

# UNIVERSITY OF PITTSBURGH LAW REVIEW

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Vol. 80 • Summer 2019

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ISSN 0041-9915 (print) 1942-8405 (online) • DOI 10.5195/lawreview.2019.655  
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# REGULATORY CHALLENGES OF ZERO-RATING

Dr. Đorđe Krivokapić LL.M.,\* Adriana Minović\*\*

## ABSTRACT

*Zero-rating is a practice of electronic communication network operators whereby they offer certain apps and services that do not count toward a consumer's monthly data allowance. Over the past few years, the legality of this practice has become one of the most disputed when it comes to the greater regulatory regime. Even though significant case law has emerged, and regulators have made meaningful efforts, there have been unexpected developments in established approaches to such regulation. Consequently, there is uncertainty as to the proper regulatory regime for this practice. Average consumers might be quick to say that zero-rating is a great benefit, but there are other important factors that must be evaluated before giving the final word about the regulation of zero-rating practices.*

*Zero-rating practices reflect the interdisciplinary nature of the Internet and the digital economy. Therefore, it must be analyzed from various perspectives. First, zero-rating can be examined within the net neutrality debate and from the competition law perspective. However, there are also implications in other areas like consumer protection and content diversity, and even human rights. This paper attempts to highlight major controversies surrounding the zero-rating debate in order to provide a regulatory proposal that could address this practice.*

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Over the past few years, the issue of zero-rating has become one of the most disputed topics in regulatory debates.<sup>1</sup> Despite significant case law and efforts made in the soft law field, there is no definitive legal consensus on this issue. In short, zero-rating is a practice by electronic communication network operators to either offer certain apps and services that do not count toward monthly data allowances,<sup>2</sup> or to grant certain content for free even after data caps are exhausted.<sup>3</sup> The zero-rating practice is most commonly employed by mobile operators, given that in fixed markets data allowances are very high. Thus, the upcoming sections of this Article focus on the zero-rating<sup>4</sup> practices of mobile operators (hereinafter “ISPs”). Zero-rating arrangements are made between the users’ mobile operator and the providers of certain content or apps (hereinafter “CAPs”), or where a mobile operator, on its own, decides to provide content (in some cases, its own) for free. These arrangements can include paying a certain price set by the content provider, so-called “sponsored data” (more prevalent in United States). They may also be framed in a way that ISPs are not requesting payment, since this practice is mutually beneficial.<sup>5</sup>

Zero-rating illustrates the interdisciplinary nature of the Internet and digital economy, and therefore the policy surrounding zero-rating must be reviewed from various perspectives. This Article aims to highlight the major controversies surrounding the zero-rating debate in order to provide a perspective for future regulatory proposals. Firstly, zero-rating will be examined from a net neutrality angle and from a competition law perspective. Later on, the Article will assess the implications of zero-rating on other areas such as consumer protection, content diversity and even human rights.

## I. ZERO-RATING AS A NET NEUTRALITY THREAT?

First, to start with a question: Is zero-rating violating the principle of open Internet and net neutrality? In order to answer this question, it is necessary to keep in mind that net neutrality refers to a type of regulation requiring all data to be treated

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<sup>1</sup> *What is Zero-Rating?*, BODY OF EUROPEAN REGULATORS FOR ELECTRONIC COMMUNICATIONS, [https://berec.europa.eu/eng/netneutrality/zero\\_rating/](https://berec.europa.eu/eng/netneutrality/zero_rating/) (last visited Aug. 17, 2019).

<sup>2</sup> For example, when your mobile packet permits free access and data for the Facebook app.

<sup>3</sup> For example, certain apps or content are still available without charges even after your monthly data cap has been reached.

<sup>4</sup> Directorate-General for Competition, *Zero-Rating Practices in Broadband Markets*, COM at 21 (2017) 687 final (Sept. 8, 2017).

<sup>5</sup> *Id.* at 3.

equally, meaning that no paid prioritization is allowed, including so-called “fast lanes.”<sup>6</sup> This neutrality principle was introduced in the EU Telecom regulatory package as one of the overarching principles within the electronic communications market—the other principles being the practices of throttling and traffic blocking/degradation.<sup>7</sup> However, the regulation provided no straightforward guidelines regarding implementation. To tackle this problem, Regulation (EU) 2015/2120 emphasized the importance of Internet access providers treating all traffic equally and condemned any commercial practice that could limit consumer use and access to information, content, or applications of their choice.<sup>8</sup>

The Body of European Regulators for Electronic Communications (“BEREC”) dealt with the topic from the perspective of Article 3 of the Regulation, listing some of the factors that need to be considered when assessing the appropriateness of these practices.<sup>9</sup> First, BEREC emphasized that zero-rating practices, accompanied by the degradation of speed or blocking of other content that is not zero-rated, should be considered a breach of net neutrality,<sup>10</sup> because these cases clearly violate the core principles of net neutrality (*i.e.*, technical discrimination, degrading traffic, etc.). This was the case with “Streamon,” when a court in Germany found a breach of net neutrality rules where zero-rated video services were throttled in a way that their speed was reduced to 1.7 megabytes per second.<sup>11</sup>

BEREC emphasized, however, that the situation is more complex and requires an analysis of various factors when zero-rating is applied to certain applications or categories of applications without preventing or interfering with customer use of other applications. These factors include:

- Market position of the ISP as well as CAP

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<sup>6</sup> Regulation (EU) 2015/2120, 2015 O.J. (L 310) 1.

