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Shedding light on net neutrality: The Brazilian case

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Shedding light on net neutrality: the Brazilian case

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ABSTRACT

The recently enacted “Civil Rights Framework for the Internet” (Marco Civil), is a Law that has set the grounds for different Internet related rights in Brazil. Among its provisions are the ones related to network neutrality. Due to the importance of the topic, as well as its relevance for the Internet ecosystem, this paper aims at analyzing net neutrality as per established on Marco Civil. In order to do so, it utilizes the theory of Chris Marsden, who has classified neutrality into the "backward-looking" and “forward-looking” models and also defends a co-regulatory institutional model. Moreover, this paper also draws insights from the recent debate over net neutrality United States, which are also re-evaluating it’s regulatory approach to the topic.

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1. Introduction

While the Internet's impact is still an unknown territory for most persons, "netneutrality" is a concept that most people have heard of. The topic has gained momentum in different countries around the globe, and in Brazil it was no different. The recently enacted "Civil Rights Framework for the Internet" Law # 12.965/14 ("Lei do Marco Civil da Internet"), set the grounds for the network neutrality in the country. By enacting Marco Civil, Brazil has taken a major step towards establishing a clear path to be followed in the development of the Internet in the country. Notwithstanding its clear provision, it still needs to be further regulated by a presidential decree, with inputs from both the Brazilian Internet Steering Committee (CGI.br) and ANATEL, the national telecommunications agency.

The United States are also evaluating the regulation of net neutrality, and intends to release new rules within the next months. The debate is a heated one also due to some announced business deals that are challenging the current regulatory framework in the country. Due to the importance of the topic, as well as its relevance for the Internet ecosystem, this paper aims at analyzing the main aspects of net neutrality as per established on Marco Civil. In order to do so, it utilizes the theory of Chris Marsden. It also draws insights from the recent debate over net neutrality United States.

This paper describes the concept of net neutrality, and characteristics that are highlighted across the main studies in the field. It also explains the "two-sided market" theory and importance in the development of networks. Further, it explains what some of the main authors in the field argue, and what are the main differences among them. Additionally, it uses Marsden's theory in order to define net neutrality as well as to find the institutional framework necessary to be established in order to regulate net neutrality. Moreover, we explain the main issues currently being raised in the United States, and describes how the country is looking at its regulatory framework. It also describes how Marco Civil was created and describes how it approaches net neutrality. Lastly, it analyzes Marco Civil under the frameworks established by Marsden.

2. What is net neutrality?

There is no homogeneous concept of network neutrality. However, there are some characteristics that are highlighted across the main studies in the field: "(i) the principle of net neutrality imposes an obligation not to block users from accessing certain websites and applications, and is also forbidden to ISPs arbitrarily slow down or impede access to specific applications to service providers; (ii) net neutrality prevents differential charging for access to certain content and applications are free to charge different rates depending on the access speed or

volume of bandwidth used; and (iii) ISPs must maintain transparent and reasonable practices concerning their technical standards of traffic management”¹.

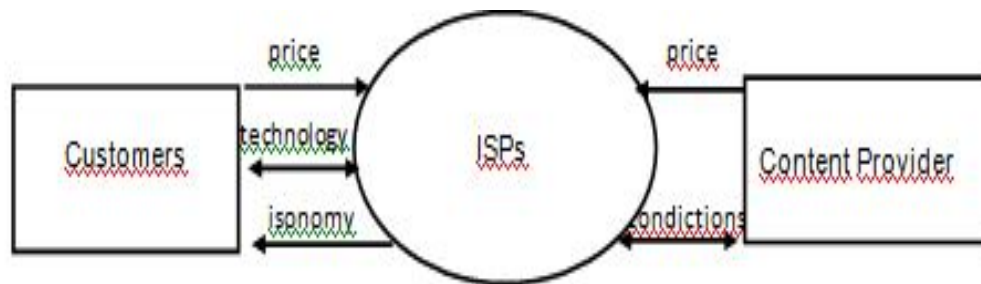
There are three possible ways in which discrimination occurs: (i) blocking applications that are not aligned with the interests of network administrators; (ii) discrimination by speed, which can be “negative” (application with a lower speed in comparison to others) or “positive” (application with a faster speed in comparison to the others); and (iii) price discrimination, which can also be “positive” (a lower price is charged for a particular application) or “negative” (a higher price is charged for a particular application).

