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NET NEUTRALITY, TURKEY, AND BEYOND
A Road Map for Net Neutrality Regulation in Turkey

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Executive Summary

Net Neutrality (NN) remains as one of the most debated internet governance topics. This is because laws and regulations governing the NN principle have a tremendous impact on the end-users, fundamental rights, as well as fair competition, therefore, calling for a careful consideration of what challenges the internet actors face and how their rights should be preserved. Due to carrying pivotal importance for both enhancing the rights of end-users and fostering fair digital economy, NN debates require urgent attention from relevant Turkish Authorities. Currently, Turkey does not have a clear stance on NN, which created a legal gap and lead to applications that are far from being best practices. Therefore, the “Net Neutrality, Turkey and Beyond: A Road Map for Net Neutrality Regulation in Turkey” Report (Report) is intended as a roadmap for Turkish Regulators, analyzing the existing NN ecosystem particularly within the EU and US, comparing and contrasting NN best practices and applications that may pose some risks to various internet actors. It is also intended as a resource for those interested in the NN research in general, outlining why they should be concerned about the lack of NN regulations in Turkey. What follows translates between different approaches to NN by reframing the possible scenarios for relevant Turkish Authorities.

This Report is prepared by the collaboration of lawyers, technologists, academic scholars, and experts in the field who worked together to analyze the most debated NN topics with a 360-degree view and draw a transparent and well-rounded roadmap for Turkey’s journey in factual and evidence-based policymaking process regarding NN. Data gathering and analysis are conducted through carefully investigating various regulations, policies, academic papers, international reports, case studies, and through reviewing interviews of relevant experts. Main themes the Report focuses are the relationship between NN and, connectivity and access; NN principles, exemptions, and the relationship between NN and zero-rating programs; regulatory approach of different countries to NN; reflections of international organizations; and finally, the impact of NN and network bias on internet actors.

As a starting point, connectivity and access remain as a primary element in the NN ecosystem due to being related to notions such as adequate internet infrastructure, affordability, and digital

literacy. In other words, without proper internet infrastructure that is affordable to literate end-users, debates around NN may lose its priority since end-users may not have the necessary means for accessing the internet. Therefore, any debate on how NN should be regulated must start with addressing the strengths and weaknesses in the internet infrastructure from both social and technical perspectives. Later on, the principles of NN provide a clear guideline on how the NN ecosystem should be constructed in a way that adheres to technology neutrality, transparency, non-discrimination, non-blocking, non-throttling, and non-prioritization. All of these principles are equally important in achieving the core purposes of NN, however, in some instances, they may be interpreted in different ways in various geographies. These principles are framed in-depth particularly by the European Union's Open Internet Regulation (Regulation), which oversees NN rules in the EU. This Regulation also sets forth exemptions to these principles that are applied under strict conditions which include compliance with legal obligations, integrity and security of the network, and congestion management in exceptional and temporary situations.

The Report later moves on to analyze the relationship between NN principles and the implementation of zero-rating programs. This relationship remains as one of the most controversial issues. Overall, this practice has the potential to yield both positive and negative outcomes, which differ on a case-by-case basis and require questioning which services are chosen to be offered free of charge, in what capacity, to whom, and whether these programs adhere to NN principles. The delicacy of this relationship requires a deeper understanding of the impact of these programs on NN, possible opportunities and drawbacks introduced by zero-rating offerings, and finally the differing regulatory approaches to these offerings. One of the NN principles that may be undermined significantly by the improper implementation of zero-rating programs is the principle of non-discrimination. Apart from the non-discrimination principle of NN, when applied improperly, zero-rating programs carry the potential of degrading the relevant principles that are core to the NN. On the other hand, when offered on a non-exclusive, independent and non-affiliated, and transparent basis, they have the potential to enhance digital access, allow low-income users to have continuous connectivity, and digital inclusion. Different regulatory bodies have a different approach in regulation zero-rating programs, but the general trend in the EU and the US is a case-by-case basis approach.

As an attempt to analyze the NN ecosystems in the EU and the US, the Report provides an overview of the regulatory approaches within these geographies, as well as provide a screenshot of the current situation in Turkey. The EU has clear regulations and procedures governing NN in place, most prominently the Open Internet Regulation that is enacted in 2015. As mentioned above, while drawing a detailed framework for NN principles, this Regulation has also been criticized for leaving too many loopholes to be exploited, such as the ability to offer priority to specialized services. Another criticism is about not providing a clear framework for zero-rating services and leaving its assessment to national regulatory authorities (NRAs). The Body of European Regulators for Electronic Communications (BEREC), which assists NRAs in implementing the Regulation has published a set of guidelines that sets forth in detail how the Regulation should be implemented. BEREC reviews each NRAs annual report on the implementation of and improvements in NN practices, however, NRAs often refrain from publishing these reports or do not follow the minimum requirements. On the other side of the Atlantic, in the US, NN has been an issue of conflict between network users and access providers for a long time and the tension is still there, if not intensified under the new presidential government. Overall, at the federal level, the US does not have a set of rules that preserves NN principles, on the contrary, the FCC believes that the internet is freer with the new FCC Order dated 2017. However, the Order has already received a high volume of controversy and lead to initiatives like the Save the Internet Act, and other proliferating state bills that contradict the Order. One example is a federal court of appeals' decision, which upheld the FCC's ability to repeal NN rules but decided that the FCC cannot prevent states from adopting their own rules. This rule provides a green light for states to have their own NN rules. Also, it is expected that the NN ecosystem may take a different route with the upcoming presidential elections, depending on the elected president's view on NN.

In Turkey, there is no clear regulation or guidance in Turkish legislation concerning the principle of NN. We believe that Turkey should break its silence regarding NN and that a multi-stakeholder debate is initiated to determine Turkey's strategic position in terms of NN, and that hopefully Turkey decides to align with the EU's open internet regulations, on its path to EU harmonization and a digital single market, that one day would include Turkey. We believe that the reason why Turkey never attempted to regulate NN is there has not been sufficient demand from the Turkish public. Even if the Turkish ISPs' practices or the public have not triggered the need to regulate

NN in Turkey, it is clear that demand and necessity, act as the driving forces for a regulatory authority to enact regulation in relation to responding to predominantly “contemporary” circumstances. However in terms of regulatory strategy, it should always be taken into consideration, the future, and especially the potential scenarios in which contemporary circumstances may promptly change and harm the values, which the Regulation was meant to protect, even before there is time to adjust the Regulation with respect to the recent developments. The need to regulate NN, which already actualized in the EU, will certainly reveal itself in Turkey, but not without potential harm to end-users or the market in general. Even though there are no alarming circumstances in Turkey, or any harm proven to have actualized due to the lack of NN regulation, there are certainly possible risks threatening the rights of end-users as well as openness and neutrality of the internet. Therefore, not regulating NN in Turkey may be considered as a decision of regulatory strategy, to bear any risks that may actualize by the virtue of the regulatory absence.