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> BODY OF EUROPEAN REGULATORS FOR ELEC. COMMC’N, REPORT ON THE IMPLEMENTATION OF REGULATION (EU) 2015/2120 AND BEREC NET NEUTRALITY GUIDELINES 8–9 (2017) [hereinafter BEREC GUIDELINES]; BODY OF EUROPEAN REGULATORS FOR ELEC. COMMC’N, DRAFT BEREC GUIDELINES ON IMPLEMENTATION BY NATIONAL REGULATORS OF EUROPEAN NET NEUTRALITY RULES 9–12 (2016) [hereinafter DRAFT BEREC GUIDELINES].

<sup>10</sup> *Id.*

<sup>11</sup> Jörn Krieger, *Court Confirms: Deutsche Telekom’s Zero-Rating Service Violates Law*, BROADBAND TV NEWS (Nov. 20, 2018, 9:09 PM), <https://www.broadbandtvnews.com/2018/11/20/court-confirms-deutsche-telekoms-zero-rating-service-violates-law>.

- The effects of these practices on end-users (*e.g.*, whether the range and diversity of content and applications which end-users may use is reduced, and whether end-users are incentivized to use certain apps over others)
- The effects on CAPs end-user rights (*e.g.*, whether CAPs are materially discouraged from entering or forced to leave the market, and whether there are other material harms to competition within the market)
- The scale of the practice and the presence of alternatives<sup>12</sup>

BEREC did not condemn these practices *per se*, but it did state that they can lead to violations of Article 3 of the Regulation, especially in situations when there is just one specific zero-rated application, which leaves the end-users' choice "materially reduced in practice."<sup>13</sup> A safer option under the guidelines would be to classify a certain type of services as zero-rated, such as all music, video, or social media services. Considering the criteria BEREC listed as potentially relevant, it is clear that in situations that fall outside of the scope of classic technical discrimination, we must evaluate zero-rating practice in the light of current conditions in a relevant market, the power of parties involved, and what effect this practice will have on the market and consumers.<sup>14</sup> Therefore, this kind of approach will ultimately lead us to the field of competition law.

Despite the fact that equal treatment of all traffic is primarily related to the quality of traffic, the advocates for strong application of net neutrality principles consider fast lanes and zero-rating as two sides of same coin—both of them make competing services unattractive. Fast lanes degrade the traffic and zero-rating makes other services unattractive due to their higher price. Therefore, both practices limit an end-user's choice, simply by different mechanisms, and ultimately lead to a situation where, even if an end-user has a choice, it is illusory.<sup>15</sup>

In response to these concerns, some countries have forbidden these kinds of practices within the scope of net neutrality rules. In 2010, Chile—which is well-known as one of the most active countries in preserving open Internet—introduced

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<sup>12</sup> DRAFT BEREC GUIDELINES, *supra* note 9, at 11–12.

<sup>13</sup> *Id.* at 9.

<sup>14</sup> *See* BEREC GUIDELINES, *supra* note 9.

<sup>15</sup> BEREC GUIDELINES, *supra* note 9, ¶ 42 (discussing, among other things, the issue of "choice being materially reduced for this to qualify as a limitation of the exercise of the end-users' rights").

legislative changes affecting net neutrality.<sup>16</sup> In 2014, based on this law, Chilean regulators responded to zero-rating with an *ex ante* approach by passing the Telecommunications Act, which banned the practice entirely.<sup>17</sup> However, nonprofit services, such as Wikipedia, were exempted from this ban.<sup>18</sup> In the rest of the world, an ex-post approach with case-by-case analysis is dominant. In Hungary, there were couple of cases which found zero-rating to be a violation of net neutrality rules based on commercial traffic management. The cases involved Telenor<sup>19</sup> and Magyar Telekom<sup>20</sup> which offered unlimited access to selected OTT video and music streaming, most popular social media and messaging applications.<sup>21</sup> Norway introduced its net neutrality rules back in 2009.<sup>22</sup> The Norwegian authorities were not supporters of these kinds of practices, and specifically expressed their concerns in situations where users' traffic is slowed after they have exceeded their data cap, while zero-rated content remains unaffected.<sup>23</sup>

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<sup>16</sup> Claudio Ruiz, *Chile: First Country to Legislate Net Neutrality*, GLOBAL VOICES (Sept. 4, 2010, 2:49 PM), <https://globalvoices.org/2010/09/04/chile-first-country-to-legislate-net-neutrality>.

<sup>17</sup> David Meyer, *In Chile Mobile Carriers can no Longer Offer Free Twitter, Facebook or WhatsApp*, GIGAOM (May 28, 2014, 3:28 AM), <https://gigaom.com/2014/05/28/in-chile-mobile-carriers-can-no-longer-offer-free-twitter-facebook-and-whatsapp>.

<sup>18</sup> Yana Welinder & Carolynne Schloeder, *Chilean Regulator Welcomes Wikipedia Zero*, WIKIMEDIA (Sept. 22, 2014), <https://blog.wikimedia.org/2014/09/22/chilean-regulator-welcomes-wikipedia-zero>.

<sup>19</sup> *Telenor Hungary Joins Telekom on the Net Neutrality Naughty Step*, TELEGEOGRAPHY (July 31, 2017), <https://www.telegeography.com/products/commsupdate/articles/2017/01/31/telenor-hungary-joins-telekom-on-the-net-neutrality-naughty-step/>.

<sup>20</sup> *Hungarian Regulator Hits Telekom with Net Neutrality Ruling*, TELEGEOGRAPHY (Dec. 6, 2016), <https://www.telegeography.com/products/commsupdate/articles/2016/12/06/hungarian-regulator-hits-telekom-with-net-neutrality-ruling/>.

<sup>21</sup> BODY OF EUROPEAN REGULATORS FOR ELEC. COMMC'N, REPORT ON THE IMPLEMENTATION OF REGULATION (EU) 2015/2120.