Advocates of net neutrality argue that it lowers barriers to entry, allowing innovators and smaller ISPs to flourish. The opposite view, however, argues that imposing neutrality rules would discourage investment in internet infrastructure and limiting the flexibility of ISPs to innovate and find innovative business models.

Contrary to what happens in telephony network, a support network to the Internet presents positive externalities of market called two-sided markets². In this case, the platform of ISPs connects on one side the content providers and on the other, the consumers for such content (Figure 1 below). This difference is reflected in the complexity of pricing the services provided as well as in the possibility of creating cross-subsidy between the two sides, as the curves of elasticity does not remain fixed, on the demand side as well as on the offer side. While in telephony was very easy to adopt the model “caller pays” given this role is transient in the two-sided market it isn't so easy identify the best business model. As per shown in Figure 1, on the left side are the consumers, that establish commercial relationships with the ISP and also relations concerning the technical conditions and, where applicable, those regarding isonomy. On the right side, content providers (CAPs) which also have commercial relations with the ISPs.

¹ Ramos, Pedro Henrique Soares. Network Neutrality and the “Marco Civil” of the Internet: a guide for interpretation. TPRC, 2014. Electronic copy available at: <http://ssrn.com/abstract=2496076>.

² The two-sided market is an instrument of analysis widely used in situations where a platform allows the relationship to different users. One of the clearest examples cited refers to credit cards in which the platform used is represented by the carrier of the cards used as means of payment and the two sides are, respectively, the buyers and retailers. For more details see Rochet and Tirole (2002).

FIGURE 1: ISPs TWO-SIDED MARKET

Source: Blowers (2010) e DigiWorld (2012).

The nature of the neutrality present in a platform of two sides also reflects the existence of relations of positive externalities intra groups in the sense that it is interesting for the content providers to increase the mass of consumers and, in the same way, users perceive value in the improvement and extension of the content provided.

However, there are also negative externalities, in particular in the direction of the content providers to users. This type of externality occurs when the number of users increases in such a way as to create bottlenecks and congestion in networks so that the operators of these networks, for technical or economic reasons, decrease the rate of transmission for content download, degrading the technical conditions of delivery of the requested service.

In other words, the network neutrality is a principle that states each Internet's user should be treated in an isonomic way and this is applicable to "both sides" of the platform, causing network providers (ISPs) to apply the same policy of treatment to the data transmitted by content providers, with no discrimination, and with equal billing for all users on the basis of access to content, web sites platforms, type of equipment used by the user and communication mode.³

Tim Wu, Professor of the Law at Columbia University, was responsible for coining the term "neutrality network" in 2003. He presents a work of theoretical nature pro neutrality network which sustains that the deployment of a system of non-discrimination in broadband environment ensures the neutrality of networks. One of his main ideas of refers directly to evolutionary theories and shumpeterian ideas related to the development of the economy⁴. The author emphasizes that the

³ Source: Digiworld – IDATE (2014). Net neutrality – International benchmark: how are telcos, content providers and regulators positioning themselves. IDATE. Motpellier, France. Dowload <http://bit.ly/1mhg1cx> 03/03/2014.

⁴ Wu, T. *Network Neutrality, Broadband Discrimination*. Journal of Telecommunications and High Technology Law, Vol. 2. 2003

neutrality of network is not different from the challenge to promote fair competition evolutionary in any private environment. Also emphasizes that the interests that promote the network neutral are the same that establish a darwinian competition. According to him, the evolution of the Internet in a darwinian way stimulates a network architecture based on the principle of "end to end" , by which all packets are transferred with the same priority in favor of network performance, making the control of data integrity only in end nodes of the network.

In principle, this architecture ensures that the network keeps neutral for all and the "natural selection" among service providers is based on the performance of applications, present at the ends of the network, recovering the failures occurred along the network. However, the author is quite cautious and emphasizes that the merits of evolutionary model does not necessarily are those that encourage the preservation of a neutral network. In other words, the strengthening of some service providers, on the basis of its competitive advantages, stimulates innovation and increased investment in features that increase the performance of applications, but it can also compromise the maintenance of neutrality.