On the other hand, based on their respective roles either in shaping policies or setting the ground rules for internet infrastructure, international organizations have various approaches to the NN. Some of the organizations have an active role in the debates, such as the Internet Society initiating the NN Experts Roundtable that came up with a set of principles for the future NN legislations. Whereas, some of the organization such as The Internet Corporation for Assigned Names and Numbers (ICANN) remains passive due to their missions that stay on the technical side of the internet infrastructure. From the perspectives of other internet actors, NN introduces other various topics such as network bias, hurdles on fair competition, and the impacts on human rights.

The Report concludes that debates around NN are multifaceted, which also requires understanding the dynamics of notions such as fair competition, preferential treatment of specific content, assessment of market power, shortcomings of existing regulations, rights-based risk assessments, and many more. There are lessons to learn from existing approaches to NN. Turkey has the means to analyze particularly the regulations and best practices in the EU since the EU ecosystem provides a more user-centric approach that enhances the user rights and preserves the dynamic of fair competition.

1. Introduction and the Workings of the Report

This Report aims to provide a comprehensive understanding of the concepts of open internet and Net Neutrality (NN), while mapping both the historical developments and current arguments around the globe by looking into various jurisdictions, challenges, and responses to these issues. The main focus of the debates revolves around deciding whether broadband internet access market should be regulated under strict NN rules - imposing a total ban upon the contested practices of blocking, throttling and paid prioritization - or if a light-touch regulatory approach will better foster its dynamics. The main objective of this Report is to provide a roadmap for Turkey, a country that has no clear stance on NN, and for national regulators by discussing the state of the art regarding the users' rights by looking into the impact of various approaches to NN on the users, as well as on the internet actors.

To comprehend the essence behind the current debates, after touching base on the importance of the connectivity and access in the internet ecosystem, this Report delves into the principles lying at the heart of NN. It approaches to these principles both from theoretical, legal, and practical perspectives by giving concrete examples of the varying approaches taken by different countries regarding the application and effectiveness of the core principles. These principles include but are not limited to transparency, non-throttling, non-prioritization and non-blocking as well as technological neutrality that is a key point for the administration of all governments and often implies a very significant impact on the public economy of the countries. There are also exemptions to these principles applied under strict conditions, which are compliance with legal obligations, integrity, and security of the network, and congestion management in exceptional and temporary situations. Through analyzing these principles and their exemptions, the Report lays out the backbone of NN and provides a clearer understanding of the reasons which various countries apply different approaches. Building on the NN principles, the Report then analyzes the impact of zero-rating programs on NN principles, users, and fair competition through looking into the approaches of the EU, US, and Turkey.

The Report then lays out the regulatory trends regarding NN in the EU, US, and Turkey. The EU has more neutral approaches in regulating NN due to its digital single market strategy adopted in

2015 that fosters notions such as open access, non-discriminatory applications, and advanced digital networks. Since 2015, the EU regulates NN clearly for the first time through various codes, most essentially, the Open Internet Regulation (EU Regulation 2015/2120) that safeguards equal and non-discriminatory treatment of traffic relating to the internet access services and relevant end-users' rights. Whereas the US undergoes a different battle in NN, causing it to alter its approach in opposite directions since 2005. Most significantly, the trend of safeguarding NN principles in the US is modified by the FCC's 2017 vote that let broadband providers to block or throttle content as they wish. This approach revoked FCC's 2015 order on NN that prevented blocking and/or prioritization of any internet traffic. However, NN debates are still a hot topic in the US and various regulators push for a change. Then, in Turkey there are no clear regulations on NN, however, some of the applications of the Turkish Information and Communications Authority ("ICTA") and provisions of ICTA's related legislation (such as e-Communication Law, Access and Interconnection Regulation) point towards safeguarding some of the principles of NN. 2019-2023 Strategy Report of the ICTA aims to provide and develop effective and sustainable competition, eliminate anti-competitive or restrictive practices and applications of the ISPs. Given the legal gap that exists in Turkey as of now, a switch from a non-existing approach, in other words, a country that has no clear stance on NN to a country with a solid stance with clear laws and rules is needed. Finally, after mapping these countries' approach to NN, the Report lays out the reflections of international organizations such as the Internet Society, the Internet Corporation for Assigned Names and Numbers, and the International Telecommunications Union to provide a multistakeholder understanding to NN debates.

This Report later builds on the above topics by addressing the importance of protecting end-users' rights such as the right to access and distribute information and content, use and provide applications and services without discrimination, and use terminal equipment of their choice. The ongoing issues relating to NN are further addressed by looking into the effects of network bias on internet actors with a specific focus on the NN's intersection with human rights. Currently, there is a push towards from end-users in making the private industry and governments to protect users and safeguard human rights by centering these notions at the heart of technology production and use. Therefore, by looking into the impact of various NN strategies have on these notions, the

Report aims to set forth the state of the art in protecting user rights and upholding fair competition rules for the internet actors.

Consequentially to the topics raised above, this Report takes a holistic approach and underscores the importance of the tangible impact NN has on matters such as investment and innovation, freedom of expression, competition, consumer protection, data protection and privacy. Overall, laws and regulations governing the issues around NN do not merely affect the internet actors, but also have a tremendous impact on the end-users, consumer welfare, and therefore calling for a careful consideration of what challenges they face and how their rights are affected. This Report looks into consumer welfare and evaluates zero-rating programs, emphasizing that some of such programs can have many benefits, e.g. when offered on a non-discriminatory basis and that they would promote consumers' rights and therefore ultimately contributing to the enhancement of consumer welfare. Looking from an economic aspect that is highly interlinked with competition law perspective, debated challenges can be traced back to the varying perspectives of interest groups that generally run after the most advantageous scenarios for their business motives, interests, or power. This Report adopts a well-rounded approach and considers all these dynamics altogether aiming to help decision makers in framing effective regulations by providing information on where countries stand as to the politics of NN, and its impacts on human rights, the economy, and much more. Overall, the Report hopes to be a valuable asset for the possible approaches Turkey may adopt to ensure that the main theoretical framework promoting openness and non-discrimination are taken into account and that the rights and interests of consumers are not undermined. The findings of this Report support the view that it would be ideal for Turkey to adopt a regulation with clear exemptions that preserves the users' rights, enhances the internet's open nature, and allows fair competition. We believe this approach likely will be more beneficial for Turkey's future NN regulatory directions. Accordingly, any attempt in drafting a new regulation along these lines may take the EU's current regulations into account and build on top of its best practices. Through this way, Turkey can do better in applying more transparent rules that both protect the users and the economy while enhancing the internet's open nature.