<sup>22</sup> Frode Sørensen, *Net Neutrality and Charging Models*, NORWEGIAN COMM. AUTHORITY (Nov. 18, 2014), <https://eng.nkom.no/topical-issues/news/net-neutrality-and-charging-models>. "The guidelines do not address the question of zero-rating. Instead they prohibit traffic management practices by Internet service providers that discriminate between specific services or sources of traffic. However NKOM's questionnaire response clarified that they regard zero-rated offers as a breach of these national guidelines." Directorate-General for Competition, *supra* note 4, at 27.

<sup>23</sup> Directorate-General for Competition, *supra* note 4, at 27 ("The guidelines do not address the question of zero-rating. Instead they prohibit traffic management practices by Internet service providers that discriminate between specific services or sources of traffic. However, NKOM's questionnaire response clarified that they regard zero-rated offers as a breach of these national guidelines.").

In the United States, the debate about zero-rating was clarified when Ajit Pai, chairman of the Federal Communications Commission (“FCC”), closed the investigation about zero-rating practices of wireless carriers.<sup>24</sup> While much of the relevant community would still not agree on this, Pai clearly stated that there was no issue with offering free data. The fate of zero-rating in the United States is inextricably linked to the net neutrality debate, specifically the 2015 Open Internet Order,<sup>25</sup> its subsequent repeal by the FCC,<sup>26</sup> proceedings launched by states against the FCC,<sup>27</sup> and legislative actions by states (such as California) to independently regulate the challenges of net neutrality and zero-rating.<sup>28</sup> Net neutrality advocates argue that the 2015 Open Internet Order should be reinstated, noting that the Order’s “general conduct rule” covering zero-rating is too vague, and that a narrower alternative, such as the one in California’s net neutrality law, would ensure lower prices and keep ISPs from steering users to privileged websites and services.<sup>29</sup>

It is difficult to balance interests when selecting a regulatory approach to zero-rating. Some of the first countries to condemn zero-rating practices as harmful to open Internet have recently changed their positions. The Dutch Government in 2014 adopted a law that bans zero-rating practices.<sup>30</sup> Based on this law, some ISPs were fined by their regulators. For example, KPN was fined for banning some services while using its Wi-Fi and hotspot, and Vodafone was fined for offering HBO for

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<sup>24</sup> Diana Goovaerts, *FCC Closes Investigation into Zero-Rated Programs as Pai Pulls Back “Midnight Regulations,”* WIRELESS (Mar. 2, 2017), <https://www.ecnmag.com/news/2017/02/fcc-closes-investigation-zero-rated-programs-pai-pulls-back-midnight-regulations>.

<sup>25</sup> Protecting and Promoting the Open Internet, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd. 5601 (2015).

<sup>26</sup> Restoring Internet Freedom, Notice of Proposed Rulemaking, WC Docket No. 17-108 (FCC Apr. 27, 2017).

<sup>27</sup> David Shepardson, *Twenty-two States Ask U.S. Appeals Court to Reinstate ‘Net Neutrality’ Rules*, REUTERS (Aug. 20, 2018, 10:25 PM), <https://www.reuters.com/article/us-usa-internet/twenty-two-states-ask-u-s-appeals-court-to-reinstate-net-neutrality-rules-idUSKCN1L605W>.

<sup>28</sup> Cecilia Kang, *Justice Department Sues to Stop California Net Neutrality Law*, N.Y. TIMES (Sept. 30, 2018), <https://www.nytimes.com/2018/09/30/technology/net-neutrality-california.html>.

<sup>29</sup> Ernesto Falcon, *The Public Deserves a Return to the 2015 Open Internet Order*, EFF.ORG (Feb. 20, 2019), <https://www.eff.org/deeplinks/2019/02/public-deserves-return-2015-open-internet-order>.

<sup>30</sup> Chris Marsden, *Dutch Pass Strict Net Neutrality Law, T-Mobile Plans Appeal—Telecompaper*, NETWORK NEUTRALITY EUR. (Oct. 14, 2016), <http://chrismarsden.blogspot.rs/2016/10/dutch-pass-strict-net-neutrality-law-t.html>.

free.<sup>31</sup> However, ISPs in the Netherlands continued to fight against this kind of regulatory approach, and in the end, a court in Rotterdam ruled in favor of T-Mobile, supporting its zero-rating practice for online music streaming services.<sup>32</sup> The court recognized that Dutch Law indeed forbade zero-rating, but the EU legal framework took precedence.<sup>33</sup> Since the EU framework contains no such blanket ban on zero-rating, the court held that zero-rating was permitted in this case.<sup>34</sup> Following this case, legislators announced amendments to the net-neutrality law,<sup>35</sup> and follow-up litigation efforts of the digital rights organization, Bits of Freedom, ended in January 2019. The final decision enabled T-Mobile to continue to provide zero-rating for certain music services to its customers in the Netherlands and re-affirmed the previous ruling that prohibitions on unequal treatment of traffic are limited to the technical treatment of traffic.<sup>36</sup> A similar situation happened in Slovenia, which was one of the first countries to introduce net neutrality legislation. Initially, a Slovenian regulator banned the zero-rating practices of Telekom Slovenia (offering free Deezer) and Si Mobile (its cloud service).<sup>37</sup> In 2016, however, a Slovenian court overturned the regulator's position, stating that the provisions of net neutrality legislation were related to slowing or blocking data, and nothing in the provisions referred to the financial treatment of traffic.<sup>38</sup>

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<sup>31</sup> Tim Rosendahl, *Fines Imposed on Dutch Telecom Companies KPN and Vodafone for Violation of Net Neutrality Regulations*, AUTHORITY FOR CONSUMERS & MKTS. (Jan. 27, 2015), <https://www.acm.nl/en/publications/publication/13765/Fines-imposed-on-Dutch-telecom-companies-KPN-and-Vodafone-for-violation-of-net-neutrality-regulations/>.