Christopher Yoo, Professor of the Law at the University of Pennsylvania has diverging points of view in regards to the importance of neutrality. Yoo's assumption is that there is a high diversity of demand of the users⁵ of the network and the appropriate treatment of this high diversity does not affect consumers and innovation in a negative way. Yoo considers the violation of neutrality principle takes place when mechanisms that allow the treatment of data are adopted and it is needed due to the intense and heterogeneous user demand. At the beginning of the Internet, he adds, the main applications were the e-mail, file transfer, and, subsequently, the access to Web pages. Currently we observe other types of traffic, such as voice over IP (VoIP) and compressed video (streaming video), for which delayed intricate can adversely affect the quality of the application, requiring network provider's policies for the prioritization of these flows.

3. Marsden's approach to net neutrality

For the purpose of this paper, we will utilize a framework introduced by Chris Marsden, Professor at the University of Sussex, one related to the core definition of net neutrality and the other one related to the institutional framework necessary to be established in order to regulate neutrality. First, in regards to the definition of neutrality itself, there are two main classifications according to Marsden⁶, as follows:

⁵ As far the network becomes a multiservice network, instead a narrowband fixed network, in which the participation of traffic of mobile network is rising, the neutrality could be ineffective for different levels of demand, requiring the prioritization of traffic according to their nature .According to CISCO'S forecast, the evolution of the Internet traffic for the period 2013 to 2018 shows an increase in the participation of traffic profile of games online, 47% to 58 %, a reduction of traffic exchange of files, emails, and navigation, 21% to 10 %, and the continued participation of video traffic, around 33 %.

⁶Marsden, C. *Net Neutrality – Towards a Co-regulatory Solution*. Ed. Bloomsbury Academic. London and New York. 2010

(i) "Backward-looking net neutrality lite", it's a bland and conservative network neutrality approach, by which the user should not be hindered by no transparent and arbitrary practices, on behalf the network providers (ISPs); and

(ii) "Forward-looking positive net neutrality", a network neutrality that allows better exploit the positive effects of externalities as provides better levels of QoS (Quality of Service) for higher prices, offered in a fair, reasonable and non-discriminatory basis to all users, the modern version of common carriage.

There is a continuous range of measures between the first and the second approach, where the biggest difference is the possibility on the forward-looking approach to invest in mechanisms for QoS differentiation and charge for Premium Service. As described by Marsden, no extreme is effective to provide a good solution to the dilemma of continuing to invest in network infrastructure and, at the same time, keep it open and in an isonomic manner. However, controlling the content transmitted, without clear rules and informed to the user, it is the decision more harmful.

Marsden's contributions go beyond the discussions of the categories of net neutrality. As per mentioned above, he also provides an institutional framework for the regulation of net neutrality: the co-regulation. Co-regulation is a form of regulation which is neither state or a regulatory institution has specific functions and also it isn't a kind of self-regulation as one can see in industry-led standard setting.

According to Marsden, the term co-regulation "encompasses a range of different regulator phenomena, which have in common the fact that the regulatory regime is made up of a complex interaction of a general framework of legislation and a self-regulatory body"⁷. The state and different stakeholder groups including, such as representatives of consumers and the private sector are requested to join an institutional organism to address net neutrality regulation. Such theory also argues that it is essential that such co-regulation be backed up by the creation of clear lines of accountability and monitoring, and that co-regulation is also likely to be the most appropriate response in the context of rapid technological advancement, as it is "easier for industry groups to assess the implications of such change and to revise their codes of practice accordingly".

The success of such co-regulatory scheme depends on whether service providers and content providers have a collective and real interest in resolving the network neutrality debate. This model has allegedly worked in Australia, "which has seen ISPs, CAPs, and various consumer groups come together under the banner of the Internet Industry Association to formulate standards in the form of a Code of

⁷ Id.

Practice by which the industry is to meet its obligations under telecommunications laws”⁸.

4. The recent network neutrality debate in the United States

In the United States, Verizon has challenged the 2010 “Open Internet Order”⁹ in the D.C. Circuit on several grounds¹⁰. It argued that the Federal Communications Commission (FCC) violated the Communications Act by imposing common carriage regulation on an information service, that the Order was arbitrary and capricious, and that the rules violated the First and Fifth Amendments to the U.S. Constitution. In January 2014, the D.C. Circuit struck down the Open Internet Order. According to decision, FCC cannot prevent companies from instituting tiered pricing schemes, unless it were willing to put it under a different regulatory regime and classify the Internet as a “common carrier”.