2. Methodology of the Report

This Report looks into different approaches to NN by comparing different geographies' applications, as well as relevant international organizations policies with the purpose of drawing a road map for Turkey. By doing so, we analyzed academic papers, international conferences, national regulations, policies, books, blog posts of internet experts, reports of various NN working groups, decisions and opinions of the relevant authorities, and other country reports regarding NN. We also conducted unstructured interviews with various experts and officials, which are embedded into this Report under anonymity principles. Our research team consists of lawyers, technologists, academics, and experts in the field who worked together to analyze the issues around NN in a multidisciplinary approach by providing differing perspectives about the components and applications of NN. With this setting, we aim to tackle the most debated topics with a 360-degree view and draw a transparent and well-rounded roadmap for Turkey's journey in factual and evidence-based policymaking process regarding NN.

3. Connectivity and Access

Connectivity and access are one of the most essential pillars for the digital transformation and the digital economy.² Internet governance models that enhance connectivity and access principles also heighten the relevant actors' participation in the digital economy. Internet connectivity and access may have different meanings for different geographies depending on different factors such as their political ecosystem, internet infrastructure, end-users' literacy.³ Taking this a step further, even though connectivity and access often come across as a set of issues regarding internet infrastructure, it also has policy and social components in it. Furthermore, one country's technical and political ecosystem around connectivity and access may also have various impact on the other

² "Open Internet." Digital Single Market - European Commission, September 9, 2013. <https://ec.europa.eu/digital-single-market/en/open-internet-net-neutrality>.

³ See ITU. 2019. "Economic Impact Of Broadband In Ldcs, Lldcs And SIDS An Empirical Study". Thematic Reports. ITUPublications. <https://www.itu.int/en/ITU-D/LDCs/Documents/2019/Economic-impact-of-broadband-in-LDCs,-LLDCs-and-SIDS.pdf>. for a comprehensive research underscoring the importance of connectivity and technologies for different countries, specifically for vulnerable countries, for example, by stating that "A growing body of evidence indicates that broadband Internet, and information and communication technologies (ICT) in general, promote economic development. Given its potential applications in diverse sectors of the economy, investment in this technology is particularly important for vulnerable countries."

countries due to the internet's transnational nature. Following are some of the most common obstacles regarding connectivity and access in various geographies:

- Lack of interest in using the internet
- Affordability
- User capability and digital literacy
- Infrastructure (broadband access)
- Content blocking
- Political ecosystem

Connectivity and access remain as a significant hurdle for underdeveloped countries, indigenous communities, and people who live in rural areas. This is mainly because of the failure in providing the necessary infrastructure for internet access. Let alone fast and reliable broadband services, there are still many regions deprived of any sort of internet infrastructure. For instance, the Internet Society (ISOC) reported that the broadband access gap for indigenous people living in the United States (US) is notable, let alone the other geographies, which suffer from basic infrastructure.⁴ In the 21st century, where the discussions about whether the access to the internet should be considered as a fundamental right remain as a hot topic, the digital divide continues to grow due to the inadequacy in internet infrastructure.

In 2006, the United Nations (UN) released a non-binding resolution condemning international disruption of internet access by governments and stated that the offline human rights must also be protected online.⁵ Within this scope, the right to internet access (“right to broadband” or “freedom to connect”) argues that all people must be able to access the internet to exercise and enjoy their fundamental human rights, such as the right to freedom of expression, the right to development, and the right to freedom of assembly. Various countries have already adopted laws that bring the state into action in ensuring that internet access is available and not being unreasonably interrupted. These countries include Costa Rica, Estonia, Finland, France, Greece, and Spain. On the other

⁴ “Empowerment through Connectivity: 2018 Indigenous Connectivity Summit Community Report”. Internet Society. 2018. https://www.internetsociety.org/wp-content/uploads/2019/01/2018-Indigenous-Connectivity-Summit-Community-Report_EN.pdf

⁵ Vincent, James. "UN condemns internet access disruption as a human rights violation". The Verge. <https://www.theverge.com/2016/7/4/12092740/un-resolution-condemns-disrupting-internet-access>

hand, in the EU, to create the most desired internet connectivity for the EU citizens, the EU published a list of initiatives and a comprehensive legislative framework in 2016. These include the Common EU Broadband for 2025, 5G Action Plan, Wifi4EU. With these legal frameworks, the EU hopes to achieve to make the EU at the forefront of internet connectivity.⁶

As to the relation between connectivity and access with NN, the Federal Ministry of Economic Affairs in Germany stated that “the core concepts of NN may inspire and inform policy initiative at higher layers of the internet value chain beyond the broadband infrastructure level”.⁷ Moreover, the Center in Regulation in Europe states that “the analysis of non-discriminatory access to platforms at higher layers of the internet value chain cannot merely rely on the insights of the net neutrality debate, but must look into the specifics of those markets.”⁸ The Center argues that the application of NN at the infrastructure layer was based on two notions which are (i) “access networks were perceived as market participants with market power and seen as critical intermediaries for users that wanted to access internet services and content”, and (ii) “the access to those gatekeeper intermediaries was viewed to be of special societal importance, because it allowed users to exercise their fundamental rights to access and distribute information, which enabled businesses to reach consumers and thus access was vital for competition and innovation.”⁹ Apart from these, In the . The next chapter addresses the relationship between open internet access and NN at a deeper level by analyzing its dynamics.

4. Open Internet Access and Net Neutrality

NN is the principle mandating that internet traffic be managed in a non-discriminatory fashion. Every government has a role to play in protecting the open Internet and ensuring that Internet users are able to access the content they want, when they want and with the speed they want. The Powell

⁶ “Improving Connectivity and Access.” Digital Single Market - European Commission <https://ec.europa.eu/digital-single-market/en/policies/improving-connectivity-and-access>.

⁷ Kraemer, Jan, Daniel Schnurr, and Alexandre de Streel. “Internet Platforms and Non-Discrimination.” *SSRN Electronic Journal*, 2017. <https://doi.org/10.2139/ssrn.3083114>.

