

Exploring Zero-Rating Challenges: Views From Five Countries

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INTRODUCTION

Recent changes in net neutrality regulation around the world have made net neutrality, zero-rating, and their effects on telecommunications practices a significant area of interest. To inform this ongoing critical debate, Public Knowledge (PK) provides in-depth case studies of five countries. The countries are present on the international forefront regarding the issues of net neutrality and zero-rating. The profile of each country is structured on the basis of core questions that are at the heart of our overall inquiry (i.e. how has net neutrality been implemented in various countries? How is net neutrality regulated in those countries? How has net neutrality affected practices such as zero-rating in these counties?) Although there are more countries where these questions are undoubtedly relevant, we chose to limit our inquiry to countries where these issues were resolved or are undergoing resolution.

Net neutrality is the principle that individuals should be free to access all content and applications equally, regardless of the source, without Internet service providers (ISPs) discriminating against specific online services or websites. In other words, it is the principle that the company that connects you to the Internet does not get to control what you do on it. PK wants to provide a landscape that offers a thorough breakdown of how net neutrality is being handled in particular countries and the core discussions and business models that may pose challenges to the Open Internet, specifically those practices known as "zero-rating".

A zero-rated service refers to services that do not incur data costs and are exempt from data usage counts. This practice generally refers to mobile carriers offering free mobile data so that customers can access particular forms of online content and services at no additional cost to the carrier's customers or without having associated data usage counted against the costumer's usage allowance under the hired wireless service plan. Two of the most common business models are "carrier initiated" and "sponsored data."

It is, in effect, a use of billing practices, rather than network management practices, to distinguish between different Internet applications or services. Unlike network management practices such as selective prioritization, zero-rating cannot be implemented if customers have unmetered or uncapped subscriptions (or if a data cap

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¹ In the "carrier initiated' model the mobile carrier simply chooses to zero-rate certain content as a means of attracting customers, while in the "sponsored data" model the content providers pay carriers to have their content zero-rated. However, as mapped below, a variety of new models have emerged. Available at http://www.nera.com/content/dam/nera/publications/2015/EconomicsofZeroRating.pdf

is set at a high enough level where it would only be an issue for the heaviest of users).² Under the archetypal zero-rating model, application or content providers, such as Google, Facebook, or WhatsApp, will offer their services and content by striking an agreement with companies like Verizon and T-Mobile to exempt their data from caps or metering, where the payment from the application provider to the network is intended to offset lost revenues from the customer, and compensate for any increased network usage. Mobile carriers can also benefit from the conversion of certain costumers from cheaper plans to more expansive plans, due to a change in behavior on the customer side – the bet is that the use of some connection will inspire an increase in use over time. In exchange, the application provider gets more users, which creates opportunities for them for paid conversions, increased data collection, increased opportunities to present ads, and benefits arising from network effects. However, the specific implementations of zero-rating vary greatly by provider and by country.

While numerous countries have addressed or implemented legislation on net neutrality, many are now grappling with the novel issue of zero-rated apps. The challenges created by zero-rating and the diversity of business models and business partnerships emerging are also re-opening a series of questions. These questions refer to how to understand net neutrality, how to apply net neutrality to mobile broadband, and when to apply it in order to allow or consider a service infringing certain countries' laws and regulations. In some countries an additional question that has emerged is what new regulations are needed to balance innovation in the mobile space, while protecting the public interest and the core values around net neutrality.

The varying approaches to this issue are evident by the different viewpoints of the countries in our case studies. In our case studies, two countries have adopted policies that regard zero-rating as a violation of its net neutrality provisions. On the other hand, other countries have taken a more favorable stance on the practice of zero-rating. Although the views on zero-rating have been primarily dichotomous, there are circumstances where the distinction between the two sides is not always clear. For example, countries that do not have specific net neutrality regulations have simply chosen to reprimand carriers that engage in zero-rating practices.

Proponents of zero-rating tend to justify their marketing and business models based on the laudable purposes of the practice and its broad societal benefits. Such benefits include bridging the digital divide, allowing access to Internet apps that otherwise would

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² Indeed, one policy question to be addresses in the early future is whether the emergence of zero-rated models could discourage ISPs from offering unlimited plans.

not be used, and leaving more data available for other applications and content. Under this view, for instance, zero-rating is regarded as a way to bring down the cost associated with accessing information in less developed countries. Regulators in countries that support zero-rating, such as India and Colombia, consider it to be a solution to the digital divide, and have been supportive of the practice despite the public disapproval. In these countries, certain platforms are being offered for free to users who would not otherwise have any access. On the other hand, critics of the practice tend to view zero-rating as anti-competitive, discriminatory, and at odds with net neutrality regulations.

Chile's approach to net neutrality and zero-rating was particularly relevant for this project because it was the first country to address zero-rating under its laws. The net neutrality-related amendments that were made to Chile's telecommunications law included a prohibition on blocking and slow-downs for user downloads. Additionally the amendments required parental controls to be provided as well as more transparency. Chilean regulators regarded zero-rating as a promotional tool and found it, in 2014, to be a violation of their general net neutrality laws.

Currently, India does not have a net neutrality regime in place, but has taken steps to investigate some mobile carriers business deals.³ Therefore, there is no specific legal limitation on ISPs regarding the control and prioritization data. Additionally, there are no specific regulatory provisions on zero-rating in India. Because the practice has not been deemed illegal so far, many companies have implemented zero-rated business models. However, this current context might change due to a recent report of the Department of Telecommunications (DoT) from July 16, 2015, where DoT affirmed that the core principles of net neutrality must be adhered to⁴ and that users' rights should be protected so that ISPs are unable to limit access to the Internet.⁵ Finally, regarding zero-rating, the report stated that content and application providers cannot be permitted to act as gatekeepers.⁶

The Netherlands adopted net neutrality amendments to its Telecommunications Act in 2012. The amendments limited the circumstances under which ISPs could cut off

³ See Anandita S. Mankotia, *Trai Examining Bharti Airtel's Special Deals on Facebook and WhatsApp,* The Economic Times (Nov. 25, 2014), https://articles.economictimes.indiatimes.com/2014-11-25/news/56455517_1_net-neutrality-mobile-data-services-uninor.

⁴ *Id.*; Telecom Regulatory Authority of India, *Net Neutrality DoT Committee Report May 2015*, Department of Telecommunications (2015).

⁵ *Id*.

⁶ *Id*.

subscribers. The Dutch government has not explicitly addressed the practice of zerorating, but it has reprimanded two major ISPs that engaged in a form of zero-rating.

Brazil enacted its net neutrality provisions in 2014 through its Marco Civil law, which were subsequently compared to the provisions passed by Chile and the Netherlands. The provisions required all Internet service providers to treat all Internet data equally. Brazil holds significant interest for the purpose of this project because the country is still in the process of implementing its net neutrality laws. The general attitudes towards zero-rating have been favorable by some regulators and some carriers in Brazil. Internet advocates, however, have strongly opposed zero-rating. In practice, a series of zero-rating models are available in the Brazilian market, but the country has not taken a final legal position on the issue. The Brazilian president's acceptance of Facebook's Internet.org zero-rating plans will undoubtedly affect other world markets.

In 2009, Colombia enacted net neutrality principles, and later in 2011, the *Comisión de Regulación de Comunicaciones* (CRC) regulatory body created a specific regulation mandated by the law. The 2011 resolution established four principles of net neutrality: free choice, no discrimination, transparency and information. With regard to zero-rating, Internet.org became available in Colombia in 2014. The fact that the government has not yet challenged Internet.org strongly suggests the country's sentiment that Internet.org does not violate net neutrality principles.

Other countries that we have not covered in this report are also developing significant laws and policies on net neutrality and zero-rating, and may deserve future research. For instance, regulators in Slovenia have fined the country's two largest mobile operators for zero-rating music and cloud storage services. In 2015, Canada's regulator, the Canadian Radio-television and Telecommunications Commission (CRTC), banned offerings by mobile providers Bell Mobility and Videotron, which offered differential pricing for the companies' mobile TV services.

In Europe, Norway has preserved net neutrality for its citizens through guidelines that have been in place since 2009. Through the EEA Agreement (Agreement on the European Economic Area), Norway is subject to any regulation of net neutrality in Europe. The Norwegian guidelines on net neutrality imply that zero-rating would

⁷ See Mobile Operators in Slovenia Fall Foul of Net Neutrality Rules, MobileWorldLive.com (Jan. 26, 2015), http://www.mobileworldlive.com/ mobile-operators-slovenia-fall-foul-net-neutrality-rules.

⁸ See Broadcasting and Telecom Decision CRTC 2015-26, Canadian Radio-television and Telecommunications Commission (January 29, 2015), http://www.crtc.gc.ca/eng/archive/2015/2015-26.htm.

constitute a violation of the guidelines. Despite the guidelines, there is still a system of discrimination between the different types of traffic. In the future, PK hopes to provide additional case studies of other countries whose laws are progressively shaping the net neutrality landscape.

The issue of zero-rating has not been as central to the net neutrality debate in the United States as in other counties. While the FCC has adopted a "general conduct" net neutrality rule that could be applied to zero-rating in specific instances, 9 it has declined to adopt a blanket prohibition or approval of the practice.

PK is not only interested in the dichotomous views surrounding zero-rating, but also the policy considerations, the potential abuses of the zero-rating practice by ISPs, and the competition and consumer implications of those practices in lightly regulated markets. Although PK does not assert, at this point, a particular stance on the proper legal response to the use of data caps and zero-rating, we remain skeptical of such practices because of their potential to be wielded in very discriminatory ways. In this paper, we also point to a series of policy considerations that aim at guiding the understanding of how zero-rating models can affect the market.

In previous years, PK has tracked and commented on the actions of ISPs (i.e. T-Mobile, Comcast, and AT&T) that have used data caps to manipulate consumers' experiences on the Internet and ultimately disrupt the progression toward an Open Internet. PK's basic questions concerning data caps pertain to the underlying purpose of the caps, why the caps are set, what services are exempted from the cap and whether this is done in a discriminatory manner, and if ISPs are penalizing customers with unfair overage. Despite the arguments ISPs made to support exempting certain services, such as music streaming, PK tends to view this type of regime as one that creates and allows carriers to monetize artificial scarcity.

Despite arguments that claim that scarcity goes away on the Internet and with mobile devices, PK believes that zero-rating and data caps may lead to a backslide into the world of scarcity. According to the scarcity doctrine, which has been a foundation of U.S. broadcast policy; spectrum is a limited ("scarce") and valuable resource that belongs to the public. Furthermore, the federal government regulates this resource in the public's interest in order to ensure that this resource is used for the public good. Based on previous years of data caps by ISPs, PK would argue that data caps are less

⁹ See Lauren Walker, Why the Net Neutrality Fight Isn't Over, Newsweek (Feb. 6, 2015), http://www.newsweek.com/why-netneutrality-fight-isnt-over-305060.

about network management. Instead, data caps have been used as limitations on content usage and designed to create artificial scarcity. This type of scarcity is harmful because of its affect on a user's behavior, specifically regarding users' fear of going over their caps. Playing on users' fears of exceeding their data caps makes cap-exempt regimes more attractive which incentivizes the content providers to pay for prioritization. We believe that data caps are not the most well tailored tools for engaging in network capacity management (for instance, data might count toward a cap even when a user is accessing data during off-peak hours). Ultimately, although the justifications for some kind of data cap are not all spurious, on balance, PK feels the potential for data cap abuse in discriminatory ways may outweigh any purported benefit.

ZERO-RATING MODELS

Because of the demand for affordable data subscriptions and the rising cost of data usage, creators of apps and services are devising schemes to lower the entrance barrier for new users and new ways to generate revenue. As mentioned above, a zero-rated service refers to services that do not incur data costs and are exempt from data usage counts. This practice generally refers to mobile carriers offering free mobile data so that customers can access particular forms of online content, apps and services at no additional cost to that carrier's customers, or without having associated data usage counted against the costumer's usage allowance under the hired wireless service plan. Differentiations in zero-rating plans could be the result of the type of content, the app or service included, or the underlying business arrangement between the carrier and the application or content provider.

These zero-rated apps could be potentially abusive in many countries when they are targeted toward low-income populations. Although the function of zero-rated apps and services have been treated with mixed feelings of acceptance and skepticism, there are differences in how these models operate. The more granular differences between the models depend on factors such as the cost to the carrier, the amount of data included, and which services can be accessed. Below are five examples of mobile apps that use different business models when offering zero-rated services.

mCent

mCent is an app developed by Jana, a startup based in Boston.¹⁰ The app makes it possible for app developers to underwrite a user's cost of downloading and using an app.¹¹ Essentially, it is a way for third-party services to promote their own apps by allowing users to test the apps under a zero-rating scheme.¹² Once users download a particular app, their use of it will not affect the user's consumption.¹³ In addition to the free use of apps, users are rewarded in the form of top up phone and data credits.¹⁴ Nathan Eagle, founder and CEO of Jana, said that he was "not interested just in free Facebook and free Wikipedia, but free Internet for everybody, so we are giving people

¹⁰ Nadine Freischald, 5 Apps That Offer Free Internet In Exchange For Ads, Tech In Asia (Jun. 23, 2015), https://www.techinasia.com/5-apps-offer-free-internet-exchange-ads/.

¹¹ *Id*.

¹² Id.

¹³ Id.

¹⁴ *Id.*; David, *Facebook's Controversial Free-App Plan Gets Competition*, MIT Tech. Rev. (May 6, 2015), http://www.technologyreview.com/news/537201/facebooks-controversial-free-app-plan-gets-competition/.

the ability to earn credit in their accounts to use it for anything."¹⁵ It was reported that about 25 million people have registered for the app and mCent is also available in fifteen countries.¹⁶

Under this particular business model similar to an ad network, Jana's cost is covered by the services using mCent as an advertising and market research channel. Once an app developer becomes a client of Jana, the developer's app will be presented to mCent users and advertised directly on their phones. Jana collects fees from its client in return for its services.¹⁷ The advertisement of an app is proportional to the amount the app developer has paid.¹⁸

Internet.org

Facebook created Internet.org and it gives users in underdeveloped markets access to a finite amount of hand-selected apps that can be used on a mobile device without counting against a user's data.¹⁹ The app was first launched in Zambia in 2014 and is currently available in countries with emerging markets, such as India, Indonesia, Pakistan, Tanzania and the Philippines.²⁰ Carriers provide the data after striking a deal with Facebook.²¹ After a user downloads the zero-rating app, they can access content by the companies with whom Facebook has agreements.²² While using these particular apps, users do not pay for the data they use on these services.²³ As with Facebook Zero, Internet.org does not pay ISPs to zero-rate its content.

Under Facebook's business model for Internet.org, the company partners with mobile carriers. The carrier pays for the data costs that the user accumulates by users of its service. In its policy, Internet.org invites anyone to apply to have an app or content delivered through the Internet.org ecosystem as long as the potential user can meet the technical requirements.²⁴ These requirements were a change made to the model after

¹⁵ Id

¹⁶ Janelle Nanos, *Mobile App Marketplace Jana Pushes Deeper Into the Developing World*, Beta Bos., http://www.betaboston.com/news/2015/05/06/with-a-new-loyalty-program-mobile-app-marketplace-jana-pushes-deeper-into-the-developing-world/.

¹⁷ Talbot, *supra* note 5.

¹⁸ *Id*.

¹⁹ Freischald, *supra* note 1.

²⁰ *Id*.

²¹ Id.

²² Id.