In the midst of the current uncertain regulatory scenario, Netflix and Comcast entered into an agreement in February 2014, under which they would directly interconnect their networks, rather than having Netflix traffic flow first through a third-party network. The two companies started right after a discussion on whether the agreement was “paid prioritization” or “paid peering”. Paid peering is a common practice in which content providers pay a data transport provider to establish a connection into the Internet backbone.

The main issue might not relate to the deal itself, but to the market power that Comcast exercises on a largely concentrated broadband ISP market. In the U.S. market, there is more competition on the content provider side (Netflix) and less competition on the eyeball ISP side (Comcast). Vishal Misra, Professor at Columbia University argues that if “there is competition on the content side but not on the eyeball that increases the leverage that the eyeball side has on the content side. Consumers who have no choice for broadband ISPs are in some ways trapped and then it is rational for content providers to pay the eyeball providers to keep earning that revenue”¹¹.

The market concentration argument is especially important as Comcast has announced its plans to merge with Time Warner Cable, which is waiting for the permission from both the FCC and United States Department of Justice to complete the transaction. Together, the two companies would cover two-thirds of the U.S. broadband cable market, and would be the only broadband provider that could deliver truly high-speed Internet and pay-TV services to nearly 40% of U.S.

⁸ Watal, Aparna. A Co-Regulatory Approach to Reasonable Network Management. Journal of Information Policy. 2011.

⁹ FCC. Report and Order (“Open Internet Order”), December 2011. Available at: https://apps.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf

¹⁰ Brief of Petitioner-Appellant Verizon, Verizon v. FCC, No. 11-1355 (D.C. Cir. July 2, 2012).

¹¹ Misra, Visha. Why is Netflix paying Comcast? February 2014. Available at <http://peerunreviewed.blogspot.com/2014/02/why-is-netflix-paying-comcast.html>

homes¹². Other authors also argue that the Comcast-Netflix agreement is not a problem per se. Laura DeNardis, one of the main scholars in Internet architecture, argues that paid interconnection is already the norm and that “the agreement is also not a unique instance of a content company compensating a network operator for interconnection”¹³.

The FCC is “planning on adopting new rules that we want to survive the next inevitable court challenge”¹⁴. In May 2014, the FCC released a “Notice of Proposed Rulemaking (NPRM)”¹⁵, the formal step for making a new regulation. The NPRM set of rules that allow ISPs to give some content priority over others provided that it is “commercially reasonable”. By September 2014, approximately 3.7 million people contributed towards a public consultation on the topic¹⁶, finished in September 2014. According to Tom Wheeler, FCC Chairman, the new rule “must bar broadband networks from cutting special deals to prioritize some websites’ and applications’ traffic over others to harm consumers, harm competition, and limit innovation on the Internet”¹⁷.

The FCC is now working on a final rule that will be legally binding. The current version of the rule is based on an “edge provider” and an “end user”, such as occurs in the two-sided market theory referred above. Critics of the NPRM, however, argue that using such theory “oversimplifies the webs of relationships that exist among end users to create the Internet ecosystem and overstates the role of access providers in facilitating those relationships”¹⁸, ignoring other spillovers from user generated public and social goods.

The proposed rule is neither a backward- looking nor a forward-looking net neutrality, as classified by Marsden. However, it might be closer to the latter. According to the NPRM, “where conduct would otherwise be permissible under the no-blocking rule, we propose to create a separate screen that requires broadband providers to adhere to an enforceable legal standard of commercially reasonable practices, asking how harm can best be identified and prohibited and whether

¹² See Letter sent by 50 public interest groups to the Federal Communications Commission and the Department of Justice. April 2014. Available at http://www.freepress.net/sites/default/files/resources/Letter_Opposing_Comcast-TWC_Merger_4-08-14.pdf

¹³ See Denardis, Laura. Fiver things you should know about the Netflix Comcast deal. Slate. Feb. 2014. Available at http://www.slate.com/blogs/future_tense/2014/02/28/netflix_comcast_net_neutrality_five_things_you_need_to_know_about_the_traffic.html