<sup>32</sup> *Dutch Regulator Overruled in T-Mobile Net Neutrality Case*, TELEGEOGRAPHY (Apr. 24, 2017), <https://www.telegeography.com/products/commsupdate/articles/2017/04/24/dutch-regulator-overruled-in-t-mobile-net-neutrality-case/>.

<sup>33</sup> *Id.*

<sup>34</sup> *Id.*

<sup>35</sup> *Dutch Minister Indicates Strict Net Neutrality Law Will be Scrapped*, TELEGEOGRAPHY (May 31, 2017), <https://www.telegeography.com/products/commsupdate/articles/2017/05/31/dutch-minister-indicates-strict-net-neutrality-law-will-be-scrapped/>.

<sup>36</sup> David Korteweg, *Time for Better Net Neutrality Rules*, BITS FREEDOM (Feb. 6, 2019), <https://www.bitsoffreedom.nl/2019/02/06/time-for-better-net-neutrality-rules>; RBROT Rotterdam 2019, Rvd. W 2019 414 m.nt. (Bits of Freedom Foundation/Consumer and Market Authority) (Neth.).

<sup>37</sup> Katja Kmet, *Net Neutrality—Situation in Slovenia*, AKOS (Sept. 28, 2015), <https://www.itu.int/en/ITU-D/Regional-Presence/Europe/Documents/Events/2015/09%20Regulatory%20Conference/Predstavitev%20NN%20in%20Slovenia%20Budva.pdf>.

<sup>38</sup> Luca Schiavoni, *Slovenian Court Further Strengthens the Case for Zero-Rating*, OVUM (Sept. 29, 2016), <https://www.ovum.com/slovenian-court-further-strengthens-the-case-for-zero-rating/>.



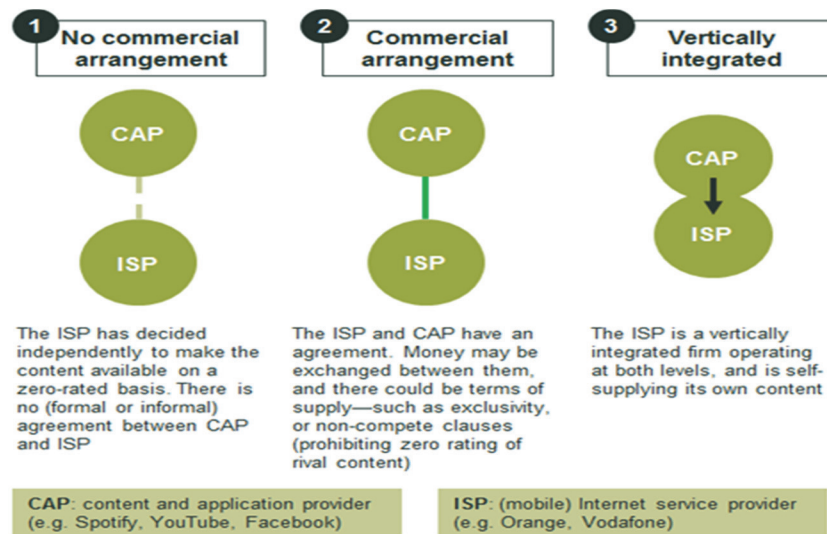
These decisions demonstrate that zero-rating practices are, under certain conditions, acceptable under the EU net neutrality framework and that litigation efforts are unlikely to succeed. Digital rights organizations hope that both the forthcoming evaluation of net neutrality rules by the European Commission, and BEREC's review of the guidelines could improve the rules and reintroduce stricter zero-rating limitations.<sup>39</sup> On the other hand, the diverse approaches toward this issue and the revision of decisions in certain countries, should motivate authorities to more closely examine the real effects of this practice and its implications on the market. Therefore, even the cases that start with examination of this issue from the perspective of net neutrality ultimately end in the field of competition law and with the question of whether this practice represents anti-competitive behavior.

## II. ZERO-RATING AS A COMPETITION LAW ISSUE?

Early criticisms of zero-rating pointed to it as a potential problem for antitrust and competition law. Many concerns were raised about its implications on the market, and how the practice of zero-rating affects competition. However, before examining the implications of zero-rating on competition, it is important to understand the very arrangements on which this practice is based. As previously mentioned, there are two common arrangements: (1) sponsored data, when a carrier pays a certain price to an ISP for zero-rating its content; and (2) free, where there is no such fee, or an ISP chooses to zero-rate some apps without asking permission from content owners. In the sponsored agreements, the cost of zero-rating falls onto CAPs. Free or sponsored, from a competition law perspective, there remains a question of how these arrangements are made, as explained below.

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<sup>39</sup> Korteweg, *supra* note 36.



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Primarily, zero-rating can influence the position of an ISP by strengthening their dominant power with these kinds of arrangements. Therefore, it is necessary to examine how, and if, zero-rating will affect competition between ISPs and the end-user's choice of ISP. However, the fact is that zero-rating is helping CAPs to become more popular, and it does influence their position on the market. For that reason, in countries where Internet is expensive and zero-rating is on a sponsored basis, there is a potential issue of determining which content will be zero-rated. Additionally, the users are limited to only zero-rated content due to their inability to afford more data. It is often stated that zero-rating "chooses the winners" and that small CAPs and startups are having difficulty competing with well-known CAPs due to zero-rating practices.<sup>41</sup> This occurs because mobile operators are more interested in offering well-known content at zero-rated terms because they bring in more customers. Furthermore, where there are sponsored arrangements, the big CAPs can afford to pay for zero-rating. Therefore, considering all circumstances, it is not hard to see zero-rating as a commercial practice with implications on competition under certain conditions. Zero-rating can be examined as an issue of abuse of dominance as well as a restrictive agreement.