 $^{^{23}}$ Id

²⁴ Adriana Lee, *Facebook Opens Internet.org To Developers-Just Not Very Much, Readwrite* (May 5, 2015), http://readwrite.com/2015/05/05/facebook-internet-dot-org-developers-platform-gotchas.

the popular outcry in India. Facebook's intentions with the Internet.org app have been criticized and treated with skepticism.²⁵ One particular concern raised by digital rights advocates is user privacy and security. These concerns are based on the fact that all browsing that takes place through Internet.org routes all browsing through a Facebook proxy, which does not allow SSL or HTTPS encryption.²⁶

Wikipedia Zero

In 2012, the Wikimedia Foundation launched Wikipedia Zero.²⁷ Wikimedia stated that its intention was to ensure that everyone has access to free knowledge regardless of whether they could afford the data charges.²⁸ The foundation noted that Wikipedia Zero was available to about 350 million people in 29 countries.²⁹

Wikipedia Zero operates similarly to other zero-rated business models. In this situation, the operator zero-rates access to Wikimedia sites so their subscribers will not incur data charges while using Wikipedia on the mobile Web or through apps. Wikimedia makes it explicitly clear to users when they are using the free data provided by mobile operators in order to avoid any confusion. In the company's public operating principles, Wikimedia states that Wikipedia Zero is not a commercial program. The foundation also lists four other central principles of its business model: (1) Wikimedia does not pay carriers to zero-rate access to Wikimedia sites and does not receive payment from carriers through Wikipedia Zero, (2) Wikipedia Zero cannot be sold as part of a limited service bundle, (3) Wikimedia will partner with a wide array of carriers in order to reach and benefit more users, (4) Wikimedia promotes free access to knowledge and is open to collaborating with other public interest sites.

Gigato

²⁵ Kurt Wagner & Mark Bergen, *Why Facebook's Internet.org Is Stumbling In India*, Recode (May 14, 2015), http://recode.net/2015/05/14/why-facebooks-internet-org-is-stumbling-in-india/.

²⁶ Lee Munson, *Facebook Opens Up Internet.org But There's No Support For HTTPS*, Sophos (May 5, 2015), https://nakedsecurity.sophos.com/2015/05/05/facebook-opens-up-internet-org-but-theres-no-support-for-https/. ²⁷ Erik Sofge, *SXSW: Wikipedia For Non-Smartphones Is Brilliant. Here's Why*, Popular Mechanics (Mar. 8, 2013), http://www.popularmechanics.com/culture/web/a8783/sxsw-wikipedia-for-non-smartphones-is-brilliant-here-swhy-15189767/.

²⁸ Wikipedia Zero, Wikimedia Foundation, https://wikimediafoundation.org/wiki/Wikipedia_Zero (last visited July 22, 2015).

²⁹ Id.

³⁰ *Id*.

 $^{^{31}}$ Id

³² Erik Moeller, *Wikipedia Zero and Net Neutrality: Protecting the Internet As A Public Space*, Wikimedia Found. (Aug. 1, 2014), http://blog.wikimedia.org/2014/08/01/wikipedia-zero-and-net-neutrality-protecting-the-internet/. ³³ *Id*.

India-based company, Mavin, developed the mobile app, Gigato. The company was cofounded by Raina Kumra, Shailesh Nalawadi, Minal Kumar, Sahoo, and Alfian Tan, and Sriram Krovvidi.³⁴ The company's co-founders stated that:

Mavin helps prepaid customers save money on the cost of their prepaid mobile data plans. We do this by displaying relevant non-intrusive ads and content on the idle screens of your smartphone (lock screen, charge screen, etc.) and reward you with geo-targeted offers and deals. We connect advertisers directly with consumers -- and this in turn sponsors the cost of the consumer's data plan. Mavin consists of a suite of content and communication applications downloadable from Google Play Store. It lets you re-skin the idle screens of your smartphone with vibrant content of your favorite bands, relevant offers and discounts, and the latest updates on sports, technology news, and much more.³⁵

The company's mission statement affirms Mavin's "support of net neutrality through unrestricted data access for the unrestricted internet." It also states that users will not "find a walled garden here, just transparent vital symbiotic business." Mavin also maintains that Gigato "believes in giving users options when it comes to paying for data and using their apps when and where they like."

Mavin's app allows users to use their android apps free of 2G and 3G mobile data charges.³⁹ When a user downloads and registers with Gigato, all the apps that partner with Mavin are able to refund the user for the data consumed on their apps with unrestricted mobile recharge credit.⁴⁰ A Recode article states that Mavin's business model is similar to other companies offering zero-rated apps.⁴¹ Mavin's business model is based on offering data credits so that they can use it the way they want. Currently Gigato only supports certain Indian prepaid users of companies such as Airtel and Vodafone.⁴²

³⁴ Erin Hobey, *Alchemist Accelerating Partners With AngelList: Transmuting Uncommon Startups Into Gold,* Crowdfund Insider (June 13, 2014), http://www.crowdfundinsider.com/2014/06/41751-alchemist-accelerators-enterprise-startups-partner-angellist-transmuting-uncommon-startups-gold/.

³⁵ *Id*

³⁶ About Us, Mavin, http://www.mavin.co (last visited July 21, 2015).

 $^{^{37}}$ Id

³⁸ About Gigato, Gigato, http://www.gigato.co (last visited July 21, 2015).

³⁹ Id.

⁴⁰ Id.

⁴¹ Wagner & Bergen, *supra* note 17.

⁴² Gigato Free Mobile Data, Google Play, https://play.google.com/store/apps/details?id=com.gigato.market&hl=en (last visited July 21, 2015).

Google Free Zone

Google Free Zone was implemented by Google and enables mobile users to access Google's Web search, Gmail, and Google+ social networking platform for free⁴³. Currently the service is available in the Philippines, India, Thailand and Sri Lanka.⁴⁴ Google Free Zone is said to work on most Internet-capable phones released in 2006 or later.⁴⁵ After a user is connected to Free Zone, the user is able to use a stripped-down version of some of Google's online services for free.⁴⁶ While using the Google services, a user is not charged for the data that they incur. Once the user attempts to navigate away from the Google services, they are warned of potential charges.⁴⁷ A Free Zone user is only able to freely access the first page that turns up in their Google search.⁴⁸ Google representatives refused to comment on Free Zone's revenue structure.⁴⁹ It is unclear how Google monetized the Free Zone and if the service will remain free.

Mozilla Equal Rating Models

In May 2015, the Mozilla Foundation stated its alternative approach to the challenges created by zero-rating Internet services. Mozilla's primary mission is to create this alternative within the Firefox OS ecosystem. ⁵⁰ The company's approach is a system of "equal rating" or "zero-rating for all." ⁵¹

One version of this system calls for some amount of data necessary for modern life to be offered at a discount or no charge while the companies that pay for it get a "brought to you by" attribution.⁵² Mozilla has started to explore this version by partnering with

⁴³ April Deibert, *Google 'Free Zone' and Facebook Zero Products Targeting Developing Populations*, Innovation Series (Feb. 19, 2013), http://www.innovation-series.com/2013/02/19/google-free-zone-and-facebook-zero-products-targeting-developing-populations/.

⁴⁴ Are You In The Free Zone, Google Free Zone, http://googlefreezone.com (last visited July 21, 2015).

⁴⁵ Geoff Duncan, *Is Google Free Zone Internet Altruistic Service For Merging Economics Or Something Else*, Digital Trends (Nov. 12, 2012), http://www.digitaltrends.com/mobile/google-free-zone-placeholder/.

⁴⁶ *Id*.

⁴⁷ *Id*.

⁴⁸ Id.

⁴⁹ Id

⁵⁰ Adith Charlie, *Net Neutrality: Mozilla Suggests 'Equal Rating,*' The Hindu Bus. Line (May 6, 2015), http://www.thehindubusinessline.com/features/smartbuy/tech-news/net-neutrality-mozilla-suggests-equal-rating/article7177532.ece.

⁵¹ *Id*.

⁵² *Id*.

telecom operator, Orange. 53 With the help of Mozilla, Orange will allow residents of select countries to purchase \$40 Firefox OS smartphones (Klif phone).⁵⁴ The phones would come packaged with 500 MB per month of data and six months of unlimited talk, text and voice functions.⁵⁵

A second version of this equal rating model involves people watching ads in order to access other websites.⁵⁶ Mozilla has explored this model by partnering with Grameenphone in Bangladesh.⁵⁷ The two companies are working together to implement a system where users will watch a short ad on their phones and receive 20 MB of data usage for free each day in return.⁵⁸

According to Mozilla, equal rating is meant to be a long-term solution to the current problems with digital inclusion and equality. ⁵⁹

POLICY CONSIDERATIONS

The clear benefits of providing even limited access at an affordable price must be balanced against the potential harms both to those individuals receiving access and the macro effects on the Internet and competition as a whole. In contrast to the obvious benefits of providing limited access, the harms are more difficult to discern at first glance and therefore require elaboration. First, providing limited access, as a policy matter, may dissuade governments and others from working towards solutions to affordable full access. A critical aspect of all zero-rating models discussed is that they provide a form of limited access, based on a theory that limited access is better than no access at all.

Unfortunately, the historic trend has been to view this temporary solution as a resolution to the broader problem. It would be an unfortunate result if efforts to provide full access

⁵³ Shashidar KJ, Mozilla's Mitchell Baker Offers Alternatives to Zero-rating for Internet Services, Medianama (May 7, 2015), http://www.medianama.com/2015/05/223-mozillas-mitchell-baker-offers-alternatives-to-zero-rating-forinternet-services/.

⁵⁴ *Id*.

⁵⁶ Mitchell Baker, Zero-rating and the Open Internet, Mozilla (May 6, 2015), https://blog.lizardwrangler.com/2015/05/06/zero-rating-and-the-open-internet/. ⁵⁷ *Id*.

⁵⁸ Id.

⁵⁹ *Id*.

to the billions of people not yet online were abandoned or significantly slowed in favor of an immediate partial access solution. Second, even if we accept the premise that limited access was an appropriate short-term solution, the gatekeeping role of the provider is potentially subject to abuse and raises significant competition concerns. This is not to impute bad motives to many companies responding to the call that wealthy corporations need to respond to the needs of the poor and vulnerable. Nevertheless, the fact that these forms of limited access resemble traditional walled gardens may potentially undermine both the willingness of the users to trust these limited access programs. Additionally, even programs begun in good faith may evolve overtime into a more classic walled-garden/gatekeeper scenario without appropriate safeguards.

Additionally, although discrimination on the basis of content is a clear violation of net neutrality, it is possible to perceive there is benefit that certain content – for the sake of balance on the basis of equity – might be allowed. Wikipedia Zero is arguably an example. Alternatively, if the government makes information about public safety, government transparency, civic engagement, education services, or other services considered of "public emergency", available online, then there is an argument that this content should not count against data caps. At the same time these exceptions need to be narrowly construed to not undermine the concept of net neutrality. Alternatively, defining the limitations of the exception might be so difficult, that zero-rating should be prohibited because the exceptions swallow the rule.

Ultimately, this global mapping of the laws on net neutrality and zero-rating is meant to inform the discussion. Furthermore, PK wants to use this project to put forth minimum policy considerations based on the similarities that we noticed between the countries that we analyzed. Because PK advocates for accessibility to the Open Internet, we feel that policy reforms that promote competition, neutral practices, and transparency will be key in this ongoing discussion. With regard to transparency, we believe that telecommunications regulators of countries that allow zero-rating should be required to explicitly state whether zero-rated apps are a marketing tactic or a fixed feature of their service plan. Our suggestion is that the regulations that have been developed and are currently under implementation in a series of countries are formatted in a way that keeps ISP behavior in check.

For PK, net neutrality is a core principle and zero-rating is a method that might or might not violate it. Net neutrality guarantees that individuals can access all content and applications equally, regardless of source, without Internet service providers discriminating against specific online services or websites.

Zero-rating is a method that is presented through numerous business models based on different incentives and with different goals. In this paper we map some of these business models and also how – in some countries –zero-rated models are being deployed, received by the market, and regulated. Regulators must look at the facts in specific market contexts to determine if a certain zero-rating model is or is not discriminatory (either by cap or speed). But such a conclusion in one market does not say anything about how the issue might play out in another market (different competitive dynamics, different income, pricing, etc.).

Our aim is to preserve the Internet as an open platform for communication and to avoid discrimination on or fragmentation of the Internet. From the early stages of the Internet, the concept of openness allowed online innovation and investment in new technology to flourish. The principles of no blocking of content or devices, no harmful discrimination, and transparency were understood and protected by norms, law, regulation, and some precedent in telephony. Nondiscrimination principles allowed competition to flourish in the early 1990s as Internet service providers and other services were guaranteed access to phone lines to provide their services.

Public Knowledge hopes that mapping the net neutrality laws and status of zero-rating for the Netherlands, Colombia, Chile, India, and Brazil, and posing these policy considerations, will prove to be a useful tool in the global discussion on net neutrality and its worldwide impact. The main challenge for regulators will be getting the anti-discrimination rules right for the mobile Internet.

CHILE*

Introduction

On April 2014, the Subsecretaria de Telecommunications (Subtel) banned mobile operators from offering zero-rated social media apps, saying such practices are illegal under Chile's net neutrality law.⁶⁰ This case study outlines Chile's approach to net neutrality, specifically regarding zero-rating practices. It will also discuss Chile's decision to ban the zero-rating practice by providing some context on Chile's mobile and broadband penetration rates.

Mobile and Internet Access

According to the Organization for Economic Co-Operation and Development (OECD), 60.5% of households in Chile had Internet access in 2012. 61 Wireless mobile broadband subscriptions were 42.9% in 2014. 62 Also, the country's fixed broadband rates were 13.68% in 2014. 63 On May 30, 2014, Quartz.com noted that Chile's OECD statistics offered plenty of room for growth. 64 The site also noted that people already had mobile phone connections, even if they were not yet using them online. 65 Furthermore, Chile had one of the highest rates of pre-paid SIM-card use in the OECD study. 66 According to Quartz, these pre-paying customers are "less likely to pay for expensive phones and newfangled services." 67

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⁶⁰ Yana Welinder & Carolynne Schloeder, *Chilean Regulator Welcomes Wikipedia Zero*, Wikimedia Found. (Sep. 22, 2014), http://blog.wikimedia.org/2014/09/22/chilean-regulator-welcomes-wikipedia-zero/.

⁶¹ Information and Communication Technology (ICT), Organisation for Economic Co-Operation and Development, https://data.oecd.org/ict/internet-access.htm (last visited Jun. 8, 2015).

⁶² Information and Communication Technology (ICT), Organisation for Econ. Co-Operation and Development, https://data.oecd.org/broadband/wireless-mobile-broadband-subscriptions.htm#indicator-chart (last visited Jun. 8, 2015).

⁶³ Information and Communication Technology (ICT), Organisation for Economic Co-Operation and Dev., https://data.oecd.org/broadband/fixed-broadband-subscriptions.htm#indicator-chart (last visited Jun. 8, 2015).
⁶⁴ Leo Mirani, When Net Neutrality Backfires: Chile Just Killed Free Access to Wikipedia and Facebook, Quartz (May 30, 2014), http://qz.com/215064/when-net-neutrality-backfires-chile-just-killed-free-access-to-wikipedia-and-facebook/.

⁶⁵ Id.

⁶⁶ Id.

⁸ Mirani, supra note 56.

According to Article 24 H of Chile's Telecommunications Law, an ISP is defined as a telecom provider that provides Internet services to Internet access providers and the Internet access providers themselves. Those providers can be any "concession of public service to Internet access providers.⁶⁸ Under the law, an ISP can be "any natural or legal person providing commercial services connectivity between users or their networks and Internet."