⁸ *ibid.*

⁹ *ibid.*

Principles provide an important roadmap for Internet to follow.¹⁰ This roadmap allows users to have the freedom to access and convey content, freedom to use applications, freedom to attach personal devices, and freedom to obtain service plan information. Allowing open internet access through laws or regulations, end-users are granted directly applicable right to access and distribute the lawful content and services of their choice via their Internet access service. For example, in the EU, open internet access principle complementing the principle of non-discriminatory traffic management are protected through the Regulation on open Internet access.¹¹ Put differently, the Regulation strengthens the idea that the internet traffic should be treated without discrimination, blocking, throttling or prioritization.¹² In addition, the EU open internet access rules allow reasonable traffic management and, with the necessary safeguards, “specialized services”¹³ that will be further explained below. While supporting and enhancing the digital market strategy, the legal framework that supports open internet access creates the individual and enforceable right for end-users in the EU to access and distribute Internet content and services of their choice.¹⁴ In order to ensure that the internet operates as an engine of innovation and it is used openly without any discriminatory obstacles, core rules should be set out to safeguard equal treatment of traffic when providing internet access services and protecting related end-users’ rights. In general, the principles should be made a priority and laws and regulations should target to safeguard end-users while at the same time to ensure the intrinsic nature – openness – of the Internet is not disrupted.

The following Chapter looks into these principles from an international window by analyzing how these principles are tackled by different countries and regulated in the relevant regulations, particularly the EU as well as US. Our analysis of these principles aims to reflect on the best practices regarding the application of these principles mainly addressing the EU Open Internet Regulation and BEREC Guidelines.

¹⁰ Powell, Michael K. “Preserving Internet Freedom: Guiding principles for the industry” 2004. 3.; See also “Net Neutrality Legislation: A Framework for Consensus | Internet ...”, n.d., accessed September 14, 2019, <https://www.internetsociety.org/resources/doc/2019/net-neutrality-legislation-a-framework-for-consensus/>.

¹¹ EU rules on open internet access apply as of 30 April 2016, following the adoption of Regulation (EU) 2015/2120 on 25 November 2015 by the European Parliament and the Council.

¹² See The Net Neutrality Debate: Access to Broadband Networks pg. 9, Congressional Research Service R40616 , April 15, 2019, available at <https://fas.org/sgp/crs/misc/R40616.pdf>

¹³ See EU Digital Single Market Policy - Open Internet, available <https://ec.europa.eu/digital-single-market/en/open-internet-net-neutrality>

¹⁴ *ibid.*

4.1. Principles

To comprehend the essence behind the current debates rotating around NN and ultimately to provide a roadmap for Turkey, following the above explained the importance of the connectivity and access in the internet ecosystem, this Chapter delves into the principles lying at the heart of NN. Practices such as throttling, prioritization, and blocking that may be included in Internet Traffic Management Practices (ITMP) and the implementation of such traffic management strategies in principle conflicts with the NN. There are core principles that are of utmost importance in preventing the parties from using such practices, which may undermine the essences of NN. This is because these core principles play a crucial role in achieving the core purposes of NN and therefore protect an open, neutral, and non-discriminatory access to the internet. This Chapter approaches to these principles both from theoretical, legal, and practical perspectives by giving concrete examples of the varying approaches taken by different countries, where necessary, regarding the application and effectiveness of the core principles.

These principles include transparency, non-throttling, non-prioritization and non-blocking as well as technological neutrality that is a key point for the administration of all governments and often implies a very significant impact on the public economy of the countries. After presenting the definitions, scope and importance of these core principles, exemptions to these principles will be explained. These exemptions are applied under strict conditions, which are (i) compliance with legal obligations, (ii) integrity and security of the network, and (iii) congestion management in exceptional and temporary situations. Through explaining and analyzing these principles and their exemptions, this Chapter lays out the backbone of NN and provides a clearer understanding of the reasons which various countries apply different approaches which will be further elaborated in Chapter 5. We also aim to reflect on the state of the art in applying these principles with the hope that we provide a clear picture regarding the importance of each of these principles and the strict application of their exemptions.

4.1.1. Technology Neutrality

The term "technology neutrality" (or "technological neutrality") is a principle of good regulation in internet and telecoms regulations.¹⁵ Technology neutrality means that “the same regulatory principles should apply regardless of the technology used.”¹⁶ OECD recognized technology neutrality as a core principle for internet policy in 2011.¹⁷ Technology neutrality has proven to be a widely recognized and prevalent principle, influencing many debates including those on convergence with broadcasting, voice over IP, universal service, spectrum allocation as well as NN.¹⁸ Technology neutrality has a wide scope of infusing legal regimes concerning other fields in addition to telecommunications including but not limited to those of governing surveillance, patents, and electronic signatures. In the context of NN, this principle requires a legal framework to set out measures that neither impose nor discriminate in favor of the use of a particular type of technology.¹⁹ A good example for this can be seen in the Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015²⁰ (EU Open Internet Regulation) that explicitly recognizes the principle of technological neutrality’s importance, being one of the bedrock notions contributing to the main goal of setting out “common rules to safeguard equal and non-discriminatory treatment of traffic in the provision of internet access services and related end-users’ rights” and “to protect end-users and simultaneously to guarantee the continued functioning of the internet ecosystem as an engine of innovation”.²¹

¹⁵ Maxwell, Winston and Bourreau, Marc, Technology Neutrality in Internet, Telecoms and Data Protection Regulation (November 23, 2014). Computer and Telecommunications L. Rev. (2014) Available at SSRN: <https://ssrn.com/abstract=2529680> or <http://dx.doi.org/10.2139/ssrn.2529680>

¹⁶ Maxwell, Winston, and Marc Bourreau. 2014. "Technology Neutrality In Internet, Telecoms And Data Protection Regulation". Computer And Telecommunications L. Rev.. doi:<http://dx.doi.org/10.2139/ssrn.2529680>.

¹⁷ "OECD Council Recommendation On Principles For Internet Policy Making". 2011. Oecd.Org. pg.6. <https://www.oecd.org/sti/ieconomy/49258588.pdf>.

¹⁸ Chris Reed, Taking Sides on Technology Neutrality, 4 SCRIPT-ED 263, 264–65 (2007) (critiquing the narrow approach taken by many to technology neutrality).