In order to establish the abuse of dominance, first, positions of ISPs and CAPs in the market must be measured. In telecommunication markets, this is a common

<sup>40</sup> Felipe Flórez Duncan, *Zero Rating: Free Access to Content, but at What Price?*, OXERA ECON. (July 2016), <https://www.oxera.com/agenda/zero-rating-free-access-to-content-but-at-what-price/>.

<sup>41</sup> Directorate-General for Competition, *supra* note 4.

example for ISPs, given the expected oligopolistic nature of such markets. Also, it is not surprising that an ISP would want to zero-rate the most popular content which is capable of attracting a large customer base. However, after examining market power, other criteria should also be taken into account. For example, this article suggests considering: whether zero-rating practice is creating incentives that have a loyalty enhancing effect; whether the cost of switching to another ISP is high due to zero-rating offer; whether there is discrimination against certain CAPs by ISPs; whether this practice is creating limitations on the market or barriers to entry; and whether there is price discrimination or bundling of services by an ISP. In situations where there is zero-rated content that is very popular, customers might decide to change ISPs in order to access this free content. Furthermore, when a dominant ISP zero-rates its own content it might lead to a competition concern if other ISPs cannot offer this content (such as the United States case involving AT&T and Verizon's practice of zero-rating their own video streaming applications).<sup>42</sup>

On the other hand, even if there is no dominance issue, these kinds of practices can raise restrictive agreement concerns. The very terms of sponsored agreements have to be evaluated to determine if they can be qualified as a restrictive agreement within the meaning of the Article 101(1) TFEU.<sup>43</sup> It is important to understand the underlying agreement between ISPs and CAPs in order to determine if this arrangement will limit or split the market, and if there is discrimination by an ISP in the same category of CAPs.<sup>44</sup> Although, from the net neutrality perspective, zero-rating of certain categories of CAP is recommended, from a competition perspective, it can be a platform for colluding and consorted practices.<sup>45</sup> It is certain that the most dangerous arrangements are those with exclusivity elements, especially if an ISP is prevented from zero-rating competing applications of certain CAPs, and the CAPs paid an ISP for such arrangement.<sup>46</sup> However, just like for any competition law issue, in order to give a definitive answer, the circumstances of each case need to be considered.

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<sup>42</sup> Directorate-General for Competition, *supra* note 4, at 134.

<sup>43</sup> Consolidated Version of the Treaty on the Functioning of the European Union art. 101, Dec. 26, 2012, 2012 O.J. (C 326).

<sup>44</sup> Jeffrey A. Eisenach, *The Economics of Zero Rating*, NERA ECON. CONSULTING (Mar. 2015), <http://www.nera.com/content/dam/nera/publications/2015/EconomicsofZeroRating.pdf>.

<sup>45</sup> *Id.*

<sup>46</sup> Directorate-General for Competition, *supra* note 4, at 131–32.

The Directorate-General for Competition, in its report on zero-rating practices concludes that there is not sufficient evidence, to date, that current zero-rating practices have been an issue from a competition law perspectives.<sup>47</sup> The Report still emphasized some of the factors that are relevant when examining competition concerns on the ISP or CAP side.<sup>48</sup> From the perspective of ISPs, the following should be taken into account (along with facts of the case and all other relevant factors):

- Whether the ISP is likely to enjoy some market power—if this is not the case, there should be less of a concern;
- Whether zero-rating is linked to plans with tight data caps—if this is the case, the question is whether there is likely to be an output-expanding effect is crucial for determining whether the practice is beneficial or potentially anticompetitive;
- Whether the zero-rated content is sufficiently attractive to drive the choice of ISP, and if this is the case, whether there is some degree of exclusivity (either because the zero-rated content is operator-owned, or because there is an agreement between the CAP and the ISP that affords the ISP exclusive rights)—if this is the case, there could be concerns about foreclosure because of the lack of replicability of the zero-rating arrangement.<sup>49</sup>

On the other hand, the most important facts from the perspective of CAPs are:

- Whether the zero-rated content is operator-owned—if this were the case, and the ISP has some degree of market power, zero-rating might foreclose competing CAPs unless the ISP offers them the option to have their content zero-rated as well on terms that do not discriminate in favor of its own applications;
- Where the zero-rated content is not operator owned, whether the ISPs undertake not to zero-rate any other similar application, and whether the arrangement covers a large share of the target audience, either because the zero-rating ISP has market power, or because the CAP has exclusivity

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<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

agreements with multiple ISPs—if this were the case, similar foreclosure concerns would arise.<sup>50</sup>

When discussing pro and con arguments, the opponents of this practice point out that, from a market perspective, offering free content may motivate operators to increase traffic prices or decrease the amount of data within current offers, because the zero-rating users would probably continue to use the service despite the higher price of traffic.<sup>51</sup> In extreme situations, this might lead to foreclosure of non-zero-rated content, especially if zero-rated CAPs are data hungry in that they require a lot of bandwidth (like video streaming). Without zero-rating, mobile operators would be motivated to lower prices in order to provide a competitive service, or to increase the amount of data that they offer in each package (this was the case in the Netherlands).<sup>52</sup>

From an economic point of view, zero-rating brings some benefits too. First, when examining the economic effects of this practice, we should keep in mind the main characteristics of this market: high fixed costs (infrastructure and R&D); necessity of economics of scale; dynamic competition; a two-sided market; and network effects.<sup>53</sup> Success in these markets is based on bringing a new marginal consumer.<sup>54</sup> Therefore, thanks to zero-rating, ISPs can make various price arrangements adjusted to customers specific needs through bundling services, and in this manner include marginal users by offering a new service at a more affordable price.<sup>55</sup> This may lead to a higher participation by including users who otherwise would not use these services. Therefore, zero-rating allows ISPs to differentiate themselves and create competitive advantage by offering tailor-made content for its users. Thus, its supporters often emphasize that zero-rating is a mechanism which

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<sup>50</sup> *Id.* at 135.