Movistar (formerly Telefònica Chile) and VTR Banda Ancha are the largest Internet service providers in the country and hold the largest market shares.⁷⁰ Chile's primary ISP companies offer contractual and prepay options; however, resident status is required for contracts.⁷¹

Chile's Approach to Net Neutrality

On July 15, 2010, the Chilean Congress passed several amendments to the General Telecommunications Law, making Chile the first country in the world to mandate net neutrality in its law.⁷² The nearly unanimous decision was passed with 100 votes to one abstention.⁷³ Although Congress introduced the bill, the efforts of a citizen movement called *Neutralidad Si* played a key role in convincing congressional representatives about the importance of implementing this law.⁷⁴

One of the amendments specifically states that ISPs must "ensure access to all types of content, services or applications available on the network and offer a service that does not distinguish content, applications or services, based on the source of it or their

⁷² David Meyer, *In Chile, Mobile Carriers Can No Longer Offer Free Twitter, Facebook, or WhatsApp*, Gigaom (May 28, 2014), https://gigaom.com/2014/05/28/in-chile-mobile-carriers-can-no-longer-offer-free-twitter-facebook-and-whatsapp/

⁶⁸ Consagra El Principio De Neutralidad En La Red Para Los Consumidores Y Usuarios De Internet, Biblioteca del Congreso Nacional del Chile,

http://www.leychile.cl/Navegar?idNorma=1016570&buscar=NEUTRALIDAD+DE+RED?link=instory&r=1 (last visited July 22, 2015) ("Las concesionarias de servicio público de telecomunicaciones que presten servicio a los proveedores de acceso a Internet y también estos últimos; entendiéndose por tales, toda persona natural o jurídica que preste servicios comerciales de conectividad entre los usuarios o sus redes e Internet")._

⁷⁰ 2013 Chile- Telecoms, Mobile, Broadband and Forecasts, BuddeComm, http://www.budde.com.au/Research/2013-Chile-Telecoms-Mobile-Broadband-and-Forecasts.html (last visited Jun. 8, 2015).

⁷¹ *Id*.

⁷³ Chile: A Leader In Net Neutrality Legislation, Open Media.Ca, https://openmedia.ca/plan/international-comparisons/chile (last visited Jun. 8, 2015).

⁷⁴ Nimish Sawant, Net Neutrality Debate: Some Insight From Countries Which Have Made It Into A Law, Tech2 (Apr. 14, 2015), http://tech.firstpost.com/news-analysis/net-neutrality-some-insights-from-countries-which-have-made-it-into-a-law-263072.html.

property."⁷⁵ Under the new law, ISPs are prohibited from blocking and slowing down downloads if users are conducting legal activities. This particular amendment was enacted in response to the imposition of connection speed limits during peak usage hours, which restricted how much data the user could use or download.⁷⁶ In addition to parental controls, amendments pertaining to transparency were also made to Chile's telecommunications law. These norms require ISPs to provide information on maximum speeds and the average speeds users will be able to achieve with a particular ISP. ⁷⁷ The laws also requires ISPs to differentiate between the quality of international and national connection services.⁷⁸ In support of the laws, Chile's Minister of Transport and Telecommunication, Fernando Morande, said that users are better served "because they will know the type of service they are buying." ⁷⁹

Approach to Zero-rating and Internet.org

The practice of providing zero-rated access for services in Chile involved large companies, such as Facebook and Twitter, striking deals with telecom providers to offer their apps for free. For example, Facebook struck a deal with an Indian telecom company, Reliance Communications (RComm), to offer Internet to users who have an RComm data plan through their Internet.org app.

Internet.org began as a Facebook-led initiative that aims to bring affordable access to select Internet-based services.⁸⁰ According to Facebook, the initiative was primarily targeted at less developed countries in an attempt to promote and facilitate the development of Internet access. On July 31, 2014, Internet.org introduced an app that will act as a portal to limited Internet services.⁸¹ The app was set to offer free services like Twitter and Facebook to users that, while consuming data, would not count against

⁷⁵ Tim Stevens, *Chile Becomes First Country to Guarantee Net Neutrality, We Start Thinking About Moving*, Engadget (July 15, 2010), http://www.engadget.com/2010/07/15/chile-becomes-first-country-to-guarantee-net-neutrality-we-star/.

⁷⁶ Christine Mehta, *Chile Approves Changes to Telecommunications Law, Supporting Net Neutrality*, The Santiago Times (July 15, 2010), http://santiagotimes.cl/chile-approves-changes-to-telecommunications-law-supporting-net-neutrality/.

⁷⁷ Consagra El Principio De Neutralidad En La Red Para Los Consumidores Y Usuarios De Internet, *supra* note 60.

⁷⁸ Rahul Gaitonde, *Chile Legally Mandates Network Neutrality and Increased Transparency for ISPs*, BroadbandandBreakfast.com (July 15, 2010), http://broadbandbreakfast.com/2010/07/chile-legally-mandates-network-neutrality-and-increased-transparency-for-isps/.

⁷⁹ *Id.*

⁸⁰ About, Internet.org, https://internet.org/about (last visited Jun. 8, 2015).

⁸¹ David Meyer, Facebook's Internet.org Unveils Free, Limited Web Access –Such Opportunity, But At What Cost, Gigacom (July 31, 2014), https://gigaom.com/2014/07/31/facebooks-internet-org-unveils-free-limited-web-access-such-opportunity-but-at-what-cost/.

their pre-paid data caps. 82 On April 14, 2014, Subtel banned mobile operators from offering zero-rated social media apps. 83

When Chilean regulators banned zero-rated services, Subtel also issued a document entitled, "Circular N. 40." The circular was provided as an explanation of the new law and mandated the cessation of zero-rating by June 1.

According to the Circular 40, Chilean regulators decided to ban zero-rating because the practice violated Articles 6 and 7 of Chile's net neutrality laws. He Circular, Chile's "Subsecretaria de Telecomunicaciones" decided that zero-rating is a promotional tool and mandated that all zero-rated-related marketing deals had to stop. In the Circular, the "Subsecretaria de Telecomunicaciones" specifically stated that "under its jurisdiction [they] have detected the existence of commercial offers by the [ISPs] who have publicized [this] by various means and in particular on its website as promotional offers, through which it offers free social network services with the condition that users purchase more [mobile internet]" (translated quotation).

The promotional plans that are offered by wireless providers generally couple traditional voice service with access to selected social media sites such as Facebook, Twitter, and WhatsApp.⁸⁷ With these plans, customers can access social media for a fraction of the cost of a traditional data plan that offers access to the entire Internet.⁸⁸ Although these promotional plans come in many varieties, including zero-rating, free social media is a popular promotional tool in developing countries.⁸⁹

According to Subtel, zero-rated promotional plans specifically violate Chile's rules that regulate "discriminatory content behavior, applications and services that integrate the principle of net neutrality contained in the text of Article 24 H(a) of the

⁸² Id

⁸³ Welinder & Schloeder, *supra* note 52.

⁸⁴ Subsecreteria de Telecomunicaciones, Circular 40 (Chile).

 $http://www.subtel.gob.cl/transparencia/Perfiles/Transparencia20285/Normativas/Oficios/14oc_0040.pdf~\ 85~Id.$

⁸⁶ *Id.* ("Esta Subsecretaría en el marci de sus competencia ha detectado la existencia de ofertas comerciales por parte de las concesionaria que han publicitado por diversos medios y en particular en su sitio web como ofertas promocionales, en cuya virtud se ofrece a los usarios que cuenten con un terminal inteligente, navegacion sin costo en redes sociales delimitadas, bajo la única condicion de efectuar una recarga o bien comprar una bolsa de internet móvil").

⁸⁷ Daniel Lyons, *In Chile, Net Neutrality Widens the Digital Divide*, Tech Policy Daily (June 6, 2014), http://www.techpolicydaily.com/communications/chile-net-neutrality-widens-digital-divide/. ⁸⁸ *Id.*

⁸⁹ Id.

telecommunications law" (translated quotation). Subtel also stated that this rule would prevent Chilean ISPs from arbitrarily distinguishing content and services based on their source and ownership. Additionally, Subtel explained that "by allowing consumers to access some websites but not others (or by exempting some but not all sites from a monthly data limit), the carrier is blocking or hindering access to all websites not included in the promotion. The Chilean regulator's worry is that allowing preferred access will be harmful to future competitors and the users that would be unable to access sites for free unless the new competitor made a deal with the carriers.

Chile's regulators supported their decision on zero-rating by asserting that the practice promoted an anticompetitive structure. 93 Allowing certain services to provide free access makes it harder for newcomers, specifically new services from local startups, to compete with established ones that are provided for free. Although the system makes services like Facebook accessible to users who would not otherwise be able to afford it, the system is arguably unfair to any potential competitors whose customers would need to pay to even try their service.

The Impact of Internet.org and Zero-rating on Chile

Although Chile initially outlawed the practice of zero-rated business models, Subtel accepted Wikipedia Zero as a possible exception.⁹⁴ In a letter of response to Wikipedia, Chilean regulators directly stated that they would allow Wikipedia Zero to be offered in Chile under a zero-rating arrangement.

In an effort to understand whether initiatives like Wikipedia Zero would be affected by Chile's stance on zero-rating, Wikimedia sent a letter to the members of Subtel. The letter explained the operating principles behind Wikipedia Zero and requested clarification on how the new ruling would apply to their service. Wikimedia asserted that:

⁹⁰ Supra note 76, "La estructura de la oferta en comento, importan a juicio de esta autoidad una contravencion a las normas que en la especie regulan y prohiben conductas discriminatories de contenidos, applicaciones o servicios, que integran el ...principo de Nuralidad de Red contenidas en le normative sectiral y en particular al texto del articulo 24 H letra."

⁹¹ Id.

⁹² Lyons, *supra* note 79.

⁹³ Glyn Moody, *Chile Bans Free Delivery of Social Media Services to Uphold Net Neutrality*, Tech Dirt (June 16, 2014), https://www.techdirt.com/articles/20140603/05442127439/chile-bans-free-delivery-social-media-services-to-uphold-net-neutrality.shtml; Wally Swain, *Chile Bans Mobile Operators From Offering Zero-Rated* Apps, Yankee Group, http://maps.yankeegroup.com/ygapp/content/efdb16fc55e04a4bbd643da4aaadc75a/68/DAILYINSIGHT/0. ⁹⁴ Welinder & Schloeder, *supra* note 52.

- a. Wikipedia Zero was solely intended to enable universal access to knowledge in a way that would not be anticompetitive. 95
- b. Wikipedia Zero did not include limited services in packages or as part of commercial offerings.
- c. Wikipedia reiterated the fact that it was a non-profit, that it does not collect the personal information of users for advertising purposes, and that it did not engage in deep packet inspection.

In his response to Wikimedia, Undersecretary of Telecommunications, Pedro Huichalaf, indicated that there is a clear difference between the operation of Wikipedia Zero and the practices prohibited by Subtel. Huichalaf also stated that Wikipedia's intent to provide access to knowledge was aligned with the views of Subtel as well as the Chilean President. In a statement posted to the Wikimedia blog, Wikimedia Chile declared their confidence that the Wikipedia Zero "program fits within Chile's legal framework and is consistent with the country's commitment to improving access to education for its citizens." Wikipedia Chile expressed its intention to begin working with all Chilean mobile carriers interested in bringing free knowledge to all people of Chile through Wikipedia Zero.

Critics of Chile's exemption of Wikipedia Zero have argued that this action is likely to create a slippery slope of basing policy decisions on dogma rather than on a factual assessment of how a policy impacts consumers.⁹⁸

Conclusion

Currently Chile has banned zero-rating and ruled that commercial arrangements and services based on zero-rating practices must end by June 1, 2014. 99 Zero-rated social networks continue to operate. However, telecommunications services are not permitted to advertise free services, but still offer the same services without consuming data.

Since Chile has allowed the Wikipedia Zero to continue, it appears that Subtel is willing to grant exemptions to services based on particular criteria.

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⁹⁵ Letter from Erik Moller, Adjunct Dir. of the Wikimedia Found.,to Sr. Pedro Huichalaf Roa, Subsecreteria de Telecomunicaciones (July 23, 2014) (on file with the author).

⁹⁶ Welinder & Schloeder, *supra* note 52.

⁹⁸ Roger Entner, *Entner: Zero-rating, Sponsored Data Services Could Help Close Digital Divide*, Fierce Wireless (Apr. 14, 2015), http://www.fiercewireless.com/story/entner-zero-rating-sponsored-data-services-could-help-close-digital-divide/2015-04-14.

⁹⁹ Swain, *supra* note 85.

INDIA*

Introduction

As of 2014, Internet access penetration¹⁰⁰ is at 21.1%.¹⁰¹ The total number of Internet subscribers was 267.39 million at the end of December 2014, from which 85.74 million had broadband access. 102 Also, as of 2014, mobile data access is at 77.58%, while penetration is at 76.6%. 103

India ranks third in the world for total Internet users, however India ranks 19th out of the top 20 countries for total Internet users in terms of penetration. 104 This is about half the penetration of China, and one-quarter the penetration of the United States and Japan. Relative to other nations, India is lagging behind in both Internet and mobile data usage.

General Laws and Trends Regarding Net Neutrality in India

A net neutrality "regime is currently not in place in India." "Hence it can be safely said that currently there are no limits on the Internet service providers' freedom to control and prioritize [sic] the type or source of data." The Telecom Regulatory Authority of India (TRAI) recently requested public comment on the topic of net neutrality and "over-the-top services," and is expected to release a report in the very near future.

Support for net neutrality has come mainly from social media. Sites such as Reddit and Twitter have been utilized to mobilize a grassroots campaign, aimed at increasing awareness about the comment period for the TRAI report. More than 10 million people

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¹⁰⁰ Penetration being defined as the percentage of residents of India with access to the internet/mobile.

¹⁰¹ Regulatory Framework for Over-the-top (OTT) services/ Internet Services and Net Neutrality, Telecom Regulatory Auth. of India (Mar. 27, 2015), available at

 $http://www.trai.gov.in/WriteReadData/PIRReport/Documents/Indicator_Reports\%20-\%20Dec-14=08052015.pdf.$ ¹⁰² *Id*.

¹⁰³ *Id*.

¹⁰⁴ Internet Users by Country (2014), InternetLiveStats.com (June 8, 2015, 9:28 AM), http://www.internetlivestats.com/internet-users-by-country/.

¹⁰⁵ Atul Dua et al., Getting the Deal Through: Telecoms & Media 2015-1 GTDT: Telecoms & Media India, Question 9 (LEXIS 2015).

¹⁰⁶ *Id*.

¹⁰⁷ The TRAI comments received range from 700,000 to 1,000,000 according to various reports.

wrote the TRAI to voice their opinion of net neutrality through the Save the Internet Campaign. ¹⁰⁸ Members of parliament asserted their support of net neutrality, including Rajeev Chandrasekhar, who reiterated his belief that the government should implement net neutrality laws. He also responded to campaigns led by the Cellular Operators Association of India (COAI) and internet.org, considering them misleading. ¹⁰⁹ Furthermore, Derek O'Brien and Baijayant Panda advocated for net neutrality on Twitter. ¹¹⁰ Even Rahul Gandhi, the leader of the Indian National Congress, has come out in support of net neutrality. ¹¹¹

Opposition to net neutrality has come from two major sources: COAI and Internet.org. Facebook launched an online petition in support of "access to free Internet." COAI implemented a campaign on Twitter¹¹³ and an SMS campaign, the which has been roundly ridiculed as misleading and confusing. COAI, which Facebook joined in August 2014, claims that some 40 million people reached out in opposition to net neutrality, and this number was subsequently cited by the TRAI. These numbers have been labeled as part of a "misinformation campaign" run by companies opposed to net neutrality.