¹⁴ FCC. Remarks of Gigi Sohn. One Community Annual Meeting. September 2014. Available at <http://www.fcc.gov/document/gigi-sohn-remarks-one-community-annual-meeting>

¹⁵ FCC NPRM. May 2014, Available at: <http://www.fcc.gov/document/protecting-and-promoting-open-internet-nprm>

¹⁶ See Kim Hart’s Twee (FCC Press Secretary) available at <https://twitter.com/khart/status/511986916141842432>

¹⁷ FCC. Remarks of Tom Wheeler. Mid-Atlantic Venture Association. Washington D.C., November 2014

¹⁸ Frischmann, Brett. Does the FCC really not get it about the Internet?. The Washington Post, Oct. 31st 2014. Available at: <http://www.washingtonpost.com/news/volokh-conspiracy/wp/2014/10/31/does-the-fcc-really-not-get-it-about-the-internet/>

certain practices, like paid prioritization, should be barred altogether”¹⁹. Commissioner Ajit Pai has stated that he sees no legal path for the FCC to prohibit paid prioritization or the development of a two-sided market²⁰.

Recent articles²¹ also suggest that the final rule will be a hybrid one. Under this approach, a “common carrier” regime would be possible as far as service providers do not give unfair advantages to one content provider over another. Paid prioritization, in turn, would be restricted unless it could be proved to be just and reasonable²². Regardless of the final text of the pending rule, the FCC has a track record of losing unanimously in court. Moreover, on November 4th 2014, Republicans became a majority in the Senate. For this reason, there is a now a debate on whether this could also be a barrier to the approval of the new net neutrality rule by the FCC.

Regarding the regulatory approach of neutrality in the United States, we can conclude that it does not adopt a co-regulatory approach, as described by Marsden. However, the FCC does consider the inputs of different stakeholders throughout the rulemaking process, as described above. Moreover, the NPRM and the current information regarding the rule to be approved by the FCC, will likely allow a larger flexibility in network management, an appropriate move in the context of rapid technological advancement.

5. The network neutrality debate in Brazil

The debate over the neutrality of networks in Brazil began in mid2007. At that time some prominent experts on Internet started to express their opinions. One of them was Carlos Alberto Afonso, an internet governance expert who expressed his position in favor of neutrality of networks. He declared that the principle of network neutrality means that "one cannot penalize anyone for the intense use of their access"²³. The first official quotation of net neutrality problem appeared in a document enacted by the Brazilian National Telecommunications Agency (ANATEL) in 2008. The reference was at a document named “General Plan of Concessions and Licenses” aimed at updating the telecommunication’s regulation of the country. According to the document the debate over net neutrality emerged

¹⁹ FCC NPRM. May 2014, Available at: <http://www.fcc.gov/document/protecting-and-promoting-open-internet-nprm>

²⁰ Id.

²¹ See New York Times. F.C.C. Considering Hybrid Regulatory Approach to Net Neutrality. Oct. 31st 2014. http://www.nytimes.com/2014/11/01/technology/fcc-considering-hybrid-regulatory-approach-to-net-neutrality.html?_r=0

²² Id.

²³ Afonso, Carlos. "All are equal before the datagrams Network" Available in http://www.nupef.org.br/sites/default/files/Paper_ca_gindre_IGF_port.pdf. Access in 03/02/2014

due to the existence of groups with significant market power but the problem could be addressed in the medium-run.

The so-called “Civil Rights Framework of the Internet” (Marco Civil da Internet) consolidated the debate over net neutrality in Brazil. An initiative of the Brazilian Ministry of Justice, in partnership with the Center for Technology and Society of the Getulio Vargas Foundation (CTS/FGV), the idea was to develop a collaborative process in which all the actors from Brazilian society could identify together the rights and responsibilities that should guide the use of the Internet in Brazil. It then became a legislative Bill, as per described further.