<sup>51</sup> *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](http://dfmonitor.eu/downloads/Banning_zerorating_leads_to_higher_volume_caps_06022015.pdf) [hereinafter *In the Netherlands, Where Zero-Rating is Banned*].

<sup>52</sup> *Id.*

<sup>53</sup> Directorate-General for Competition, *supra* note 4, at 110.

<sup>54</sup> Helani Galpaya, *Zero-rating in Emerging Economies*, Global Commission on Internet Governance, paper series: No. 47 (Feb. 2017), [https://www.cigionline.org/sites/default/files/documents/GCIG%20no.47\\_1.pdf](https://www.cigionline.org/sites/default/files/documents/GCIG%20no.47_1.pdf).

<sup>55</sup> Eisenach, *supra* note 44, at 6.

enhances competition by offering new products and stimulating innovation and investments in both content as well as networks.<sup>56</sup>

In the end, the higher number of users brings the network effect<sup>57</sup> since the value of the network of mobile operator depends on the number of users.<sup>58</sup> However, the network effect is equally important for content providers too, such as social media platforms, because their value depends on the number of users. Consequently, some authors opine that this effect can be essential for companies which have just launched and need to attract users in order to sustain their service, since, with zero-rating, they can easily reach customers and expand their network. This should also be considered in the light of practices within the digital economy, where data is the most essential resource driving innovation.<sup>59</sup> Data hungry apps, such as social media or video platforms, which already have dominant positions within the market, are the most frequently included in zero-rating arrangements.<sup>60</sup> The majority of the top 20 zero-rating apps in EEA are “paid” by data.<sup>61</sup> These applications offer services to consumers without demanding any payment, in exchange for behavioral and other data, later used as raw material and turned into data-driven products (targeted advertising, reputation systems and ranking scores, other predictions). Zero-rating of such apps further encourages the belief that the use of such apps is free, because consumers do not pay for a service or data. On the other hand, an exponential increase of usage and data traffic related to zero-rating apps<sup>62</sup> could strengthen the market positions of these apps because of larger amount of usage data collected. Consequently, it is likely that the barriers for entry of new products could grow due to the lack of collected data for newcomers.<sup>63</sup> Finally, this, and many other concerns,

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<sup>56</sup> *Id.* at 11; Directorate-General for Competition, *supra* note 4, at 110.

<sup>57</sup> CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES (1999).

<sup>58</sup> Directorate-General for Competition, *supra* note 4, at 108.

<sup>59</sup> SHOSHANA ZUBOFF, THE AGE OF SURVEILLANCE CAPITALISM (2019); ALLEN P. GRUNES & MAURICE E. STUCKE, BIG DATA AND COMPETITION POLICY (2016); OECD, DATA-DRIVEN INNOVATION: BIG DATA FOR GROWTH AND WELL-BEING (2015), [https://read.oecd-ilibrary.org/science-and-technology/data-driven-innovation\\_9789264229358-en](https://read.oecd-ilibrary.org/science-and-technology/data-driven-innovation_9789264229358-en).

<sup>60</sup> THOMAS LOHNINGER ET AL., THE NET NEUTRALITY SITUATION IN THE EU—EVALUATION OF THE FIRST TWO YEARS OF ENFORCEMENT (2019), [https://epicenter.works/sites/default/files/2019\\_netneutrality\\_in\\_eu-epicenter.works-r1.pdf](https://epicenter.works/sites/default/files/2019_netneutrality_in_eu-epicenter.works-r1.pdf).

<sup>61</sup> *Id.* at 23.

<sup>62</sup> Laure Jauniaux & Marc Leborges, *Zero Rating and End-Users' Freedom of Choice: An Economic Analysis*, *Orange* (Aug. 23, 2018), SSRN: <https://ssrn.com/abstract=3089833>.

<sup>63</sup> GRUNES & STUCKE, *supra* note 59.

lead us to the questioning of zero-rating from some other perspectives that are linked to human rights and content diversity.

### III. ZERO-RATING, CONTENT DIVERSITY AND OTHER ISSUES

Another argument against zero-rating is that it favors certain types of content, and negatively affects content diversity, especially local content. A study conducted in Germany by the Bavarian Regulatory Authority for New Media about zero-rating practices confirmed that zero-rating arrangements may violate the requirement that broadcasters to support a diversity of content.<sup>64</sup> As stated above, these authors believe that ISPs can be incentivized to enter into arrangements with big CAPs because this kind of content attracts a huge number of customers. Therefore, small local CAPs that produce local content, and are just starting their business, are disadvantaged. This is an especially big problem in situations when these zero-rating arrangements are paid, because these smaller, younger CAPs cannot afford to pay for special treatment.<sup>65</sup> For consumers, zero-rating is an offer that you cannot refuse, and therefore it is hard to compete with it. When choosing between content that is available without limitation, and content which has to be “paid” for in some way (through reaching bandwidth cap or paying the price of open mobile Internet usage), it seems obvious which content will be more attractive for consumers. The usage of zero-rated content has at least a partial psychological effect on consumers—they simply will not want to worry about exceeding or exhausting their caps.<sup>66</sup> This means that ISPs eventually decide which content consumers will consume, *e.g.*, which CAPs will be winners or losers at the market, regardless of the content quality or importance for the local communities.<sup>67</sup> Zero-rating is also important from the perspective of a participant in the startup industry. T-Mobile’s Music Freedom service demonstrates how even those zero-rating arrangements that are intended to include an entire class of applications (*e.g.*, music streaming—if they fulfill certain criteria) can raise a number of issues for content providers struggling to reach their

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<sup>64</sup> Directorate-General for Competition, *supra* note 4, at 24.