¹⁹ Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32015R2120&from=EN>

²⁰ The Regulation sets out measures that respect the principle of technological neutrality, that is to say they neither impose nor discriminate in favour of the use of a particular type of technology. (Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users’ rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union (Text with EEA relevance)) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.310.01.0001.01.ENG&toc=OJ:L:2015:310:TOC; https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02015R2120-20181220_20.12.2018_001.001

²¹ Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32015R2120&from=EN>

Technology neutrality is important for many reasons and when this principle is in ambiguity concerning the extent of laws and regulations as applied to new technologies,²² and thus creates confusion for different stakeholders, entities may be reluctant to make investments or defer their investments. As a result, dynamics in the economy may change and businesses likely will be negatively affected. Overall, technology neutrality is an interconnected principle with other core principles and its adoption is important because it solidifies the application of the essences lying at the heart of the principle of NN, complementing other core principles enhancing the notion of “neutrality” in itself, with regard to rapidly changing technologies.

4.1.2. Transparency

In a complex system like the internet, to allow people to benefit from its openness, “it must be crystal clear what the practices of operators controlling the network mean for all users, including consumers”.²³ Transparency plays a vital role in the successful application of NN rules protecting different stakeholders and achieving the protection of consumers’ rights. Also, while enhancing users’ rights at the same time transparency helps the online ecosystem maintain the internet’s benefits arising from its open nature, fostering innovation, democratic participation and freedom of expression. For many, transparency is non-negotiable and even before the recent developments rotating around NN principle globally, transparency had a crucial place in numerous countries’ rules regarding NN.²⁴ A strong framework would require a provision of strong transparency measures to ensure that consumers understand and get what they pay for. For instance, for many consumers, the lower internet speeds they get can be perplexing - taking into consideration what they have seen in the advertisement and what they have been promised before they made their decision about the service they opted. In such circumstances, customers may feel cheated. This is

²² Maxwell, W, Hogan Lovells 2014 available at <https://www.hlmediacomms.com/2014/11/17/technology-neutrality-in-internet-telecoms-and-data-protection-regulation/>

²³ Neelie Kroes, Vice President of the European Commission Commissioner for the Digital Agenda, Net neutrality in Europe, April 13, 2010 available at <http://www.abc.es/gestordocumental/uploads/Otras/discurso-neutralidad-internet.pdf>

²⁴ See for example OECD Communications Outlook Net Neutrality Report 2013 at <http://www.oecd.org/sti/broadband/2-9.pdf>; Comparative Case Studies in Implementing Net Neutrality: A Critical Analysis of Zero Rating, Christopher T. Marsden, Volume 13, Issue 1, May 2016, *Scripted* journal of Edinburgh University available at <https://script-ed.org/article/comparative-case-studies-in-implementing-net-neutrality-a-critical-analysis-of-zero-rating/>

why transparency is crucial for consumers in understanding the workings of the system and to be aware of the situation they find themselves in. More specifically, consumers should be clearly informed of the traffic management systems that are in place and should be able to choose their providers taking this into account. These are not topics up for discussion, but clear rules that are already agreed and adopted. Different stakeholders should be vigilant to ensure that they are correctly transposed and implemented by the states. Internet service providers (ISPs) should be required to give their customers detailed information about broadband prices, speeds and fees so that a country can be said to protect internet users efficiently, ensuring that they take informed decisions and act accordingly. There are many arguments rotating around the principle of transparency, for example, some opine that excluding the disclosure requirements would allow ISPs to save money that can then be used for broadband deployment.²⁵ Nevertheless, consumer protection promoters criticize this stance, deeming it a blatant attempt to weaken NN protections that open internet supporters believe are necessary for economic growth, innovation, civic empowerment, and freedom of expression.²⁶

Transparency in the context of the quality of the Internet access service and of any traffic management practices is a key prerequisite of the end users' right and ability to choose between the different services existing in the market. The connection between transparency and NN was underscored when the European legal framework was revised, as it was decided that the right to choose the service and the provider that best fits end users' needs and expectations is a right, which should be fully protected - principally via a transparency and accordingly a competitive market. Creating false expectations and not meeting them because of misrepresenting the details about the provided services to customers can be solved through enhancing transparency and setting out measures for it.²⁷ It is not surprising that transparency is key in Open Internet access regulation

²⁵ Pai, Ajit. 2017. "Statement of FCC Chairman Ajit Pai Announces Pilot Program To Release Commission Documents To The Public". Transition.Fcc.Gov. http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0202/DOC-343303A1.pdf.

²⁶ Gustin, Sam, It Begins: Trump's FCC Launches Attack on Net Neutrality Transparency Rules Net neutrality, the internet's open access principle, is under assault by the Trump administration, 2017, available at https://www.vice.com/en_us/article/kbkm5z/it-begins-trumps-fcc-launches-attack-on-net-neutrality-transparency-rules

²⁷ An example for this can be found in "Study on the implementation of the open internet provisions of the Telecoms Single Market Regulation", Bird & Bird, 2019, pg. 310 "*RRT took a decision against AB Lietuvos radijo ir televizijos centras on 18 January 2017. A consumer complained about the quality of the provided IAS and demanded the termination of his contract. RRT established that in the area where the IAS was provided the average internet speed was considerably lower than the advertised maximum speed and only a little bit higher than the minimum advertised*

and in the Body of European Regulators of Electronic Communications (BEREC)'s Guidelines transparency requirements are considered carefully and further information is provided regarding their scope and application. Both ISPs and NRAs have different responsibilities in ensuring transparency. For instance, it is necessary for NRAs to ensure that ISPs are complying with these transparency requirements. Thus, the Guidelines set off some examples of appropriate practices that ISPs are expected to follow to be able to make their information transparent.²⁸ In considering whether a traffic management measure is reasonable, NRAs should assess whether the traffic management measure is transparent, non-discriminatory and proportionate. These are legal principles that are already used in everyday regulatory practice when applying EU law and respective national law.

Overall, transparency forms the backbone of the NN principle and bringing transparency requirements has a vital role in the effectiveness as well as application of the EU Open Internet Regulation. Introducing transparency requirements for ISPs, in other words, requiring ISPs to provide clear information about their internet access services, such as speeds, data caps, and any traffic management measures applied to their service, as well as explaining whether and how specialized services might have an impact on the internet access services provided, help the principle of transparency to be implemented and respected.²⁹ In the EU Open Internet Regulation, in addition to provision of such information in general, ISPs are also required to provide this information in their contracts which aims to inform the public. An example for this can be the information published in marketing or on websites.

