fellow-publishers-to-follow-suit-and-support-net-neutrality/articleshow/46935507.cms>

Also the role of Freebasics in Facebook’s scheme of things is unclear. It was begun as Internet.org, and was supposed to be a seemingly personal, non profit, initiative by Facebook founder Mark Zuckerberg. Later it became to be identified as an initiative from Facebook. Following criticism, it was renamed FreeBasics.com (dropping the .org, seemingly non-profit, name).

Facebook invited people in India to show support for Free Basics, both through Facebook and by running a "missed call" campaign (for those people who are unconnected). The results show that more than 11 million people sent TRAI an email supporting "digital equality" and Free Basics.

Facebook's campaign to gain support for Free Basics has widely been called out as misleading and manipulative.

- Advertising Standards Council of India has acknowledged receiving multiple complains against FreeBasics' misleading advertising and the matter is being investigated (source: <https://twitter.com/ascionline/status/681336527700520960> ).
- Anecdotal evidence exists where people with inactive accounts have been shown as supporting Free Basics and people, on clicking on 'Scroll down to read more', or reading, have been shown as supporting Free Basics. (<http://blog.savetheinternet.in/if-youve-been-misled-by-facebook/>).
- TRAI has itself disputed having received 11 million replies as quoted by Facebook.