<sup>65</sup> Barbara van Schewick, *Network Neutrality and Zero-Rating*, FCC (Feb. 19, 2014), <https://ecfsapi.fcc.gov/file/60001031582.pdf>.

<sup>66</sup> Directorate-General for Competition, *supra* note 4, at 117.

<sup>67</sup> See Letter from Michael A. Cheah, Gen. Counsel, Vimeo, LLC to Marlene H. Dortch, Sec’y Fed. Comm’n (Feb. 19, 2014) (regarding protecting and promoting the open Internet, GN Docket No. 14-28).

audience.<sup>68</sup> The negative cumulative effect of such practices should not be neglected. If startups, small players, or non-commercial content-makers need to approach a carrier to be included in its zero-rated program, or to create competitive applications in accordance with an ISP's technical zero-rating requirements, it could be the end of "innovation without permission"—an important principle on which the Internet was founded.<sup>69</sup>

Nonetheless, one of the advantages of zero-rating is that in some cases it allows users to participate in the creation of the content, especially in the local context.<sup>70</sup> Furthermore, it allows low-income users to use otherwise cost prohibitive services.<sup>71</sup> This being so, zero-rating expands the market in poor countries where penetration is low.<sup>72</sup> In most developing economies, zero-rating allows a big part of population who cannot afford to pay for data consumption, to access desired content.<sup>73</sup> Hence, it is understandable that the trend among supporters of zero rating is always to emphasize these positive social and economic externalities, by expanding the number of people that will use the Internet via mobile phones.<sup>74</sup> There is also an argument that content providers engaged in zero-rating, such as Facebook, Twitter, and Wikipedia can be considered vehicles for the open expression of social, political and cultural views by all participants and for the creation of relevant local content.<sup>75</sup> One of the major arguments favoring zero-rated programs is that it is better for certain classes of consumers to have access to the limited online content that results from zero-rating than no online access at all.<sup>76</sup> Finally, there is an assumption that the initially limited access to certain content can eventually lead to a full

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<sup>68</sup> Barbara van Schewick, *T-Mobile's Binge On Violates Key Net Neutrality Principles*, STAN. L. CTR FOR INTERNET AND SOC'Y (Jan. 29, 2016, 9:00 AM), <http://cyberlaw.stanford.edu/blog/2016/01/t-mobiles-binge-violates-key-net-neutrality-principles>.

<sup>69</sup> *Id.*

<sup>70</sup> Olivier Sylvain, *Integrative Information Platforms: The Case of Zero-Rating*, 2 GEO. L. TECH. REV. 360, 375 (2018).

<sup>71</sup> Galpaya, *supra* note 54, at 7, 8.

<sup>72</sup> *Id.*

<sup>73</sup> *Id.*

<sup>74</sup> Directorate-General for Competition, *supra* note 4, at 169.

<sup>75</sup> Sylvain, *supra* note 70, at 375; Galpaya, *supra* note 54, at 9.

<sup>76</sup> Galpaya, *supra* note 54, at 9; *see* van Schewick, *supra* note 68 (critiquing this view); Helani Galpaya, *Zero-Rating in Emerging Economies*, GLOBAL COMMISSION ON INTERNET GOVERNANCE, No. 47, Feb. 2017, at 8.



connectivity, since consumers will push mobile operators to provide such services once they experience the Internet.<sup>77</sup> This is not, however, proven in practice, as such connectivity depends upon user behavior, market conditions, the human rights landscape and the regulatory environment.<sup>78</sup>

Conversely, one of the biggest concerns related to zero-rating is that users who cannot afford metered data can easily end up relying exclusively on zero-rated services. This will lead to limited access to any other content except that which is zero-rated by the carrier.<sup>79</sup> The result of this would be that the communities that are already marginalized by their lack of access to information and public participation would be further pushed into the “walled gardens” of the Internet.<sup>80</sup> In addition to limiting access, these “walled gardens” can affect the shaping of public opinion and create a fruitful field for spreading misinformation and political propaganda.<sup>81</sup> There is an ongoing debate on how tall these information walls might be.<sup>82</sup> It might be that, at least in certain countries, zero-rating will create “a poor Internet for poor people,” providing very poor content.<sup>83</sup> One study presented a concerning outcome of a Facebook zero-rating campaign in underdeveloped countries, where average consumers of a Facebook zero-rated service considered Facebook to be the actual Internet.<sup>84</sup> Thus, people in these walled gardens might actually have no idea that they are trapped in an extremely limited world of Internet, which poses an obvious threat to content diversity. This concern remains regardless of the fact that applications that are widely zero-rated (such as Wikipedia or Facebook) allow consumers to create

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<sup>77</sup> See Ariel Futter & Alison Gillwald, *Zero-Rated Internet Services: What is to be Done?*, RESEARCH ICT AFRICA, Sept. 2015, [http://www.researchictafrica.net/docs/Facebook%20zerorating%20Final\\_Web.pdf](http://www.researchictafrica.net/docs/Facebook%20zerorating%20Final_Web.pdf) (Facebook claims this causal link is proven in their Internet.org initiative in Africa.).