In order to gather the public participation in the legislative process, an online consultation was launched twice, first in 2009 and then in 2010, each of them spanning roughly 45 days. The first period of the consultation involved a debate about general principles, which then served as reference for the writing of the text of draft Bill. These principles were divided into three groups: (i) individual and collective rights (privacy, freedom of speech, and access rights), (ii) principles related to intermediaries (net neutrality and civil liability), and (iii) governmental directives (openness, infrastructure, and capacity building). The draft text of the Bill, reflecting the comments received on its first phase, was then put under consultation for the second period. The Bill was officially presented by President Dilma Rousseff in 2011. After three years, on March of 2014, the Bill passed on the Chamber of Deputies and a month later it passed on the Brazilian Senate. Law # 12.965/14 was finally sanctioned by President Rousseff on April 23, 2014.

Marco Civil contains thirty two articles divided into five chapters, concerning: (i) preliminary provisions; (ii) user rights and guarantees; (iii) provision of connection Services and Internet services; (iv) the role of public authorities; and (v) final provisions. The law begins by advancing users’ rights and some general principles for the regulation of the Internet, before dealing with the issues of the preservation of connection logs, secondary liability for ISPs, and net neutrality, and establishes directives aimed at the public sector.

It is a very modern Law highlighting the safeguarding freedom of speech, communication, and manifestation of thought, the protection of privacy; the protection of personal data, the preservation and safeguarding of net neutrality, preservation of the stability, security and functionality of the network, by means of technical practices compatible with international standards, as well as the incentive for the use of best practices. It also established that intermediaries can only be held liable if they do not comply with a court order explicitly demanding content to be removed, and that the participatory nature of the Internet should be preserved.

Marco Civil deals with network neutrality on Section I, article 9. According to such article, any data packages, regardless of content, origin and destination, service, terminal or application should be treated on an isonomic basis and the discrimination or degradation of traffic shall be regulated, as follows:

“Art. 9. The party responsible for the transmission, switching or routing has the duty to process, on an isonomic basis, any data packages, regardless of content, origin and destination, service, terminal or application.

§1º The discrimination or degradation of traffic shall be regulated in accordance with the private attributions granted to the President by means of Item IV of art. 84 of the Federal Constitution aimed at the full application of this Law, upon consultation with the Brazilian Internet Steering Committee and the National Telecommunications Agency, and can only result from:

I – technical requirements essential to the adequate provision of services and applications; and

II – prioritization of emergency services

§2º In the happening of discrimination or degradation of traffic provided in §1º, the responsible entity must:

I – abstain from causing damages to users as foreseen in art. 927 of Law no 10.406, January 10th, 2002 - the Civil Code;

II – act with proportionality, transparency and equality;

III – in an advanced notice, provide, in a transparent, clear and sufficiently descriptive manner, to its users, the traffic management and mitigation practices adopted, including those related to network security; and

IV – offer services in non-discriminatory commercial conditions and refrain from anti-competition practices.

§3º When providing internet connectivity, free or at a cost, as well as, in the transmission, switching or routing, it is prohibited to block, monitor, filter or analyze the content of data packets, in compliance with this article.”

We note that such provisions also applies for connectivity provided free of cost and that there are only two exceptions to the neutrality rule (i) technical requirements; and (ii) prioritization of emergency services, which remain to be regulated. Despite the clear provision of the isonomic treatment of any data packages, regardless of content, origin and destination, service, terminal or application, the interpretation of some concepts remains to be seen. What a proportional, transparent and equal discrimination or degradation of traffic is (art. 9, §2, II), remains to be seen. Moreover, the fact that the Law still mentions that after degrading or discriminating of traffic services must still be offered in non-discriminatory commercial conditions (art. 9, §2, IV) might also leave space for debate.

In regards to the regulatory model of neutrality, Marco Civil established it as an attribution of President, upon consultation with the Brazilian Internet Steering Committee (CGI) and the National Telecommunications Agency (ANATEL). CGI itself, is already a multistakeholder body. It was created in 1995 by an Interministerial Ordinance²⁴, with the aim of coordinating and integrating all Internet service initiatives in Brazil, as well as promoting technical quality, innovation and the

²⁴ Interministerial Ordinance 147, of May 31st, 1995, which was amended by Presidential Decree 4,829 of September 3rd, 2003

dissemination of the services available²⁵. CGI's members come from the private and public sectors as well as from the civil society and academia, which are democratically elected. Its work has a strong presence in the formulation of policies as well as in the establishment of strategic guidelines for the development of the Internet in the country.