The Department of Telecommunications (DoT) released its final report on net neutrality on July 16, 2015. DoT's report offered favorable news for users of free over-the-top (OTT) messaging services.¹¹⁹ In the report, the DoT removed obstacles facing messaging services by stating that Internet services dealing with messaging should not

¹⁰⁸ A campaign called "Save the Internet" was launched, and comedians from a group called All India Bakchod ("AIB") produced a video on Net Neutrality which asked Indian citizens to email TRAI. *AIB: Save the* Internet, (available at https://www.youtube.com/watch?v=mfY1NKrzqi0 (This video has almost 2.98 million views as of June 16th, 2015).

¹⁰⁹ Rajeev Chandrasekhar AMA, *Hi /r/india, I am Rajeev Chandrasekhar, Member of Rajya Sabha and a strong supporter of Net Neutrality, AMA*, Reddit (June 2, 2015),

http://www.reddit.com/r/india/comments/387req/hi_rindia_i_am_rajeev_chandrasekhar_member_of/.

110 Twitter handles: @quizderek, @BeWithRG.

Devjyot Ghoshal, *Rahul Gandhi—India's Most Internet-Unsavvy Politician—Is Now Crusading For Net Neutrality,* Quartz (Apr. 22, 2015), http://qz.com/388660/rahul-gandhi-indias-most-internet-unsavvy-politician-is-now-crusading-for-net-neutrality/.

¹¹² Shashidhar KJ, *Facebook Launches A Campaign For Internet.Org; Claims Over 100k Supporters* http://www.medianama.com/2015/05/223-facebook-launches-a-campaign-for-internet-org-claims-over-100k-supporters/

¹¹³ Meaning "for everyone."

¹¹⁴ Id

¹¹⁵ See Id.; Chandrasekhar, supra note 101.

¹¹⁶ *Id*.

¹¹⁷ Id.

¹¹⁸ *Id*.

¹¹⁹ Net Neutrality DoT Committee Report May 2015, *supra* note 5.

be interfered with regulatory instruments. ¹²⁰ In contrast, regulation was imposed on communication that uses Voice over Internet Protocol (VoIP). This provision directly affects providers like Vodafone, Ideal, and Airtel. The regulation requires these particular providers to adhere to regulatory licensing norms. ¹²¹ An issue with the regulatory scheme is formulating the distinction between VoIP OTTs and messaging OTTs. ¹²² The committee stated that messaging on an OTT service like WhatsApp should not be regulated. If the same app also offers voice-calling services, it should be subject to regulations that are already in place. ¹²³ Overall, the committee said, "the core principles of net neutrality must be adhered to." ¹²⁴ Furthermore, the committee advocated for the protection of user's rights so that ISPs are unable to limit access to the Internet. ¹²⁵

General Laws and Trends Regarding Zero Rating in India

As of June 2015, there are no specific regulations or regulatory decisions concerning zero-rating in India. Given that zero-rating was not declared illegal, many companies currently have zero-rating business models and plans in place, or have attempted to implement them.

Bharti Airtel has implemented Airtel Zero (AZ), its version of a zero-rating plan. This plan was met with grassroots opposition on social media, and Airtel initially withdrew plans for AZ. However, after a few weeks Airtel changed course and put AZ back onto the market.

Twitter has implemented a zero-rating platform for their social media site, utilizing a custom app allowing free access to Twitter. ¹²⁷ They partnered with Reliance

¹²⁰ Nikhil Pahwa, *Updated: A Look at the DoT Committee's Alleged Net Neutrality Report*, Medianama (July 16, 2015), http://www.medianama.com/2015/07/223-net-neutrality-report-india-telecom/. ¹²¹ *Id*.

¹²² Shruti Dhapola, *DoT's Panel for Net Neutrality, but What Conditions Apply?*, The India Times (July 19, 2015), http://indianexpress.com/article/explained/dot-panel-for-net-neutrality-but-what-conditions-apply/. ¹²³ *Id.*

¹²⁴ *Id.*; Telecom Regulatory Authority of India, *supra* note 111.

See Net Neutrality Supporters Downrate Flipkart App After Co-Founder Supports Airtel Zero, NDTV Gadgets (Apr. 10, 2015), http://gadgets.ndtv.com/internet/news/net-neutrality-supporters-downrate-flipkart-app-after-co-founder-supports-airtel-zero-679939; see also Flipkart Says No to Airtel Zero After Net Neutrality Protests, NDTV Gadgets (Apr. 14, 2015), http://gadgets.ndtv.com/internet/news/flipkart-pulls-out-of-airtel-zero-after-net-neutrality-protests-681209.

¹²⁷ Drew Olanoff, *Reliance Communications Partners With Twitter To Offer Free, Unlimited Access To The Service In India,* Techcrunch.com (Apr 23, 2015), http://techcrunch.com/2013/04/23/reliance-communications-partners-with-twitter-to-offer-free-unlimited-access-to-the-service-in-india/.

Communications in 2013 to provide service to India. There is no indication that Twitter Zero was unpopular or negatively perceived.

Google initially planned to release a zero-rating platform, but subsequently cancelled the said plan. There has been no indication as to the reason behind the cancellation, beyond mere speculation.

The report issued by the DoT also addressed the zero-rating. The committee says that "content and application providers cannot be permitted to act as gatekeepers" and go against the principles of net neutrality. Additionally, the committee stated the question of net neutrality violation via zero-rating, on a case-by-case basis. 129

The Impact of Internet.org in India

Internet.org, Facebook's zero-rating platform, was launched in India in February 2015 exclusively on carrier Reliance Communications. Facebook claims that Internet.org has helped over 800,000 Indians get online, with 160,000 of those 800,000 being new users of mobile data. Furthermore, Facebook claims that users of Internet.org have increased their data usage outside the app by some 100 megabytes. Examples of services that are currently part of Internet.org include: ESPN Cricket, BBC News, and Bing Search. Services that have withdrawn include the travel site Cleartrip.com and Times Group – India's largest media conglomerate. It is likely that the negative reception of Internet.org has led some companies to withdraw from the service.

In response to net neutrality concerns related to Internet.org, Facebook has opened up the platform to all developers, however they still hold the power of final approval for any

¹²⁸ Dhapola, *supra* note 114.

¹²⁹ Pahwa, *supra* note 112.

¹³⁰ Yuthika Bhargava, Opposition Against Internet.Org Growing, thehindu.com,

http://www.thehindu.com/business/opposition-against-internetorg-growing/article 7224500.ece.

¹³¹ Tech Desk, *Over 800,000 Indian Users Connected Online via Internet.org*, Bloomberglaw.com, https://www.bloomberglaw.com/s/news/d6d334da20dc8380a7839a84510676ab/document/NOX03E3M0C8W?be stStory=true&highlight=%26quot%3BOver+800%2C000+Indian+Users+Connected+Online+via+Internet.org%26quot%3B (last visited July 21, 2015).

¹³³Internet.org App Now Available in India (2015), Internet.org (Feb. 10, 2015), https://internet.org/press/internet.dot-org-app-now-available-in-india.

¹³⁴, Report of the Most Circulated Dailies in India (2013), Audit Bureau of Circulations, http://www.auditbureau.org/news/view/17 (last visited July 22, 2015).

¹³⁵ Matthew Wall, *Indian Companies Withdraw From Facebook's Internet.org*, BBC News (Apr. 16, 2015), http://www.bbc.com/news/technology-32334181.

service. 136 Facebook has outlined three central principles to which companies must adhere in order to gain approval. First, "services should encourage the exploration of the broader internet wherever possible." Second, "websites that require high-bandwidth will not be included. Services should not use VoIP, video, file transfer, high resolution photos, or high volume of photos." And lastly, partner services must be optimized for smartphones and feature phones, and be free from JavaScript or SSL/TLS/HTTPS elements. It remains to be seen what effect this change will have on the perception of Internet.org.

The Impact of Zero Rating on Competition

The debate surrounding zero-rating is largely focused on the alleged anticompetitive nature of zero-rating applications. The argument proffered by Rewheel, ¹³⁷ an anti-zerorating group, makes it so that consumers are unable to say no to zero-rating platforms because, otherwise, they only have data that is expensive or unavailable. Carriers who release zero-rating apps then reduce the amount of available data or make it even more expensive, thus forcing consumers into zero-rating apps that do not consume their scarce, expensive data. This damages the market, as consumers have no real choice.

Some economic counterarguments claim that zero-rating is *not* anti-competitive. This argument advances three points about zero-rating: (1) zero-rating is "carrier initiated," (2) sponsored data programs are non-exclusive, and (3) there is no "prima facie basis" that exclusive zero-rating "would be anti-competitive." Carrier initiation that does not involve payments cannot be considered as foreclosing other providers; it simply reflects the fact that the carrier has determined that adding the provider will improve its own value. 138 Further, there is no evidence that sponsored data arrangements are exclusive, and "therefore there is no foreclosure." Finally, the wireless "markets suggest that exclusivity in [zero-rating] programs . . . is of the efficiency enhancing variety." 140 These economic arguments point to the uncertainty that zero-rating is, on its face, anticompetitive.

¹³⁶ Jon Russell, Facebook Opens Internet.Org To All Developers In Response To Net Neutrality Concerns, TechCrunch http://techcrunch.com/2015/05/04/facebooks-internet-org-project-is-now-a-platform/.

¹³⁷ Antonios Drossos, *The Real Threat To The Open Internet Is Zero-Rated Content*, Rewheel, http://dfmonitor.eu/downloads/Webfoundation guestblog The real threat open internet zerorating.pdf (last visited July 23, 2015).

¹³⁸ *Id*.

¹³⁹ *Id*.

¹⁴⁰ Id.

Mozilla Foundation Chair Mitchell Baker has taken a more nuanced approach to zero-rating, stating that "predetermined, limited access – is disastrous," however zero-rating where "someone other than the ultimate consumer covers the cost" is "clearly part of the long-term answer." The solution, according to Baker, is to "equal rate" content, and requires either attribution or an advertisement to be viewed in order to receive data.

Mozilla's position on zero-rating is that zero-rating "may result in the same harms as throttling, blocking or paid prioritization," but caution that "there are many things we still don't know about [zero-rating]." Furthermore, "it may be possible that access to zero-rated services will help . . . previously unconnected users" access the Internet, which could lead "them to demand access to the Open Internet itself." zero-rating "shouldn't be a binary choice; technology and innovation can create a better way." 143

Conclusion

It is unclear what effect the response by the TRAI will have on net neutrality and zerorating in India. Over 77%¹⁴⁴ of Indians surveyed support government intervention to ensure that consumer interest is protected and telecom operators are not allowed to charge more based on the sites and services accessed on the Internet. 53% of the people surveyed said they did not trust the charges levied by operators for the use of data service or value-added services.

TRAI's released report will hopefully clear up the governments' stance and actions moving forward regarding net neutrality and zero-rating. Facebook, of course, believes that both Internet.org and net neutrality can coexist, and it shall be seen with whom the TRAI agrees: the people of India or Facebook. Competition concerns are real, however there is a dearth of evidence that unpaid zero-rating is *prima facie* anti-competitive, though, as echoed in Mozilla's discussion on the matter, having "fast lanes" and paid zero-rating is likely to be viewed as anti-competitive and exclusive.¹⁴⁵

https://blog.mozilla.org/netpolicy/2015/05/05/mozilla-view-on-zero-rating/

143 Id.

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¹⁴¹ Mitchell Baker, Zero Rating and the Open Internet, Mozilla (May 6, 2015), https://blog.lizardwrangler.com/.

Denelle Dixon-Thayer, *Mozilla View on Zero-rating*, Mozilla (May 5, 2015), https://blog.mozilla.org/netpolicy/2015/05/05/mozilla-view-on-zero-rating/.

¹⁴⁴ Yuthika Bhargava, *77% Citizens Want Govt. To Protect Net Users: Survey*, The Hindu (Apr. 18, 2015), http://www.thehindu.com/news/national/77-citizens-want-govt-to-protect-net-users-survey/article7114972.ece?ref=relatedNews.

¹⁴⁵ Dixon-Thayer *supra* note 134.

NETHERLANDS*

Introduction

On May 8, 2012, the Dutch Senate adopted amendments to the Telecommunications Act of 1998 ("Telecommunicatiewet")¹⁴⁶ The new legislation established net neutrality and limited the circumstances under which ISPs can cut off subscribers.¹⁴⁷ The Netherlands has not specifically addressed the practice of zero-rating. However, the Dutch government specifically stated the Dutch telecommunication companies' practice of price discrimination was explicitly prohibited under the net neutrality policies.¹⁴⁸

Mobile and Internet Access in the Netherlands

According to the OECD, the total number of fixed broadband subscriptions in the Netherlands was 6,854,000 in June 2014.¹⁴⁹ Additionally, the total number of wireless subscriptions during June 2014 was 11,286,000.¹⁵⁰

According to Article 7.4a of the Netherlands Telecommunications Law, ISPs are defined as "Providers of public electronic communications networks over which Internet services are delivered and providers of Internet access services" (translated quote).¹⁵¹ The major mobile network providers in the Netherlands include Vodafone, T-Mobile, and the former Dutch state telecom Royal KPN NV.¹⁵²

https://www.eff.org/deeplinks/2012/05/netherlands-passes-net-neutrality-legislation.

^{*}Co-author: Taylor R. Moore. 2015 Google Policy Fellow.

¹⁴⁶ Netherlands: Amended Telecommunications Act Prescribes Net Neutrality, Stricter Cookie Provisions, Library of Congress, http://www.loc.gov/lawweb/servlet/lloc_news?disp3_l205403143_text (last updated May 15, 2012). ¹⁴⁷ Parker Higgins, The Netherlands Passes Net Neutrality Legislation, Elec. Frontier Found. (May 21, 2022),

¹⁴⁸ In the Netherlands, Where Zero-rating is Banned, KPN Just Doubled (Free Of Charge) the Mobile Internet Volume Caps to Encourage a Carefree Usage of its Online Videos, Rewheel (Feb. 6, 2015), http://dfmonitor.eu/downloads/Banning zerorating leads to higher volume caps 06022015.pdf.

¹⁴⁹ *OECD Broadband* Portal, Organisation for Economic Co-operation and Dev., http://www.oecd.org/sti/broadband/oecdbroadbandportal.htm (last updated July 23, 2015). ¹⁵⁰ Id

¹⁵¹ Dutch translation: "Aanbieders van openbare elektronische communicatienetwerken waarover internettoegangsdiensten worden geleverd en aanbieders van internettoegangsdiensten."

¹⁵² Netherlands Makes Net Neutrality a Law, BBC News (June 23, 2015), http://www.bbc.com/news/technology-13886440.

The Netherlands' Approach to Net Neutrality

During June 2012 the Netherlands became the first country in Europe to establish a legal framework supporting net neutrality.¹⁵³ The amendments to the Telecommunications Act were unanimously passed by the Senate and published in the official journal of the Netherlands, The Official Gazette of the Kingdom of the Netherlands.¹⁵⁴

As one of the 28 member states of the European Union (EU), the Netherlands is subject to the 2009 EU Telecoms Package. The 2009 EU Telecoms Package left considerable leeway for member states to implement their own net neutrality directives. These new provisions by the Dutch government are its way of implementing the 2009 EU Telecoms Package framework. Article 1(3a) of the Framework Directive states that EU member states may only adopt measure interfering with citizens' ability to access and use the Internet in limited circumstances.