Finally, from the end users' perspective, ensuring transparency is critical for maintaining open internet access. Users should be able to access transparent information about internet traffic management. The possibility for consumers to make informed choices and take informed decisions hinge on the provision of clear and accessible information about how internet traffic is managed

speed. RRT concluded that the advertised maximum speed could not be achieved in the area where this end-user was located. RRT therefore determined that the ISP did not provide proper services and acknowledged the complaining party's right to terminate the agreement without having to pay a penalty for early termination. This case was not further litigated in court."

²⁸ e.g. it should be easily accessible, accurate, meaningful, and should enable comparison with other offers.

²⁹ BEREC, "What transparency requirements does the Regulation introduce for ISPs?" available at <https://berec.europa.eu/eng/netneutrality/transparency/>

and the conditions and quality of connections. Furthermore, transparency also believed to underpin competitive broadband access markets. However, measures strengthening transparency will only have a limited impact unless they are combined with a robust and clear policy regarding internet traffic management.³⁰ BEREC explicitly stated that, “even in the absence of competition problems, the widespread use of certain types of traffic management techniques could lead to changes in the Internet economy over time”.³¹ With regards to competition, although transparency is seen as a key feature for competition, it is also argued that transparency is not an absolute guarantee for effective competition; even in cases where there is competition “there still remains a possibility that the levels of quality of service offered by the market are considered insufficient with regards to the demands and expectations of end users and the wider society.”³² Therefore, in general, solely recognizing transparency’s role in a legal framework is not sufficient for the implementation and effectiveness purposes, an open and clear policy is also required.³³

4.1.3. Non-Discrimination

Non-discrimination means prohibiting discrimination and providing equal treatment, that equivalent conditions are applied in the same circumstances, in relation to interconnection and/or access, an obligation of non-discrimination ensures that an operator applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services and provides services and information to others under the same conditions and of the same quality as it provides for its own services or those of its subsidiaries or partners.³⁴ Non-discrimination principle is vital for the purposes of equal treatment, NN, and open internet access. This is because, for example, in the absence of non-discrimination, internet broadband access providers may attempt to capture the consumer surplus that remains after uniform pricing.³⁵ There are two reasons for this attempt. First,

³⁰ EBU. 2019. "Open Internet". Ebu.Ch. Accessed September 4. <https://www.ebu.ch/legal-policy/open-internet>.

³¹ See BEREC response to European Commission Consultation on the open Internet and net neutrality in Europe. and See BEREC Guidelines On Net Neutrality And Transparency: Best Practices And Recommended Approaches Bor (11) 44 pg.9 (Berec.europa.eu, 2011) <https://berec.europa.eu/doc/berec/consultation_draft_guidelines.pdf> accessed 7 September 2019.

³² “About BEREC’s Net Neutrality Guidelines” BEREC. https://berec.europa.eu/files/document_register_store/2016/8/NN%20Factsheet.pdf

³³ EBU, 'Open Internet' (Ebu.ch) <<https://www.ebu.ch/legal-policy/open-internet>> accessed 4 September 2019.

³⁴ Bird & Bird and ECORYS. 2019. "Study On The Implementation Of The Open Internet Provisions Of The Telecoms Single Market Regulation". pg.20 Luxembourg: European Commission. <http://10.2759/922060>.

³⁵ Economides, Nicholas. “‘Net Neutrality’, Non-Discrimination and Digital Distribution of Content Through the Internet.” SSRN Electronic Journal, 2007. <https://doi.org/10.2139/ssrn.977096>.

even in an unconstrained monopoly situation, price discrimination, based on differences in the elasticity of demand, increases profits. Second, uniform regional pricing, discussed above, constrains carriers' profits to duopoly levels, below the level that could be achieved through price discrimination.³⁶ Furthermore, it should be noted that recognizing and respecting the non-discrimination principle are not sufficient in principle, it brings many other implementation measures and details with it. Non-discrimination is a general concept, however, its application and implementation merit specific and thorough considerations depending on the nature and type of discrimination in question (e.g. price discrimination). The European Parliament previously underscored the importance a non-discriminatory access in its report on platforms and the digital single market stating that *“the need for net neutrality and fair and non-discriminatory access to online platforms as a prerequisite for innovation and a truly competitive market”* in order to set the objective to achieve platforms that serve as *“a gateway to a downstream market do not become gatekeepers”*.³⁷

The notion of non-discrimination is among the backbone principles of NN since it aims to ensure that equivalent conditions are applied in the same circumstances. Overall, it implies to a non-discriminatory access to a gatekeeper's resource in the internet, which has been at the heart of global policy considerations in the developments and discussions that took place in recent years. Internet's benefits to the world are commonly agreed on, especially regarding the contribution it made to *“growth and innovation in our economies – the low barriers to entry on the open platform of the internet have provided particularly fertile ground for new content and applications to develop, and for information to flow freely”*.³⁸ The principle of non-discrimination and the non-discriminatory feature of NN is strongly supporting the free expression and an open society.³⁹ This is because a non-biased network allows the free flow of information as stated before; it is *“a necessary condition for exercising freedom of expression on the Internet...”*.⁴⁰ Respecting the

³⁶ BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, pg. 15.

³⁷ "Internet Platforms And Non-Discrimination". pg.9. 2017. Cerre.Eu. https://cerre.eu/sites/cerre/files/171205_CERRE_PlatformNonDiscrimination_FinalReport.pdf.

³⁸ "What Is Covered And Protected By The Regulation". 2019. Berec.Europa.Eu. Accessed September 7. <https://berec.europa.eu/eng/netneutrality/regulation/>.

³⁹ "Net neutrality reloaded : zero rating, specialised service, ad blocking and traffic management. Annual report of the UN IGF Dynamic Coalition on Net Neutrality"/Edited by Luca Belli ; preface by Tim Wu. FGV Direito Rio, 2016. ISBN: 9788563265760, available at <http://www.ict-21.ch/com-ict/IMG/pdf/Net-Neutrality.pdf> pg.7.

⁴⁰ OAS Special Rapporteur on Freedom of Expression. Freedom of Expression and the Internet. 2014. IDH/RELE/INF.11/13. Available at <http://www.oas.org/en/iachr/expression/docs/>

principle of non-discrimination means “to take affirmative action to ensure equality”⁴¹ as this principle aims to ensure equal treatment, promotes equal access to internet⁴², complements other principles and rules adopted in the inner working of the NN framework, and pursues to make sure that the internet ecosystem maintains to flourish as an engine of innovation and freedom of expression.