<sup>78</sup> David Kaye, *Report of the Special Rapporteur to the Human Rights Council on the Role of Digital Access Provider*, U.N. Doc. A/HRC/35/22 (Mar. 30, 2017).

<sup>79</sup> Susan Crawford, *Zero for Conduct*, MEDIUM (Jan. 7, 2015), <https://medium.com/backchannel/less-than-zero-199bcb05a868>; Kaye, *supra* note 78.

<sup>80</sup> Crawford, *supra* note 79.

<sup>81</sup> *Id.*

<sup>82</sup> *Id.*

<sup>83</sup> Emily Hong, *A Zero Sum Game? What You Should Know About Zero-rating*, NEW AMERICA (Feb. 4, 2016), <https://www.newamerica.org/weekly/109/a-zero-sum-game-what-you-should-know-about-zero-rating/>.

<sup>84</sup> *Id.*

user generated content.<sup>85</sup> Such possibilities for creation are always constrained to some extent and cannot compensate for the lack of open Internet. This topic also raises concerns in the field of human rights, particularly in developing countries. Users of a walled-garden Internet will hardly be able to click links that go outside the garden (even in presence of technical possibilities, finance constraints could easily make such option close to theoretical), let alone engage in innovation by launching their own applications or practice free speech without constraints.<sup>86</sup>

As is already noted above, scenarios where ISPs are allowed to set data caps and then choose what types of content will be exempt from those caps, pose a considerable threat, because such ISPs are allowed to favor or disfavor broad categories of content.<sup>87</sup> These ISPs will also have an incentive to set lower caps,<sup>88</sup> or to increase the price of open mobile Internet usage.<sup>89</sup> On the other hand, the evidence from the Netherlands has shown that a ban on zero-rating in that country actually led one mobile provider to double its mobile Internet volume caps.<sup>90</sup> In addition to antitrust-related concerns, this is also a strong indicator that content diversity is directly influenced by the structure of zero-rated arrangements. Only open Internet access can enable freedom of expression and diversity of content; and zero-rated arrangements should not be allowed to preclude those. In this context, there also lies a zero-rated paradox: if CAPs can, without limitations, participate in a zero-rating offer, there is less concern that zero-rating will distort markets; on the other hand, the more zero-rated content and services available to the user, the less likely the user is to access metered substitutes.<sup>91</sup>

#### IV. CONCLUSION

Contemporary debates about zero-rating are mainly focused on competition and net neutrality concerns. Even though there is still no definitive answer on this issue, we can extract some guidelines that can help determine the effects of zero-

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<sup>85</sup> *Id.*

<sup>86</sup> Crawford, *supra* note 79.

<sup>87</sup> Sylvain, *supra* note 70, at 367.

<sup>88</sup> Hong, *supra* note 83; Danielle Kehl, *Why Surfing the Web Could Become as Dreadful as Flying Economy Class*, FORTUNE (May 28, 2014), <http://fortune.com/2014/05/28/why-surfing-the-web-could-become-as-dreadful-as-flying-economy-class/>.

<sup>89</sup> See Letter from Nick Grossman, Union Square Ventures to Marlene H. Dortch, Sec'y Fed. Comm'n n.4 (Feb. 18, 2015).

<sup>90</sup> *In the Netherlands, Where Zero-Rating is Banned*, *supra* note 51.

<sup>91</sup> ERIK STALLMAN & R. STANLEY ADAMS, ZERO RATING: A FRAMEWORK FOR ASSESSING BENEFITS AND HARMS 15 (2016).

rating. This is why the authors believe that zero-rating can have implications in many different areas and suggest the following approach in examining it.

In the first place, it should be determined if specific zero-rating practice is affecting net neutrality rules as it covers the widest area, per guidelines already issues by BERIC. If a concrete zero-rating practice is affecting technical characteristics of service, such as when all other content has a lower speed than zero-rating or when some content is banned while the zero-rated is not, it is clear that there is a violation of net neutrality principle. If this is not the case, then we should determine whether zero-rating has led to consumers generally having access to all content, but in fact that access in some circumstances has been materially reduced in practice. This leads us to a more specific area, which according to the criteria that BERIC mentioned leads us to competition law. In this specific case, we should first be familiar with the characteristics of the market we examine, the market power of the participants in this zero-rating arrangement, and the elements of this zero-rating arrangement; so that we can examine the effects that this practice might have on market, consumers and competitors. It is clear that examination from a competition law perspective is a very demanding task, as presented in DG Competition study. However, from a competition law perspective, there is no evidence that any of the current zero-rating practices have had a negative effect. Therefore, the argument that zero-rating has implications for competition law must be supported by a detailed economic analysis of the market and effects of the practice, combined with close cooperation between regulatory authorities for the digital market, the market participants, and the consumers. These are the two most regulatory aspects that need to be taken into account when discussing a specific zero-rating case.

However, apart from these issues it should not be forgotten that in some situations and countries with specific political situations where fundamental rights might be endangered, zero-rating can have implications on cultural diversity and freedom of information. In these cases, a special emphasis should be given to the context in which zero-rating is present, as explained in the previous section discussing content diversity.

As with any other commercial practice, zero-rating will end up being examined in the light of its market implications (unless there is a clear case of violation of net neutrality rules). The regulatory approach from country to country might vary since the underlying question that will predominantly influence decision about zero-rating is: do we see Internet as an important medium (or even, a human right) or as a pure business tool? Only after answering this question can we examine circumstances of each zero-rating case with a set of rules appropriate for that environment. However, it is certain that examining zero-rating requires a deep understanding of technology, law, business-markets and fundamental human rights; and therefore, it will require deeper regulatory collaboration in order to properly be addressed.