The aim of the amendment that forms the Netherlands' net neutrality laws was to "guarantee free access to Internet under the law." Under the law, telecommunications companies and Internet service providers are prohibited from "block[ing], delay[ing] or obstruct[ing] in any way, services and other Internet and/or telecom traffic, unless necessary for reasons of congestion management, security, continuity of the network, etcetera." 160

The provisions were meant to "prevent telecom providers from blocking or throttling services such as Skype or WhatsApp from making their prices for Internet services dependent on the services used by the subscriber." These net neutrality provisions occurred as a reaction to KPN's 2011 announcement regarding the company's decision

¹⁵³ Higgins, *supra* note 139.

Netherlands: Amended Telecommunications Act Prescribes Net Neutrality, *supra* note 138; Loek Essers, *Dutch Ney Neutrality to Become Reality After Senate Approves Law*, PC World (May 9, 2012), http://www.pcworld.com/article/255296/dutch_net_neutrality_to_become_reality_after_senate_approves_law.html.

¹⁵⁵ Higgins, *supra* note 139.

¹⁵⁶ Id.

¹⁵⁷ *Id*.

¹⁵⁸ *Id*.

¹⁵⁹ Net Neutrality Laid Down in Dutch Law, Dutch Daily News (May 9, 2012), http://www.dutchdailynews.com/net-neutrality-laid-down-in-dutch-law/.

¹⁶⁰ Peter van der Veen, *Dutch Senate Approves Telecom Act: Net Neutrality and Restricted Use of Cookie* Codified, Future of Copyright (Sept. 5, 2012), http://www.futureofcopyright.com/home/blog-post/2012/05/09/dutch-senate-approves-new-telecom-act-net-neutrality-and-restricted-use-of-cookies-codified.html.

¹⁶¹ Essers, *supra* note 146.

to make users pay extra for the use of third-party messaging applications over 3G. KPN stated that the decision was a result of the increase of data usage and the company's desire to keep its average revenue per user up. Although KPN retracted the statement, the Second Chamber of Parliament asked the Minister of Economic Affairs to add net neutrality provisions to the telecommunications law.¹⁶²

The provisions state that, while traffic may be throttled in order to prevent congestion or protect the network, it may not be blocked except when necessary to "protect the integrity and security of the network or users' terminals." Specifically, Article 7.4a Telecommunication, the net neutrality provision, states (unofficial translation):

- 1. Providers of public electronic communication networks which deliver Internet access services and providers of Internet access services do not hinder or slow down applications and services on the Internet, unless and to the extent that the measure in question with which applications or services are being hindered or slowed down is necessary:
- 1. To minimize the effects of congestion, whereby equal types of traffic should be treated equally;
 - 1. To preserve the integrity and security of the network and service of the provider in question or the terminal of the end-user;
 - 2. To restrict the transmission to an end-user of unsolicited communication as referred to in Article 11.7, first paragraph, provided that the end-user has given its prior consent;
 - 3. To execute* a legislative provision or court order.

 (*=originally this read "to give effect to a legislative provision or court order." The current translation is correct)
 - 2. If an infraction on the integrity or security of the network or the service or the terminal of an end-user, referred to in the first paragraph sub b, is being caused by traffic coming from the terminal of an end-user, the provider, prior to the taking of the measure which hinders or slows down the traffic, notifies the end-user in question, in order to allow the end-user to terminate the infraction. Where this, as a result of the required urgency, is not possible prior to the taking of the measure, the provider provides a notification of the measure as soon as possible. Where this concerns an end-user of a different

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¹⁶² Iljitsch van Beijnum, *Netherlands Becomes World's Second "Net Neutrality" Country*, Ars Technica (May 10, 2012), http://arstechnica.com/tech-policy/2012/05/netherlands-becomes-worlds-second-net-neutrality-country/. ¹⁶³ *Id.*

provider, the first sentence does not apply.

- 3. Providers of Internet access services do not make the price of the rates for Internet access services dependent on the services and applications that are offered or used via these services.
- 4. Further regulations with regard to the provisions in the first to the third paragraph may be provided by way of an administrative order. A draft order provided under this paragraph will not be adopted before it is submitted to both chambers of the Parliament.
- 5. In order to prevent the degradation of service and the hindering or slowing down of traffic over public electronic communication networks, minimum requirements regarding the quality of service of public electronic communication services may be imposed on undertakings providing public communication networks.¹⁶⁴

The one significant exception to the net neutrality provision against throttling is a religious exception. This exception allows Internet users to request an ISP to filter their Internet traffic by blocking certain services and applications based on ideological grounds. The religious exception was added after the Dutch Labor Party accidentally voted in favor of an amendment proposed by the Reformed Political Party (SGP). Even though the filtering is at the customer's request, Dutch politicians reportedly feared that the exception could lead to censorship. The religious filtering exception is housed in Article 7.4a(1e), which says:

[Allowing the hindrance or delay of services] to comply with an explicit request of the subscriber to hinder services or applications on the basis of ideological motives specified by the subscriber, provided the provider does not give the subscriber a monetary or other advantage for this permission

Door Ot Van Daalen, *Translations of Key Dutch Internet Freedom Provisions*, Bits of Freedom (June 27, 2011), https://www.bof.nl/2011/06/27/translations-of-key-dutch-internet-freedom-provisions/.

 $^{^{165}}$ The Netherlands Approves Net Neutrality Laws, Gamepolitics.com (May 9, 2012),

http://www.gamepolitics.com/2012/05/09/netherlands-approves-net-neutrality-law; Lee Kaelin, *Netherlands Becomes First in Europe to Pass Net Neutrality Law*, Infowars.com (May 12, 2012), http://www.infowars.com/the-netherlands-becomes-first-in-europe-to-pass-net-neutrality-law/.

¹⁶⁶ *Id*.

¹⁶⁷ *Id*.

¹⁶⁸ Id.

(translated quote)¹⁶⁹

In May 2015, the Ministry of Economic Affairs issued guidelines on net neutrality for the Authority for Consumers and Markets (ACM). According to Article 21 of the Framework Act on Independent Governing Bodies, "the Dutch Ministry of Economic Affairs has a mandate to issue policy regulations that clarify the scope and subject matter of certain provisions that fall under the portfolio of the Ministry." The guidelines are the basis for the enforcement of the net neutrality laws by the ACM.

The Netherlands' Approach to Zero-rating

The Netherlands' net neutrality laws prohibit the practice of zero-rating. 173

The Netherlands' net neutrality law specifically prohibits the practice of price discrimination by ISPs. Price discrimination is a zero-rating scheme that involves the exemption of chosen services from a user's data allowance. ¹⁷⁴ Essentially, the two terms are used synonymously because zero-rating is a type of price discrimination that results in operators not charging end-users for accessing the data volume linked to specific applications or internet services. ¹⁷⁵

On June 30, 2015, the European Union agreed to an alternate version of the telecommunications law.¹⁷⁶ The terms agreed to by the European Parliament and the presidency of the EU, held by Latvia, must receive approval from the parliament and European governments before being entered into law and taking effect on April 30, 2016.¹⁷⁷ The law proposes equal treatment of Internet traffic lanes, but leaves room for

Wet van 10 Mei 2012 tot Wijziging van de Telecommunicatiewet ter Implementatie van de Herziene Telecommunicatierichtlijnen, Verheid.nl (June 4, 2012), https://zoek.officielebekendmakingen.nl/stb-2012-235 html

¹⁷⁰ Feyo Sickinghe, *Net Neutrality Guidelines in the Netherlands Come Into Force*, Bird and Bird (May 27, 2015), http://www.twobirds.com/en/news/articles/2015/netherlands/net-neutrality-guidelines-in-the-netherlands-come-into-force.

Youssef Fouad, *Netherlands: Regulation Clarifying the Provision on Net Neutrality*, IRIS Merlin (Jan. 29, 2015), http://merlin.obs.coe.int/iris/2015/6/article29.en.html.

¹⁷³ Paul Sweeting, *The Next OTT Battleground: Zero-rating*, Concurrent Media (Feb 23, 2015), http://concurrentmedia.com/2015/02/23/the-next-ott-battleground-zero-rating/. ¹⁷⁴ *Id.*

¹⁷⁵ Franceso M. Salerno et al., *Net Neutrality – quo vadis?*, Wolters Kluwer (Feb 12, 2015), http://kluwercompetitionlawblog.com/2015/02/12/net-neutrality-quo-vadis/comment-page-1/.

¹⁷⁶ Press Release, European Comm'n, Roaming Charges and Open Internet: Questions and Answers (June 30, 2015) (on file with author).

¹⁷⁷⁷ Natalia Drozdiak, EU Backs Diluted Form of Net Neutrality Law, The Wall St. Journal (June 30, 2015),

some exceptions. Under the law the EU proposes a system of net neutrality wherein all Internet traffic will be treated equally by ISPs.¹⁷⁸ However, the law is not free from all discrimination because forms of blocking and outright restrictions are still permissible in certain cases. Such circumstances of imposed blocking and restriction would include instances of counter attacks, illegal content, and the easement of the flow of traffic.¹⁷⁹

In comparison to the United States' strict approach to net neutrality, the EU proposition is considerably more lenient. The European Union's leniency is evident in its allowance of the prioritization of "specialized services." According to the EU, "specialized services" include services like "IPTV, high-definition videoconferencing or healthcare services like telesurgery." Critics remain skeptical of this exception for this seemingly overbroad category of "specialized services" because it appears to act as type of a fast lane once a particular service is deemed "specialized." The EU defends its exceptions of these services by stating "more and more innovative services require a certain transmission quality in order to work properly, such as telemedicine or automated driving. These and other services that can emerge in the future can be developed as long as they do not harm the availability and the quality of the Open Internet." ¹⁸²While the European Union's exception of these services runs alongside its promise of an "Open Internet," some feel that it undermines the goal of net neutrality and ultimately creates a two-tier Internet.

The new rules also allow the practice of zero-rating to continue. In its official statement, the EU asserted "Zero-rating does not block competing content and can promote a wider variety of offers for price-sensitive users, give them interesting deals, and encourage them to use digital services." Those against the EU agreement speculate that zero-rating will encourage "bigger companies to pay for a place on zero-rate programs, thus raising the barrier to entry for new, competitive services." ¹⁸³

The Impact of Internet.org and Zero-rating on the Netherlands

http://www.wsj.com/articles/eu-agrees-to-scrap-roaming-charges-enshrine-net-neutrality-1435639112

Roaming Charges and Open Internet, *supra* note 170.

¹⁷⁹ Drozdiak, *supra* note 171.

¹⁸⁰ Roaming Charges and Open Internet, *supra* note 170.

Mike Masnick, EU Moves To Create Internet Fast Lanes, Pretends It's Net Neutrality By Redefining Basic Words, Tech Dirt (June 30, 2015), https://www.techdirt.com/blog/netneutrality/articles/20150630/06594931497/eumoves-to-create-internet-fast-lanes-pretends-net-neutrality-redefining-basic-words.shtml.

¹⁸² Roaming Charges and Open Internet, *supra* note 170.

¹⁸³ Glyn Moody, EU plans to destroy net neutrality by allowing Internet fast lanes, Ars Technica (June 30, 2015), http://arstechnica.com/tech-policy/2015/06/eu-plans-to-destroy-net-neutrality-by-allowing-internet-fast-lanes/.

On January 27, 2015 the Dutch Authority for Consumers and Markets (ACM) fined Vodafone Netherlands and KPN for infringing the country's net neutrality laws. ¹⁸⁴ Vodafone was fined €200,000 while KPN faced a fine of €250,000. ¹⁸⁵ Specifically, KPN blocked services such as Voice over Internet Protocol (VoIP) access via its Wi-Fi hotspots. ¹⁸⁶ Vodafone was fined for zero-rating the 'HBO GO' app. ¹⁸⁷ Vodafone offered plans with which customers were able to watch pay-tv channel HBO using an app. ¹⁸⁸ The company offered this service without the deduction of data for a three-month period. ¹⁸⁹ Essentially, the ACM found that Vodafone's offer of a data-free access to a pay-tv application infringed paragraph three of Article 7.4a of the Telecommunications Act. ¹⁹⁰ This section of the Act explicitly prohibits ISPs from applying differentiated tariffs for accessing particular services on the Internet. On the other hand, KPN was fined for blocking various services "including several Internet calling services." ¹⁹¹

In January 2015, KPN attempted to launch an online and TV on-demand video service iTV Online app that allowed customers to watch TV on their smartphones or tablets. However, the implementation of the Dutch net neutrality laws rendered KPN unable to zero-rate the gigabyte usage of the iTV Online app over its 3G and 4G mobile networks. With KPN's restrictive open mobile Internet volume caps, the lack of zero-rating would only have allowed customers to watch a few hours of video per month. Because of the net neutrality restrictions, KPN doubled the mobile Internet volume caps on its SIM-only smartphone tariff plans, free-of-charge.

Commentators on the fines imposed of KPN and Vodafone say that the this situation shows the ACM's strict approach to the Department's Net Neutrality Guidelines and its

¹⁸⁴ In the Netherlands, Where Zero-rating is Banned, KPN Just Doubled (Free Of Charge) the Mobile Internet Volume Caps to Encourage a Carefree Usage of its Online Videos, *supra* note 140.

Fines imposed on Dutch telecom companies KPN and Vodafone for Violation of Net Neutrality Regulations, Auth. for Consumers and Mkts. (Jan. 27, 2015), https://www.acm.nl/en/publications/publication/13765/Finesimposed-on-Dutch-telecom-companies-KPN-and-Vodafone-for-violation-of-net-neutrality-regulations/.

¹⁸⁶ ACM fines KPN, Vodafone for Net Neutrality Violations, TeloGeography (Jan. 27, 2015), https://www.telegeography.com/products/commsupdate/articles/2015/01/27/acm-fines-kpn-vodafone-for-net-neutrality-violations/.

¹⁸⁷ Id.

¹⁸⁸ *Id.*

¹⁸⁹ Id.

¹⁹⁰ Franceso M. Salerno et al., *supra* note 169.

¹⁹¹ ACM fines KPN, Vodafone for Net Neutrality Violations, supra note 183.

¹⁹² Id.

¹⁹³ Id.

¹⁹⁴ Id.

¹⁹⁵ Id.

close adherence to the Net Neutrality Act. 196 Furthermore the ACM's treatment of the two companies clarifies the exact scope of the Net Neutrality Act. 197 This situation illustrates that "providers may only offer one single stand-alone service under the exemption for stand-alone services. 198

V. Conclusion

Currently the Netherlands' net neutrality laws make the practice of zero-rating impermissible. Additionally the Netherlands addressed zero-rating by explicitly banning the practice of positive price discrimination. Price discrimination was deemed a violation of the country's net neutrality laws because it is classified as a zero-rating practice.

 196 Sickinghe, supra note 163. 197 $\emph{Id.}$

¹⁹⁸ Id.

BRAZIL*

Who is online in Brazil?

Brazil's population is approximately 203 million, making it the fifth most populous country in the world. A 2013 Freedom House to study found that 52% of Brazilians were able to access the Internet in 2013, either inside or outside of the home. Twenty million Brazilians had fixed broadband connections, but about 60% of households were not Internet connected. Of the households that had Internet connections, 68% had fixed broadband (DSL or cable broadband). Only 18% of household Internet connections were mobile broadband. A percent of Internet users in the lowest income bracket used public paid Internet stores called "LAN houses" to access the Internet. These private businesses charge an hourly fee to use a computer.