4.1.4. Non-Blocking

Non-blocking means that the parties shall not block lawful content, applications, services, or non-harmful devices, subject to reasonable network management.⁴³ Non-blocking is another rule on which NN rules should be guided on. Non-blocking is strongly interlinked with non-throttling, to be able to have an open internet ecosystem where there is no discrimination, and that providers of internet access are not subject where there are practices that block, slow, or degrade people’s ability to use, send, receive, or offer any lawful content, application, service, or non-harmful device of their choice on the internet.⁴⁴ In the EU Open Internet Regulation, Article 3(3) bans blocking of access and restricts traffic management measures. Moreover, it also bans throttling and discrimination between content, applications, and services, subject to certain limited exceptions.⁴⁵ Implementation of the non-blocking principle allows more freedom to consumers. More

reports/2014_04_08_Internet_ENG%20_WEB.pdf.

⁴¹ "Freedom Of Expression And Internet". 2019. Oas.Org. Accessed September 30. https://www.oas.org/en/iachr/expression/docs/reports/internet/Internet_OAS_executive_summary.pdf. pg.1.

⁴² See "Access and Non-Discrimination - Explanatory Memorandum". 2019. Freedom Of Expression. Accessed September 30. <https://www.coe.int/en/web/freedom-expression/access-and-non-discrimination-explanatory-memo>.

⁴³ “Net Neutrality Legislation: A Framework for Consensus | Internet ...”, n.d., accessed September 14, 2019, <https://www.internetsociety.org/resources/doc/2019/net-neutrality-legislation-a-framework-for-consensus/>.

⁴⁴ For examples and the interlink between non-throttling and non-blocking principles. See Bird & Bird and ECORYS. 2019. "Study On The Implementation Of The Open Internet Provisions Of The Telecoms Single Market Regulation". Luxembourg: European Commission. <http://10.2759/922060>.

⁴⁵ Article 3(3) bans blocking, throttling and discrimination between content, applications and services, subject to certain limited exceptions. Traffic management, to optimise the quality of the services transmitted, is possible as long as it is reasonable. The third sub-paragraph lays down restrictive exceptions from the obligation not to engage in traffic management measures (and not to block, slow down, alter, restrict, interfere with, degrade or discriminate between specific content, applications or services) in order to comply with legislation, or to preserve the security of the networks or to prevent exceptional/temporary congestion management.

specifically, this principle enables consumers to benefit from access to websites and online services of their own choice.⁴⁶

Prior to the enactment of the EU Open Internet Regulation, end-users complained that Voice Over IP services (VoIP) (such as Skype and Telegram) were being blocked by internet service providers. According to the commercial developments of authorized services under Impact of Article 3(1) of the recently published Report from the Commission to the European Parliament and the Council on the implementation of the open internet access provisions of Regulation (EU) 2015/2120, VoIP services, in particular, are reported to have developed freely since the regulation entered into force and consumer associations have welcomed this as a clear success of the EU Open Internet Regulation. With regard to blocking, BEREC Guidelines also note that “*Conducting traffic management measures in order to preserve the integrity and security of the network could basically consist of restricting connectivity or blocking of traffic to and from specific endpoints.*”⁴⁷ However, it must be noted that such practices should be limited to instances such as blocking of IP addresses, or ranges of them, because they are well-known sources of attacks.

Issues concerning blocking have also appeared in several court decisions. An example concerning blocking can be seen in a case concerning TOR-Project website. In 2012, four British operators blocked access to the TOR-project website that offered privacy-enhancing technologies, whilst another mobile operator blocked access to the website of the advocacy group La Quadrature du Net.⁴⁸ Such cases highlight the very concrete and factual threats that unregulated blocking and not adopting the principle of non-blocking may determine on freedom of communication and information. Also, non-blocking principle has an IP rights aspect that is addressed in many court decisions, for example, in Germany, the Federal Court of Justice ruled in 2015 that, in case it constitutes the only way to actively complete the infringement of rights on a website by a copyright holder, that website can be ordered to be blocked. If so, the copyright owner can request an ISP to

⁴⁶ See "Commission Report On Open Internet - Digital Single Market - European Commission". 2019. Digital Single Market - European Commission. <https://ec.europa.eu/digital-single-market/en/news/commission-report-open-internet>.

⁴⁷ See BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, BoR (16) 94 Draft, 2016 and "Guideline On Assessing Security Measures In The Context Of Article 3(3) Of The Open Internet Regulation". 2018. Enisa.Europa.Eu. https://www.enisa.europa.eu/publications/guideline-on-assessing-security-measures-in-the-context-of-article-3-3-of-the-open-internet-regulation/at_download/fullReport.

⁴⁸ Cappuccini, A., Craggs, G. (2012, February 15). Orange UK blocking La Quadrature du Net. Open Rights Group. <https://www.openrightsgroup.org/blog/2012/orange-uk-blocking-laquadrature-du-net>

block that website subsequent to an evaluation of the circumstances of the case. A court has the right to intervene in case of a refusal by the provider. Due to the fact that blocking is seen as possible to overcome and thereby without effect, the ruling has been criticized. Since the kinox.to website was found to host content that was uploaded unlawfully, a Munich-based regional court ordered an injunction against Vodafone that compelled the internet provider to block the website in February 2018. Vodafone appealed this decision, which has been subject to criticism because it was found to be without effect and beyond proportion.⁴⁹ On the other hand, in the US, the Federal Communications Commission's (FCC) Open Internet Order 2015 also recognizes non-blocking principle and further provide that “No blocking: ISPs shall not block lawful content, applications, services, or non-harmful devices, subject to reasonable network management.”⁵⁰ Although countries can have different perspectives regarding the implementation of this principle, non-blocking is generally accepted as a core pillar of NN and is valued for enabling the freedom of the internet as an open platform also allows users to enjoy their fundamental right of freedom of expression.

4.1.5. Non-Throttling

Throttling is a technique employed to manage traffic and minimize congestion, may be used to degrade certain types of traffic and so affect the quality of content.⁵¹ The non-throttling principle, in other words, not allowing, or banning throttling is considered to be essential not only to satisfy the reasonable expectations of a customer who chooses a broadband service that creates expectations to access to all of the lawful content, but also “to avoid gamesmanship designed to avoid the no-blocking rule by”, for example, rendering an application effectively, but not technically, impracticable”.⁵² It prohibits the degrading of internet traffic based on source, destination, or content. To shed light in this context, it is noteworthy to state that the safeguards of the non-blocking and non-throttling rules are applicable in particular classes of applications, content and services as well as particular applications, content, and services. Moreover, it precisely bans conduct that singles out content competing with a broadband provider's business model.