6. Analyzing the Brazilian case under Marsden's frameworks

Under Marsden's theory, we can assess the provisions of Marco Civil from the perspective of the definition of net neutrality as well as from the perspective of the institutional regulatory framework necessary to address the issue of neutrality. As per mentioned above, Marco Civil has recently passed and remains to be regulated²⁶.

Regardless of future regulatory outcomes, it seems that Marco Civil does not leave any space for a "forward-looking approach" in which different levels of QoS for higher prices could be offered in a fair, reasonable and non-discriminatory basis to all users. In turn, the Law has established a framework that is closer to what Marsden has described as a "backward-looking net neutrality lite" approach. The reason why we make this affirmation is that there are only two exceptions to the neutrality rule (i) technical requirements; and (ii) prioritization of emergency services. However, the Law also leaves some space for debate on the definition of proportionality, transparency and equality.

Net neutrality provisions under the Marco Civil also apply for connectivity provided free of cost. However, some mobile network operators (MNO) and mobile virtual network operators (MVNO) in Brazil are already offering "zero rating", or sponsored data, access to some applications. Customers are not charged when accessing specific applications or Internet services via their wireless networks in limited or metered data plans and tariffs. For instance, one operator²⁷ offers a social media package that includes unlimited and unrestricted use of Facebook and Twitter, and already has millions of users under this deal. The debate over "zero rating" is controversial and will certainly be one important issue to be addressed by the regulation of Marco Civil, as such practice allegedly constitutes an infringement of net neutrality.

Under Marsden's theory, there is also the concept of "co-regulation", as per explained above. Under co-regulation, is a complex interaction of a general framework of legislation and a self-regulatory body. The way policy and regulation is

²⁵ See more information at CGI's website:<http://www.cgi.br/pagina/about-the-cgi-br/148>

²⁶ Until November 2014.

²⁷The operator is Claro. See <http://www.claro.com.br/atendimento/celular/saiba-mais-sobre-o-acesso-gratis-ao-twitter-e-facebook>

undertaken in the country has been considered an international role model. CGI, a multi-stakeholder committee, has been regarded as a “pioneer in the development of Internet governance based on fundamental principles”²⁸. Marco Civil was only enacted after a process of several years. The process took inputs from different groups, including private companies and civil society advocates. Thus, the Brazilian model approaches what Marsden has conceived as a co-regulatory model.

7. Conclusions

This paper has not addressed all the aspects involved in the debate over net neutrality. Notwithstanding, it has provided clear description of some of its main aspects underpinning the debate. Brazil has recently already established the grounds for the future of net neutrality and the United States has a new regulation pending. Both countries now have a legislative framework backing neutrality, but still have some regulatory issues pending.

Using the classification proposed by Marsden, we can conclude that Brazil has chosen a model closer to the more conservative “backward-looking” approach, as it does not allow for discrimination or degradation of traffic. Despite the fact that Brazil has chosen a more conservative approach, the “zero-rating” debate is one that will certainly need to be addressed on a near future. The United States, in turn, appears to leaning towards a “forward-looking model”, under which it is possible to provide better levels of QoS for higher prices, provided that they are offered in a fair, reasonable and non-discriminatory basis to all users. The more the FCC advances towards a new rule, however, the more controversial the debate gets, as many argue that a “forward-looking regime” would hinder the development of the Internet.

In regards to Marsden’s “co-regulation” theory, we can conclude that it is not too far from what Brazil already has in place. CGI, is already a multi-stakeholder committee, and had a strong say not only thought the legislative process of Marco Civil, but is also now responsible for the oversight of its regulation, as provided by Law. The United States also counts with a lot of public participation in the rulemaking process, despite the fact that it is still not implementing the co-regulatory model as described by Marsden.

There are several reasons to believe that net neutrality is an important topic that deserves a close and attentive look. One thing is clear, however: the debate is not “neutral” in the sense that there are different interests at stake. Whatever models are chosen they will certainly profoundly impact the development of business models and consequently how the Internet is going to evolve throughout the years. The awareness of the issue is increasing, and hopefully we will be able to come to policies and regulations that foster the innovative and vibrant side of the Internet.

²⁸NETmundial Initiative. Best Practices for Local Multistakeholder IG Structures. Access on Nov. 2014. Available at: <https://www.netmundial.org/best-practices-local-multistakeholder-ig-structures>

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