Anatel, the Brazilian National Telecommunications Agency, regulates Brazil's telecommunication market.²⁰⁶ CGI.br is an independent consultive body created in 1995²⁰⁷ to oversee the development and deployment of Internet access in Brazil, as reaffirmed by Marco Civil, the Brazilian Law that regulates Internet use.²⁰⁸

Fixed Broadband Services in Brazil

As of spring 2015, the majority of Brazil's fixed-broadband market is provided by just three companies: Telefónica (providing both fixed and mobile broadband under the

^{*}Co-author: Katherine S. Boyle.

¹⁹⁹ Brazil Population, World of Meters, http://www.worldometers.info/world-population/brazil-population (last accessed June 30, 2015).

²⁰⁰ Freedom on the Net 2014: Brazil, Freedom House (2014),

https://freedomhouse.org/sites/default/files/resources/Brazil.pdf [hereinafter Freedom House Report].

²⁰¹

²⁰² *Id*.

²⁰³ Id.

²⁰⁴ Id

²⁰⁵ "LAN" stands for "local area network." Freedom House Report.

²⁰⁶ Anatel, http://www.anatel.gov.br (last accessed July 1, 2015).

²⁰⁷ About the CGI.br, CGI.br, http://cgi.br/about (last accessed July 1, 2015).

²⁰⁸ Marco Civil da Internet [Civil Rights Framework for the Internet] Law No. 12,965 of April 23, 2014, (Brazil) English translation available at https://www.publicknowledge.org/assets/uploads/documents/APPROVED-MARCO-CIVIL-MAY-2014.pdf [hereinafter Marco Civil Translation].

name Vivo²⁰⁹), América Móvil (providing both fixed and mobile broadband under the name Claro), and Oi (also providing both fixed and mobile broadband).²¹⁰

Mobile Broadband Services in Brazil

The four dominant telecom companies Vivo, TIM Brasil, Claro, and Oi provide 99% of mobile broadband. Since 2010, more than 148 million 3G-enabled wireless devices have been sold in Brazil. Brazilians choose to buy smartphones over traditional cell phones by a large margin. In 2014, 76% of mobile phones sold were smartphones. That margin is increasing rapidly: 93.3% of all mobile phones sold during the first quarter of 2015 were smartphones. However, about 35% of Brazil's population lives in areas that do not have 3G coverage. Coverage.

Network Neutrality in Brazil

Brazil enacted the Marco Civil da Internet, popularly known as the Internet Bill of Rights, in 2014. The bill was originally introduced in 2011 but did not gain traction at the highest political level until September 2013, when it was discovered that the U.S. National Security Agency had been spying on individuals and corporations in Brazil. The NSA intercepted millions of phone calls and emails, including those of Brazilian President Dilma Rousseff and Brazilian companies like Petrobras. President Rousseff asked the legislature to move quickly on the bill, leading to its enactment on April 24, 2014. The Marco Civil provides strong privacy, data security, freedom of expression and network neutrality rules.

²⁰⁹ Telefónica acquired Global Village Telecom ("GVT") in spring 2015, decreasing the number of major fixed-broadband providers from four to three. *Telefónica buys GVT and becomes undisputed leader in the Brazilian market* (Mar. 25, 2015),

http://saladeprensa.telefonica.com/jsp/base.jsp?contenido=/jsp/notasdeprensa/notadetalle.jsp&id=0&idm=eng&pais=1&elem=21331.

²¹⁰ Brazil - Fixed-Line Operators, BuddeComm, http://www.budde.com.au/Research/Brazil-Fixed-Line-Operators.html (last visited June 15, 2015).

²¹¹ Cellular Operators Market Share in Brazil, Teleco (May 27, 2015), http://www.teleco.com.br/en/en_mshare.asp.

²¹² Market Share of Mobile Operators' 3G Handsets, Teleco (Mar. 18, 2015) www.teleco.com.br/en/en mshare wcdma.asp (statistics as of January 2015).

²¹³ Smartphones in Brazil, Teleco (June 18, 2015) http://www.teleco.com.br/en/en_smartphone.asp.

²¹⁴ Internet.org Não Fere Neutralidade, Segundo Facebook [Internet.org Does Not Hurt Neutrality, According to Facebook], Canaltech (Mar. 27, 2015), http://canaltech.com.br/noticia/internet/internetorg-nao-fere-neutralidade-segundo-facebook-43913.

²¹⁵ Marco Civil Translation.

²¹⁶ Explainer: What Is Brazil's Internet Constitution?, Americas Society (Mar. 27, 2014), http://www.as-coa.org/articles/explainer-what-brazils-internet-constitution.

²¹⁷ Larissa Pinho & Katitza Rodriguez, *Marco Civil Da Internet: The Devil in the Detail*, Electronic Frontier Foundation (Feb. 25, 2014), https://www.eff.org/deeplinks/2015/02/marco-civil-devil-detail.

Network Neutrality Provisions of the Marco Civil

Many people praised the net neutrality provisions of the Marco Civil, comparing it to similar laws passed previously in Chile and the Netherlands.²¹⁸ The network neutrality provisions require Internet providers to treat all data equally on the Internet. The law explicitly states, in its article 9th, that "the party responsible for the transmission, switching or routing [of Internet traffic] has the obligation to process, on an isonomic basis, any data packages, regardless of content, origin and destination, service, terminal or application."²¹⁹

According to the plain text of the law, discrimination or degradation of Internet traffic is allowed for only two exceptional purposes: (1) technical requirements are essential to the provision of Internet service, and (2) prioritization of emergency services.²²⁰ Even when Internet providers are permitted by law to discriminate or degrade Internet traffic, the service provider must act with equality, proportionality, and transparency, and must offer services on nondiscriminatory terms and refrain from anticompetitive practices.²²¹ Internet providers involved in transmitting, switching, or routing are prohibited from blocking, monitoring, filtering, or analyzing the content of data packets, even when the Internet access is provided for free.²²²

Based on the plain language of the law, it would seem that zero rating, if considered a net neutrality issue, does not fit in either of the exceptions allowing for discrimination of web traffic (emergency services or technical requirements of the network). The law very clearly identifies these two exceptions as the only justifications for discrimination.

²¹⁸ Brazil's 'Marco Civil' Internet Civil Rights Law Finally Passes, With Key Protections Largely Intact, Tech Dirt (Mar. 27, 2014), https://www.techdirt.com/articles/20140326/09012226690/brazils-marco-civil-internet-civil-rights-law-finally-passes-with-key-protections-largely-intact.shtml; see also Marco Civil: Statement of Support from Sir Tim Berners-Lee, World Wide Web Found (Mar. 24, 2014) http://webfoundation.org/2014/03/marco-civil-statement-of-support-from-sir-tim-berners-lee.

²¹⁹ Marco Civil Translation, art. 9.

²²⁰ Marco Civil Translation, art. 9 § 1.

²²¹ Marco Civil Translation, art. 9 § 2.

²²² Marco Civil Translation, art. 9 § 3.

Zero-rating Practices in Brazil

A few individual regulators in Brazil look upon zero-rating favorably, ²²³ but they do not represent the unified position of the Agency, which has not taken a final stance on this debate.

Other actors within the government recently published their official positions rejecting zero-rating. Both the Secretariat for Economic Monitoring of Brazilian Ministry of Finance (SEAE/MF) and the legal advisory departments of both the Senate and the House of Representatives in Brazil have published legal opinions against zero-rating.²²⁴

A number of mobile carriers either have in the past or currently plan to offer zero-rating services to mobile phone users in Brazil. TIM currently offers zero-rating for WhatsApp,²²⁵ the most popular app and messaging service in Brazil.²²⁶ Claro currently offers zero-rating for Facebook, Twitter, and WhatsApp.²²⁷ Claro's zero-rating plan is available to both pre-paid and post-paid mobile phone subscribers.²²⁸ In 2014, Oi announced that, for a limited time, smartphone users could access Facebook and Twitter for free through the Opera Mini web browser.²²⁹

Claro currently offers a zero-rating promotion for Facebook, Twitter, and WhatsApp. Users must first subscribe to a mobile broadband data plan with a data cap.²³⁰ When

For example, Anatel Director Marcelo Bechara believes that zero-rating does not violate the net neutrality rules. *Marco Civil: Anatel Diz que Fará Consulta Pública Sobre Neutralidade de Rede [Marco Civil: Anatel Says It Will Make Public Consultation on Net Neutrality]* Convergencia Digital (Dec. 11, 2014), http://convergenciadigital.uol.com.br/cgi/cgilua.exe/sys/start.htm?infoid=38632.

²²⁴ Contribuições Pedem que Regulamentação não Engesse Marco Civil, Teletime (May 20, 2015), http://www.teletime.com.br/20/05/2015/contribuicoes-pedem-que-regulamentacao-nao-engesse-marco-civil/tt/412262/news.aspx.

Roberta Prescott, *LatAm: TIM signs with WhatsApp; Twitter grows 25.6% in Brazil*, RCR Wireless News (Dec. 30, 2014), http://www.rcrwireless.com/20141230/americas/latam-tim-signs-whatsapp-reveals-ott-strategy-twitters-numbers-tag5.

Fernando Paiva, *Pesquisa Lista os 25 Apps Mais Comuns na Home Screen dos Internautas Brasileiros*, Mobile Time (May 5, 2015), www.mobiletime.com.br/05/05/2015/pesquisa-lista-os-25-apps-mais-comuns-na-home-screen-dos-internautas-brasileiros/410683/news.aspx.

²²⁷ Novidades no Seu Plano [What's New in Your Plan], Claro, http://www.claro.com.br/infodadospos (last visited June 30, 2014).
²²⁸ Id.

²²⁹ 50 Million Brazilians Say "Oi" to Opera Mini, Opera Software (Feb. 24, 2014), http://www.operasoftware.com/press/releases/mobile/2014-02-24.www.operasoftware.com/press/releases/mobile/2014-02-24.

²³⁰ Currently, Claro offers data caps as low as 500 megabytes and as high as 7 gigabytes. *Planos Pós-Pago* [*Post-Paid Plans*], Claro, http://www.claro.com.br/celular/planos-pos/regiao/ddd43/PR/cidade (last visited July 3, 2015).

the user browses one of the zero-rated sites, the data used is not counted against the data cap. The promotion is valid for twelve months.

Post-paid subscribers to the "Controle" data plan can use text, audio, video and photo in WhatsApp, and the data is not counted against the user's data cap.²³¹ The user can continue to use WhatsApp for free even after the user has reached the data cap limit.²³²

TIM previously allowed zero-rating for Facebook and Twitter, but discontinued the promotion because the customer experience was not positive.²³³ "It was not transparent to customers when and how data was used due to the other applications that were being used at the same time, and they consumed data."²³⁴

The Debate of net neutrality implementation and zero-rating in Brazil

The Marco Civil empowers the President to regulate discrimination or degradation of Internet traffic under consultation with CGI.br and Anatel. The rules are in the process of being implemented, but it is already clear that some Brazilian regulators are supportive of zero-rating applications. Some Brazilian officials have publicly stated that they believe zero-rating does not violate the net neutrality rules of Marco Civil. While other policy makers says zero-rating does infringe net neutrality rules in MC.

One Anatel official stated that zero-rating applications may increase innovation by allowing corporations to develop different types of business models.²³⁶ He argued that

²³¹ Controle WhatsApp, TIM, http://www.tim.com.br/sp/para-voce/planos/controle/controle-whatsapp (last visited July 3, 2015); Claro Junta WhatsApp, Facebook e Twitter em Promoção de Zero Rating [Claro Adds WhatsApp, Facebook and Twitter to Zero-rating Promotion], Teletime (June 15, 2015), http://www.teletime.com.br/15/06/2015/claro-junta-whatsapp-facebook-e-twitter-em-promocao-de-zero-rating/tt/414167/news.aspx.

²³³ Roberta Prescott, *LatAm: TIM signs with WhatsApp; Twitter grows 25.6% in Brazil*, RCR Wireless News (Dec. 30, 2014), http://www.rcrwireless.com/20141230/americas/latam-tim-signs-whatsapp-reveals-ott-strategy-twitters-numbers-tag5.
²³⁴ *Id.*

Luís Osvaldo Grossmann, Anatel Insiste que Regulamentação Não Deve Impedir 'Zero Rating' [Anatel Insists that Regulations Should Not Prevent 'Zero Rating'], Convergencia Digital (June 8, 2015), http://wap.convergenciadigital.com.br/cgi/cgilua.exe/sys/start.htm?infoid=39796&sid=4; Zero Rating Não Fere a Neutralidade da Rede, Diz Getschko, do NIC.br [Zero Rating Does Not Violate Net Neutrality, Says Getschko, from NIC.br], Teletime (June 10, 2015), http://www.teletime.com.br/10/06/2015/zero-rating-naofere-a-neutralidade-da-rede-diz-getschko-do-nicbr/tt/413922/news.aspx.

²³⁶ Luís Osvaldo Grossmann, *Anatel Insiste que Regulamentação Não Deve Impedir 'Zero Rating'* [*Anatel Insists that Regulations Should Not Prevent 'Zero Rating'*], Convergencia Digital (June 8, 2015), http://wap.convergenciadigital.com.br/cgi/cgilua.exe/sys/start.htm?infoid=39796&sid=4 (statement of José Alexandre Bicalho, superintendent of planning and regulation of Anatel).

preventing zero-rating plans could hinder the emergence of new applications. Anatel officials believe there are four potential justifications for exceptions to network neutrality: (1) handling of network congestion, (2) spam blocking or denial of service attacks for security, (3) ensuring network quality, and (4) "quality of applications." Under this interpretation of the law, different types of applications can be treated differently, but similar applications must be treated equally.²³⁸

Anatel has requested comments from the public regarding the implementation of the Marco Civil. 239 CGI.br hosted its own consultation process. The result of these processes were then fed into a consultation led by the Ministry of Justice, which is responsible for drafting the presidential Decree. Based on the research developed by the Brazilian think tank InternetLab, the Ministry of Justice's consultations received a total of 1,843 registered participants who contributed with 1,200 comments divided into 339 topics created by these participants under the four main topics of the consultation: net neutrality, log retention, privacy and "others". The most discussion happened under "Other Issues and Considerations," with a received 124 lines of discussions, followed by network neutrality with 98 lines of discussions; log retention with 70 and Privacy with 68 active discussions. Among the discussions of net neutrality, zero-rating was the topic that received the most attention and arguments by participants.

Net neutrality advocates have urged the Brazilian government not to allow zerorating.²⁴⁰ Congressman Alessandro Molon – an influential politician who acted as the Marco Civil bill rapporteur - believes that zero-rating violates the letter of law and also its intents.²⁴¹

²³⁸ Id.

²³⁹ Net neutrality in Brazil; Anatel kicks off consultation, Bus. News Americas, Apr. 1, 2015; Consulta Pública nº 8/2015 - Tomada de subsídios sobre a regulamentação da neutralidade de rede, prevista no Marco Civil da Internet, Anatel, http://www.anatel.gov.br/dialogo/groups/profile/120/consulta-publica-no-82015-tomada-desubsidios-sobre-a-regulamentacao-da-neutralidade-de-rede-prevista-no-marco-civil-da-internet (last visited July 23, 2015).

²⁴⁰ E.g., Javier Pallero, Access Submits Comments on Zero Rating to Government of Brazil, Access (Apr. 2, 2015), https://www.accessnow.org/blog/2015/04/02/access-submits-comments-on-zero-rating-to-government-of-brazil. ²⁴¹ Zero Rating Não Se Encaixa Nas Exceções à Neutralidade do Marco Civil, Diz Molon [Zero Rating Does Not Fit the Exceptions to the Neutrality of the Marco Civil, Says Molon Teletime (June 8, 2015). http://www.teletime.com.br/08/06/2015/zero-rating-nao-se-encaixa-nas-excecoes-a-neutralidade-do-marco-civildiz-molon/tt/413529/news.aspx.

The vice president of institutional affairs at TIM, Mario Girasole, has criticized detractors of zero-rating, saying that net neutrality rules should be pragmatic, not dogmatic.²⁴² TIM contributed a public comment in response to Anatel's request. In the comment, TIM said:

Differentiated business models that do not interfere with routing routines or data traffic cannot, per se, be reputed violators of network neutrality. Quite the contrary, differentiated web access offers should be observed from a pro-competitive point of view, that is, the increase of the competition level in all relevant markets, benefiting the collective wellbeing. Particularly regarding zero-rating offers, it is to be noted that such practices are beneficial for all stakeholders in the value chain of the provision of telecommunications services and the provision of applications and content over the network. (...) For users the advantage is the ability to access more content, including local content, with the remainder of the franchise that will not be consumed by those zerorated. Thus, zero-rating practices can serve as a engine of citizens access growth (especially those from countries with low rates of digital inclusion to the Internet, such as Brazil) to knowledge available on the network, particularly as guarantee users the peace of mind need not to control the use in applications requiring more traffic time (such as research, social networks and others). Permitting the use of the remainder of his franchise in other services, without the need for new spending on the acquisition of an additional package of data or migration to a higher priced plan. Also serving as social inclusion mechanism for disadvantaged classes. (TIM, 2015)²⁴³

For Telefonica and Vivo, in their contribution to ANATEL's Public Consultation, Marco Civil does support some zero-rating practices that do not prioritize access or degrade traffic. The mobile operator went further to say that models that involve non-isonomic blocking of traffic (for example, where the access provider allows for the transmission of only certain applications, in a discriminatory manner, the moment the user's franchise is finished) do translate in undue discrimination of traffic and therefore should not be accepted (even if the operator is calling that "zero-rating"). The submission of Telefonica

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²⁴² TIM Defende uma Neutralidade Pragmática, Não Dogmática [TIM Advocates Neutrality that is Pragmatic, Not Dogmatic], Teletime (June 8, 2015), http://www.teletime.com.br/08/06/2015/tim-defende-uma-neutralidade-pragmatica-nao-dogmatica/tt/413527/news.aspx.

TIM Celular S.A., Contribution No. 66 to Anatel's Public Consultation (May 19, 2015), available at http://sistemas.anatel.gov.br/SACP/Relatorios/RelatorioDadosBd.asp?pCodProcesso=C1836&pCodTipoProcesso=1&pTipoRelatorio=1.

and Vivo concludes, in this specific regard that, the mere designation of a practice as zero-rating cannot be considered as a 'safe harbor' for arbitrary practices and the adherence to MCI should be made case-by-case basis.

In its contributions to the public consultations, CTS/FGV stated that²⁴⁴ the offer of free services after the data package of a consumer has ended – as it was the initial practice of the mobile carriers - is against article 9 of Marco Civil since it would hurt the isonomic treatment mandate stated in that Article.

In its contributions to Anatel's consultation, Netflix opposed zero-rating.²⁴⁵ It believes that the Open Internet should be free of commercial manipulation. For Netflix, zero-rating encourages users to visit only certain sites, thus allowing businesses to pick winners and losers, instead of allowing consumers to choose the best websites.²⁴⁶

The Brazilian Association of Information Technology and Communication Companies (Brasscom),²⁴⁷ emphasized that Internet penetration in Brazil varies by income.²⁴⁸ It stated that while 97% of Brazilians with the highest income had Internet access, only 17% of Brazilians with the lowest income had access.²⁴⁹ Brasscom believes that business models that subsidize Internet access will allow lower-income people to access the Internet, and anticompetitive practices can be policed with antitrust law.

GSMA, an association representing the interests of the mobile carriers, said that zerorating should be allowed because it is a business model that is good for consumers.²⁵⁰ It also stated that antitrust law can be used to police anticompetitive practices.²⁵¹

In its contributions, CISCO pointed that the essential issue should be guaranteeing transparency and easy ways for consumers to track their data and plan usages, and

Telefónica | Vivo, Contribution No. 60 to Anatel's Public Consultation (May 19, 2015), available at http://sistemas.anatel.gov.br/SACP/Relatorios/RelatorioDadosBd.asp?pCodProcesso=C1836&pCodTipoProcesso=1&pTipoRelatorio=1.

²⁴⁵ Netflix, *Questionamentos Anatel: Consulta Pública nº 8/2015*, at 16, available at http://www.anatel.gov.br/dialogo/file/download/373.

²⁴⁷ Brasscom, *Contribuições da Brasscom para Consulta Pública nº 8/2015*, at 5 (May 19, 2015), *available at* www.anatel.gov.br/dialogo/file/download/366.

²⁴⁸ Brasscom, *Contribuições da Brasscom para Consulta Pública nº 8/2015*, at 5 (May 19, 2015), *available at* www.anatel.gov.br/dialogo/file/download/366.

²⁵⁰ GSMA, *Contribuições da GSMA à Consulta Pública nº 8/2015*, available at http://www.anatel.gov.br/dialogo/file/download/367.

also if the offer made by the carrier is being fulfilled in terms of connection and speed packages.

While a series of consumer and digital rights organizations, such as IDEC, Intervozes and Article 19, argue that zero-rating can create market barriers to newcomer applications who do not have the market power to strike deals with mobile carriers or be part of packages of applications such as those within Internet.org.

Internet.org

Internet.org is a zero-rating program started by Facebook that would allow people in underserved regions to access some online content and apps for "free." So far, there is no official implementation of Internet.org in Brazil, but Facebook is actively courting the Brazilian government. As mentioned above, most of the operators offer some type of free access to Facebook's app. Internet.org, however, would conversantly provide access to other apps, not just Facebook. Facebook officials seem confident that Internet.org does not violate net neutrality. Mark Zuckerberg spoke personally to President Rousseff about expanding Internet access to Brazilians. The Brazilian government asked Facebook to comment on certain criticisms of Internet.org, and Facebook has responded, indicating that it does not believe that Internet.org violates net neutrality. Facebook has denied that Internet.org will create a "walled garden" in which Internet users are restricted to browsing only certain websites.

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²⁵² Lúcia Berbert, *Internet.org Será Avaliado por Grupo de Trabalho do Governo Federal [Internet.org Will Be Evaluated by the Working Group of the Federal Government*], Teletime (June 10, 2015), http://www.teletime.com.br/10/06/2015/internetorg-sera-avaliado-por-grupo-de-trabalho-do-governo-federal/tt/413926/news.aspx.

Internet.org offers more than 100 free basic services globally. Facebook recently announced the Internet.org Platform, which gives more developers an opportunity to include their services in Internet.org and gives people choice over the services that they want to use. A key guideline for developer participation is to encourage the exploration of the entire internet. Internet.org: Myths and Facts, Internet.org (May 13, 2015), https://internet.org/press/internet-dot-org-myths-and-facts.

Thiago Jansen, 'Não Vemos a Neutralidade da Rede Como Obstáculo ao Internet.org', Diz Executivo do Facebook no Brasil Leia Mais Sobre Esse Assunto em ["We Do Not See Net Neutrality as an Obstacle to Internet.org," Says Facebook Executive in Brazil], O Globo (June 10, 2015),

http://oglobo.globo.com/sociedade/tecnologia/nao-vemos-neutralidade-da-rede-como-obstaculo-ao-internetorg-diz-executivo-do-facebook-no-brasil-16393541.

²⁵⁵ Mark Zuckerberg Facebook post of April 10, 2015,

https://www.facebook.com/photo.php?fbid=10102020398242521.

Internet.org Não Fere Neutralidade, Segundo Facebook [Internet.org Does Not Hurt Neutrality, According to Facebook], Canaltech (Mar. 27, 2015), http://canaltech.com.br/noticia/internet/internetorg-nao-fere-neutralidade-segundo-facebook-43913.

²⁵⁷ Internet.org: Myths and Facts, Internet.org (May 13, 2015) https://internet.org/press/internet-dot-org-myths-and-facts.

Facebook representatives testified in a multistakeholder panel before Congress²⁵⁸ and reaffirmed Facebook's belief that Internet.org does not infringe Brazilian net neutrality rules.

Reactions to Internet.org in Brazil

After Facebook announced its intention to sign an agreement with the Brazilian government regarding Internet.org, Intervozes and a series of other civil society groups in Brazil sent a letter to President Rousseff, urging her not to enter into the deal.²⁵⁹ One concern was that "by promising free and exclusive access to certain services and applications, Facebook is actually limiting Internet access to other existing services."²⁶⁰ The letter stated that when the company providing Internet access is the same that provides Internet content, it limits cultural diversity and restricts the free flow of information on the Internet.

Other Zero-Rating Players

As previously mentioned, most of the Brazilian operators offer some zero-rating service in partnerships with Twitter, Facebook and WhatsApp. The founder of Wikipedia has indicated that he would like to expand WikipediaZero - a service already available in more than 12 countries - and his People's Operator²⁶¹ (a "charitable" mobile virtual network operator he is the CEO) to Brazil.²⁶² Spotify has publicly said that it does not plan to offer a zero-rating service in Brazil, as it has offered in other regions.²⁶³

Implications for the Future

Brazil's acceptance of zero-rating plans could influence the adoption of Internet.org in other developing countries. Brazil is a huge market that also has a large number of people without Internet access. If Brazil decides to partner with Facebook, it will open up

http://intervozes.org.br/entidades-divulgam-carta-a-dilma-rousseff-contra-anuncio-de-acordo-comfacebook.

²⁵⁸ O acordo firmado entre o governo federal e o Facebook para a implantação, no Brasil, do projeto denominado Internet.org [The Agreement Between the Federal Government and Facebook for Deployment of the Project Called Internet.org in Brazil], Portal da Câmara dos Deputados (June 30, 2015), http://www2.camara.leg.br/atividade-legislativa/webcamara/ao-vivo/transmissoes-dodia/videoArquivo?codSessao=53037#videoTitulo.

Entidades divulgam carta à Dilma Rousseff contra anúncio de acordo com Facebook [Entities disclose letter to Dilma Rousseff against agreement with Facebook], Intervozes (Apr. 24, 2015), http://intervozes.org.br/entidades-divulgam-carta-a-dilma-rousseff-contra-anuncio-de-acordo-com-

²⁶⁰ *Id*.

²⁶¹ People's Operator, https://www.thepeoplesoperator.com (last visited July 8, 2015).

²⁶² Wikipedia wants to bring MVNO, Wikipedia Zero to Latin America, Bus. News America, June 18, 2015.

²⁶³ Spotify Goes 'Zero Rating' with LatAm Carriers, Bus. News Americas, June 5, 2015.

a huge new source of Facebook users. In one survey of Brazilian Internet users, 55% of respondents agreed with the statement "Facebook is the Internet." Facebook will be able to greatly expand its dominance in the country if the government does decide to adopt Internet.org.

COLOMBIA*

In 2009, Colombia experienced a major turning point in telecommunications law and policy by adopting Law 1341.²⁶⁴ The law recognized the economic and social opportunities of Information Communication Technologies (ICTs) and sought expansion of those areas by implementing the principles of network neutrality.²⁶⁵ Since the expansion of telecommunications regulation, Colombia has continued to develop its regulatory system for communications. This case study outlines Colombia's approach to net neutrality and zero-rating practices following the implementation Law 1341's neutrality principles.

Mobile and Internet Access in Colombia

Colombia has the second largest population in South America and with 46 million citizens, has the 30th largest population in the world.²⁶⁶ This population supports a modern digital telephone network, employing satellite and microwave links, coax cable and two fiber optic trunk routes.²⁶⁷ The Colombian network includes 49 million mobile lines and 6.2 million broadband connections.²⁶⁸ Access to the Internet has been extended to 3 million users and the communications technology industry is revamping the lines from analogue connection to high speed Internet.²⁶⁹

The Colombian government invests in several programs aimed at increasing Internet access and usage. The *Union Temporal Fibra Optica Colombia* is a program that deploys and maintains a nationwide fibre-optic network.²⁷⁰ It is part of Vive Digital

²⁶⁶ The World Factbook, Cent. Intelligence Agency, https://www.cia.gov/library/publications/the-world-factbook/geos/co.html (last visited July 7, 2015).

^{*}Co-author: Ariel A. Diamond, 2015 Dale Hatfield Scholar.

²⁶⁴ L. 47426, julio 30, 2009, Diario Oficial [D.O.] (Colom.).

²⁶⁵ Id

²⁶⁷ About Colombia, Embassy Colum. http://www.colombiaemb.org/overview_(last visited July 7, 2015).

²⁶⁸ Colombia Telecom Update: 49M Mobile Subscribers, 6.2M Internet Broadband Connections, RCR Wireless News (Mar. 8, 2013), http://www.rcrwireless.com/20130308/carriers/colombias-telecom-landscape-update-49-m-mobile-subscribers-6-2-m-internet-broadband-connections-2.

²⁶⁹ Id.

²⁷⁰ Colombia's National Fibre Project Awarded, Telegeography (Nov. 10, 2011), https://www.telegeography.com/products/commsupdate/articles/2011/11/10/colombias-national-fibre-project-awarded. https://www.telegeography.com/products/commsupdate/articles/2011/11/10/colombias-national-fibre-project-awarded/.

Colombia that the government implemented as part of the 2010-2014 National Development Plan.²⁷¹ The program sought to connect 1,078 municipalities through 15,000km of optical fiber, bringing the number of Internet connections in Colombia to 8.8 million by 2014.²⁷² Following the completion of the four-year plan, the government boasts that 1,078 municipalities are connected to the Internet, including 100% of rural population centers of more than 100 inhabitants.²⁷³

In March 2014, Diego Molano, Colombia's minister for information and communications technology, stated in an interview with the Washington Post that the program pulled 2.5 million people out of poverty, but an international digital divide still exists because the majority of the world's apps and services are not built for the poor. He pressed that the nation will relentlessly move forward in connectivity, "Almost 80 percent of Colombians are connected. My forecast is, we'll go from 8.8 million to 27 million by 2018. Most of that will be wireless, using LTE." He added that Colombia will also implement a cloud storage program called Citizen Folder where "every citizen will have an official folder in the cloud with privacy restrictions and cybersecurity measures, but private companies will be able to interact with it...."

Colombia has several regulatory bodies within the government that oversee telecommunications. In 1994, Law 142 was enacted to create Colombia's information and communication technology regulator, the *Comisión de Regulación de Comunicaciones (CRC)*.²⁷⁷ This regulatory body was initially charged with increasing competition in telephone markets²⁷⁸ and was later given more broad regulatory power across markets through Law 1341 of 2009.²⁷⁹ The *Comisión* is now situated beneath the Ministerio de Tecnologías de la Información y las Comunicaciones (MINTIC), which retains responsibility for allocation of frequencies, policy development, and enforcement

²⁷¹ *Id*.

²⁷² Id.

²⁷³ Progress Toward a New Colombia, Presidencia.gov.co,

http://wp.presidencia.gov.co/sitios/especiales/Documents/20150515-100-logros/100-logros.html#logro49 (last visited July 7, 2015).

²⁷⁴ Brian Fung, *What Washington Can Learn from Colombia's Genius Plan to Lift Millions Out of Poverty*, Wash. Post (Mar. 12, 2014), https://www.washingtonpost.com/blogs/the-switch/wp/2014/03/12/what-washington-can-learn-from-colombias-genius-plan-to-lift-millions-out-of-poverty.

²⁷⁵ Id

²⁷⁶ Id.

²⁷⁷ OECD Review of Telecommunication Policy and Regulation in Colombia, OECD Publishing 18 (Apr. 9, 2014), http://dx.doi.org/10.1787/9789264208131-en.

²⁷⁹ L. 47426, julio 30, 2009, Diario Oficial [D.O.] (Colom.).

in ICT industries.²⁸⁰ Law 1341 also created Agencia Nacional de Espectro, which oversees spectrum management, planning, and control. In 2012, the Autoridad Nacional de Televisón was set up as an independent regulatory body to regulate television broadcasting and content.²⁸¹

As of 2013, five corporate groups account for over three-quarters of telecommunication industry revenues: América Móvil, Telefónica, Tigo, UNE-EPM, ETB, DirecTV. 282 Claro (Comunicación Celular S.A. Comcel) leads the mobile market with a 61.9% market share, followed by Telefónica's Movistar (Telefónica Móviles Colombia S.A.) with 23.85%, Tigo (Colombia Móvil) with 13.48%, Uff Móvil with 0.67% and UNE EPM Telecomunicaciones with 0.10%.²⁸³

The OECD 2013 report on Colombia concludes that the nation significantly lags behind other OECD countries in broadband penetration, speed, and prices, while the markets for mobile, broadband, and telephony are highly concentrated at local and regional levels.²⁸⁴ Colombia was one of the last countries in Latin America to introduce mobile services when the cellular mobile telephony concessions were granted in 1994.²⁸⁵ There is unequal distribution of population and so there is a high gap in access to ICTs between the urban and rural areas of the country.²⁸⁶

Colombia's Approach to Net Neutrality

The 1341 Act of 2009 broadened Colombia's telecommunications regulatory scheme by outlining a general framework for the ICT sector.²⁸⁷ Article 6 provides the definition of ICTs as the "set of resources, tools, equipment, software, applications, networks and media, allowing the collection, processing, storage, and transmission of information voice, data, text, video and images."288 Article 2 of Law 1341 establishes guiding principles for the law and states "Information Technology and Communications must serve the general interest and the duty of the State to promote efficient and equal

²⁸⁰ Id.

²⁸¹ Id.

²⁸² Id.

²⁸³ Colombia Telecom Update: 49M Mobile Subscribers, 6.2M Internet Broadband Connections, RCR Wireless News (Mar. 8, 2013), http://www.rcrwireless.com/20130308/carriers/colombias-telecom-landscape-update-49-mmobile-subscribers-6-2-m-internet-broadband-connections-2.

²⁸⁴ OECD Review of Telecommunication Policy and Regulation in Colombia, OECD Publishing 18 (Apr. 9, 2014), http://dx.doi.org/10.1787/9789264208131-en.

²⁸⁵ *Id*.

²⁸⁷ L. 47426, julio 30, 2009, Diario Oficial [D.O.] (Colom.).

access opportunities to all of the country."289 The guiding principles are organized into eight categories: priority access and use of information technology and communications, free competition, efficient use of infrastructure and scare resources, protection of the rights of users, promotion of investment, technological neutrality, the right to communication, information, and education and basic ICT services, and responsible use of ICT by governments²⁹⁰

Article 2, Section 6 of the 1341 Act of 2009 specifically defines that "the State shall guarantee the free adoption of technologies... and ensure free and fair competition, and its adoption is in harmony with sustainable environmental development. 291 Article 4 outlines when regulatory intervention is needed in the area of ICT including: protecting the rights of users, promoting universal service and development of content and applications, ensuring free and fair competition, coverage for areas difficult to access, expansion of service coverage, industry development to contribute to economic growth, competitiveness, job creation and exports.²⁹² These articles have consolidated the mandate for the State to further regulate ICTs market in Colombia, including net neutrality as described further below.

In 2011, Law 1450 was passed and outlines the principles of net neutrality, specifically in its article 56, while stating that the CRC must regulate telecommunications under the principles and provisions of the 2009 law. 293

Article 56 establishes that:

Article 56. Neutrality Internet. The Internet service providers:

1. Notwithstanding the provisions of Law 1336 of 2006 (sic, 2009), may not block, interfere with, discriminate or restrict the right of any Internet user to use, send, receive or offer any content, application or legal service through from Internet. In this regard, they must offer each user an Internet access service or connectivity, not arbitrarily distinguish content, applications or services based on the source or ownership of these. The Internet service providers can make offers to the needs of market segments or its users according to their use and consumption profiles, which will not be understood as discrimination.

²⁹⁰ Id.

²⁹¹ Id.

²⁹² Id.

²⁹³ L. 48/102, junio 16, 2011, Diario Oficial [D.O.] (Colom.).

- 2. They may limit the right of a user to enter or use any kind of instruments, devices or devices on the network, provided they are legal and that they do not damage or harm the network or service quality.
- They offer users parental controls service for offending against the law, giving the user information in advance of clear and precise about the scope of such services.
- 4. They posted on a website, all information relating to the characteristics of Internet access offered, speed, quality of service, differentiating between national and international connections as well as the nature and service guarantees.
- 5. They implement mechanisms to preserve the privacy of users against viruses and network security.
- 6. They block access to certain content, applications or services, only at the express request of the user. Paragraph. The Communications Regulation Commission shall regulate the terms and conditions of application of the provisions of this article. The initial regulation must be issued within six months from the entry into force of this law.

To further clarify the statements of the telecommunications law of 2001, CRT's Resolution 3502 of 2011 was promulgated. The resolution's purpose is to define "terms and conditions to be met by suppliers of networks and telecommunications services that provide the service of Internet access" to comply with the rules of net neutrality. 294 Its mandates applies to "suppliers of telecommunications networks and services that provide the Internet access service and other providers or users that make use of such access, in accordance with Article 56 of Law 1450 of 2011 and Law 1341 of 2009."295 The resolution provides four core principles for net neutrality: free choice, no discrimination, transparency, and information.²⁹⁶

²⁹⁵ L. 48285, diciembre 16, 2011, Diario Oficial [D.O.] (Colom.).

²⁹⁶ Id. Original in Spanish: "Artículo 3°. Principios. 3.1. Libre elección. El usuario podrá libremente utilizar, enviar, recibir u ofrecer cualquier contenido, aplicación o servicio a través de Internet, salvo en los casos en que por disposición legal u orden judicial estén prohibidos o su uso se encuentre restringido. Adicionalmente, el usuario podrá libremente utilizar cualquier clase de instrumentos, dispositivos o aparatos en la red, siempre que sean legales y que los mismos no dañen o perjudiquen la seguridad de la red o la calidad del servicio. 3.2. No discriminación. En todo momento, los proveedores de redes y servicios de telecomunicaciones que prestan el servicio de acceso a Internet brindarán un trato igualitario a los contenidos, aplicaciones y servicios, sin ningún tipo de discriminación arbitraria, en especial en razón al origen o propiedad de los mismos. En todo caso, conforme lo previsto en el artículo 56 de la Ley 1450 de 2011, los proveedores de redes y servicios de telecomunicaciones que prestan el servicio de acceso a Internet podrán hacer ofertas según las necesidades de los segmentos de mercado o de sus usuarios de acuerdo con sus perfiles de uso y consumo, lo cual no se entenderá como discriminación. 3.3. Transparencia. Los proveedores de redes y servicios de telecomunicaciones que prestan el servicio de acceso a Internet deben revelar sus políticas de gestión de tráfico a los usuarios y a otros

Article 3 defines the four core principles as:

- 3.1. Free choice. The user is free to use, send, receive or offer any content, application or service over the Internet, except in cases where by law or court order are banned or its use is restricted. Additionally, the user is free to use any class of instruments, devices or devices on the network, provided they are legal and that they do not damage or harm the security of the network or service quality.
- 3.2. No discrimination. At all times, providers of telecommunications networks and services that provide the Internet access service provide equal treatment to content, applications and services, without any arbitrary discrimination, particularly because the origin or ownership thereof. In any case, under the provisions of Article 56 of Law 1450 of 2011, network providers and telecommunications services providing access service to the Internet may make offers to the needs of market segments or its users. According to their use and consumption profiles, which will not be understood as discrimination.
- 3.3. Transparency. The providers of telecommunications networks and services that provide the Internet access service must disclose their traffic management policies to users and other providers who have access to your network.

 3.4. Information. The providers of telecommunications networks and services that provide the Internet access service must provide the user with all the information associated with the service provision conditions including speed, quality, traffic management practices relating to each plan offered or agreed on the terms set forth in Resolution 3066 CRC 2011.

Article 5 forbids content blocking stating that providers of telecommunications networks and services that provide the Internet access services may not block, interfere with, discriminate or restrict the user's right to use, send, receive or offer any content, application or service over the Internet, without the express consent of the user. The article, however, authorizes end-user parental control determining clear and transparent information on its function to the user. ²⁹⁷

proveedores que tengan acceso a su red. 3.4. Información. Los proveedores de redes y servicios de telecomunicaciones que prestan el servicio de acceso a Internet deben suministrar al usuario toda la información asociada a las condiciones de prestación del servicio incluida velocidad, calidad, prácticas de gestión de tráfico relativas a cada plan ofrecido o acordado, en los términos dispuestos en la Resolución CRC 3066 de 2011." ²⁹⁷ Id.

Article 7 of the resolution allows suppliers of telecommunications networks and services to implement traffic management measures that are reasonable and do not discriminate against any supplier, service, content or protocol.²⁹⁸

Traffic management practices are considered reasonable when they are intended to:

- 7.1. Reduce or mitigate the effects of congestion on the network.
- 7.2. Ensure the security and integrity of networks.
- 7.3. Ensure quality of service to users.
- 7.4. Prioritizing generic classes or types of traffic based on the quality of service requirements (QoS) characteristics of such traffic, such as latency and delay thereof.
- 7.5. Provide services or capabilities according to customer choice, that meet the technical requirements, standards or best practices adopted by Internet governance initiatives or organizations of standardization.

Additionally, Article 8 on traffic prioritization elaborates that telecommunications providers who supply Internet "may not perform behaviors prioritization, degradation or blocking that contravene the provisions of the present resolution."²⁹⁹

Zero-rating in Colombia

The perpetuation of governmental acceptance of programs such as Internet.org and other zero-rating practices, in Colombia demonstrates the nation's unique implementation of its own net neutrality rules.

While the language of Act 1341 of 2009 outlines the goals of net neutrality and implements the goals of free and fair competition, CRT Resolution 3502 did not go far enough and remitted its application to open ended principles contained in Article 3. The resolution ended up allowing for traffic prioritization, degradation or blocking by providers that do not "contravene the provisions of the resolution," by impeding on free choice, non-discrimination, transparency, or information. Traffic management measures are also allowed if they are reasonable and do not discriminate against any supplier, service, content or protocol. The resolution ultimately holds that some

²⁹⁹ Id

²⁹⁸ Id.

³⁰⁰ L. 48285, diciembre 16, 2011 DIARIO OFICIAL [D.O.] (Colom.).

restrictive behavior will be allowed unless it is against the core principles of neutrality outlined in Article 3.

Other nations including the United States and Chile use language in net neutrality regulations that do not allow room for discrimination, no matter how reasonable. For example, in July 2010 the Chilean Congress passed a set of amendments to the General Telecommunications Law stating "No [ISP] can block, interfere with, discriminate, hinder, nor restrict the right of any Internet user of using, send, receive, or offer any content, application, or legitimate service through the Internet, as well as any activity or legitimate use conducted through the Internet." Chile's guarantee of net neutrality and prohibition of zero-rating does not allow for any blocking, interference, discrimination or other form of hindrance, while Colombia's providers must adhere to the neutral principles of Article 3 when restricting services or use.

Zero-rating models and services in Colombia

Select mobile operators offer free WhatsApp services in Colombia including Movistar and Claro. Virgin Mobile has operated in Colombia since April 2013 and provides mobile services through the mobile operator Movistar. Virgin Mobile announced that it will start charging for WhatsApp voice calling service according to Comunidad Ola. The free service to call other WhatsApp users requires an Internet connection.

Internet.org in Colombia

Colombia was the first country in Latin America and the fourth country in the world to receive the new Internet.org service. The service is provided through Latin American mobile carrier Tigo and is aimed at low income and rural users, offering more than a dozen tools through the Android operating system like Facebook's social network and messaging service, health information, and job postings. These services are available without incurring any data charges for the users, thanks to negotiated agreements with

³⁰² Chile: A Leader in Net Neutrality Legislation, OpenMedia.ca, https://openmedia.ca/plan/international-comparisons/chile (last visited July 7, 2015).

³⁰³ Virgin Mobile Colombia to Charge for Use of WhatsApp Calls, Telecompaper (Apr. 8, 2015), http://www.telecompaper.com/news/virgin-mobile-colombia-to-charge-for-use-of-whatsapp-calls--1075698.

³⁰⁴ Id.

³⁰⁵ Id

Facebook CEO Mark Zuckerberg Brings Free Internet to Colombia, TECH2 (Jan. 15, 2015), http://tech.firstpost.com/news%20-%20analysis/facebook-ceo-mark-zuckerberg-brings-free-internet-to-colombia-

David Talbot, Facebook's Internet.org Hits Global Flak, MIT Tech. Rev. (May 18, 2015), http://www.technologyreview.com/news/537441/facebooks-internetorg-hits-global-flak.

carriers. 308 Juan Minuel Santos the Colombian President stated his perceived benefits of zero-rating during the launch of Internet.org "We're forming a great alliance --Facebook and Colombia -- to give access to millions of Colombians who otherwise would not be able to access the Internet." 309

There are early criticisms rising around Colombia's implementation of Internet.org. The Karisma Foundation points out to the MIT Technology Review that the mobile carrier Tigo told customers that it would discontinue the free apps on May 31³¹⁰ therefore was not actually a service nor a effort of digital inclusion, but just a marketing effort. Additionally, Tigo decided to offer a 60-day free trial of Facebook, creating confusion in Colombia about the application and what was being offered under which package.³¹¹ Karisma Foundation, a civil society organization in Colombia focused on digital rights and fostering access to internet and FOSS, believes that zero-rating may damage the enjoyment of internet benefits because "people don't realize they are only on Facebook—not on the Internet."312 Users are confusing the Internet.org app with the Internet, and the confusion is even bigger on those rural and secluded communities targeted by the government and Facebook.³¹³

Conclusion

Colombia implemented net neutrality principles into its telecommunication law in 2009.314 In 2011, regulations were set concerning neutrality and telecommunication management.³¹⁵ Internet.org was introduced in 2014, making Colombia the first country in Latin America to strike the deal. Internet.org has not faced any legal challenges in Colombia yet, and the governmental support it has received might indicate that the government believes that it does not violate Colombia's net neutrality principles as long as the provider's aim is reasonable and not against the principles of neutrality stated in Resolution 3502 of 2011.

³⁰⁹ David Bogado & Katitza Rodriguez, *Does Internet.org Leave Latin Americans Without A Real Internet?* Electronic Frontier Found. (Apr. 20, 2015), https://www.eff.org/deeplinks/2015/04/does-internetorg-deprive-latinamericans-real-internet.

³¹⁰ David Talbot, Facebook's Internet.org Hits Global Flak, MIT Tech. Rev. (May 18, 2015), http://www.technologyreview.com/news/537441/facebooks-internetorg-hits-global-flak ³¹¹ *Id*.

³¹² *Id*.

³¹⁴ L. 47426, julio 30, 2009 DIARIO OFICIAL [D.O.] (Colom.).

³¹⁵ L. 48285, diciembre 16, 2011 DIARIO OFICIAL [D.O.] (Colom.).