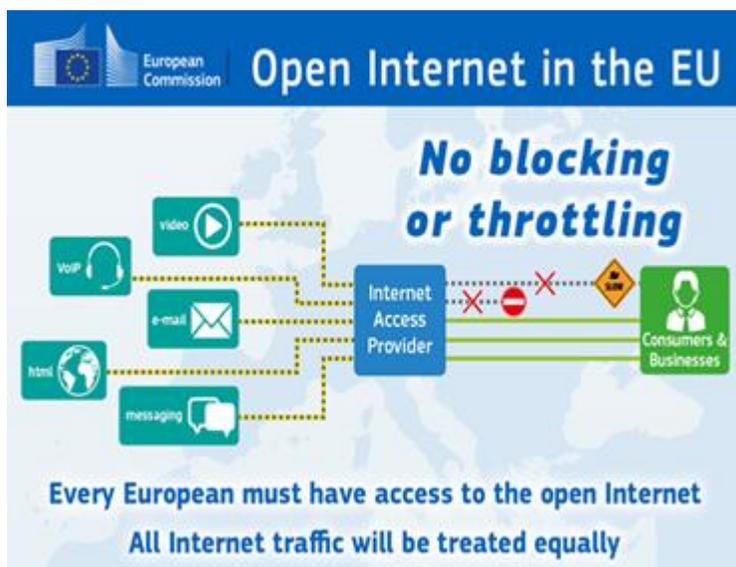
⁴⁹ 'Germany Decisions' (Freedomhouse.org, 2018) <<https://freedomhouse.org/report/freedom-net/2018/germany>> accessed 4 September 2019.

⁵⁰ Para. 15, Open Internet Order (2015).

⁵¹ Bird & Bird and ECORYS, 'Study On The Implementation Of The Open Internet Provisions Of The Telecoms Single Market Regulation' (European Commission 2019) <<http://10.2759/922060>> accessed 1 September 2019.

⁵² *ibid.*

Statements from how FCC describes the three threats to NN in its 'Protecting and Promoting the Open Internet' rules, namely throttling, blocking, and paid prioritization.⁵³ Open Internet Order 2015 provides that “ISPs shall not impair or degrade lawful Internet traffic on the basis of Internet content, application, or service, or use of a non-harmful device, subject to reasonable network management”.⁵⁴ In the EU legal framework, under the Regulation and BEREC Guidelines it is made clear that throttling is not allowed of internet traffic by Internet Service Providers (ISPs) is not allowed in the EU except the three exceptions, namely, compliance with legal obligations; integrity of the network; congestion management in exceptional and temporary situations.



Source: “Open Internet.” Digital Single Market - European Commission⁵⁵

An example for throttling practices is recently seen in the research conducted at Northeastern University and University of Massachusetts Amherst, where it was stated that more than 650,000 tests in the U.S. and found that from early 2018 to early 2019, AT&T Inc. throttled Netflix Inc.

⁵³ 'Blocking, Throttling, Paid Prioritization: The 3 Threats To Net Neutrality' (News18, 2015) <<https://www.news18.com/news/tech/blocking-throttling-paid-prioritisation-the-3-threats-to-net-neutrality-982039.html>> accessed 9 September 2019; 'Protecting And Promoting The Open Internet' (Federal Register, 2015) <<https://www.federalregister.gov/documents/2015/04/13/2015-07841/protecting-and-promoting-the-open-internet>> accessed 6 September 2019.

⁵⁴ Paras. 16–17, Open Internet Order (2015).

⁵⁵ “Open Internet.” Digital Single Market - European Commission, September 9, 2013. <https://ec.europa.eu/digital-single-market/en/open-internet-net-neutrality>.

70% of the time and Google's YouTube service 74% of the time.⁵⁶ Such throttling practices affect the users' experience in internet ecosystem and affect their daily lives and accordingly have an impact on the enjoyment of their right to access. Issues concerning throttling practices can be seen in numerous case law examples, one is *Comcast Corp. v. FCC*, 600 F.3d 642 (D.C. Cir. 2010) ("Comcast"), where, "petitioners filed suit against the company, seeking enjoinder of Comcast's network management practices; Comcast throttled Petitioners' access to certain P2P online content to an extreme low, making impracticable Petitioner's ability to use P2P services".⁵⁷ As Belli points out throttling or prioritizing specific data flows, are not in line with the NN principle and have the potential "to unduly interfere with end-users' enjoyment of their fundamental rights as well as to jeopardize the Internet's fundamentally open architecture".⁵⁸

Overall, throttling practices are against the openness and accessibility notions and also it could be derived that non-throttling principle works in line, similar to the above-explained non-blocking principle and constitute one of the core principles forming, enhancing the NN principle and valuing customers, end-users' rights in the Internet ecosystem.

4.1.6. Non-Prioritization

Non prioritization requires that providers of internet access should not be permitted to enter into arrangements that provide certain content at faster speeds or require content providers to pay in order to provide a certain quality of service to end-users. All traffic has to be treated equally; in other words, there should be no prioritization of traffic in the internet access service.⁵⁹ Traffic prioritization is different from the above explained blocking and throttling, this kind of technique gives preferential treatment to specific types of traffic such as through prioritizing time-sensitive applications, such as VoIP, or to guarantee quality of service of specific services. Violation of this

⁵⁶ 'Wireless Carrier Throttling Of Online Video Is Pervasive' (Bloomberg.com, 2019) <https://www.bloomberg.com/amp/news/articles/2019-08-19/wireless-carrier-throttling-of-online-video-is-pervasive-study?__twitter_impression=true> accessed 3 September 2019.

⁵⁷ IRIS plus 2011-5, Why Discuss Network Neutrality? (Susanne Nikoltchev (Ed.), European Audiovisual Observatory, Strasbourg 2011) available at <https://rm.coe.int/1680783bca> pg.33.

⁵⁸ Belli, Luca. 2016. "End-To-End, Net Neutrality And Human Rights". Thehinducentre.Com. https://www.thehinducentre.com/multimedia/archive/02801/9783319264240-c1_2801992a.pdf.

⁵⁹ "Open Internet - Digital Single Market - European Commission". 2019. Digital Single Market - European Commission. Accessed September 1. <https://ec.europa.eu/digital-single-market/en/open-internet-net-neutrality>.

principle may occur when operators implement pay for-priority schemes, “allowing specific CAPs to purchase preferential treatment, or when operators deploy specialized services (such as IPTV or e-health services) with no separation from Internet access services”.⁶⁰

"Paid prioritization" refers to the management of a broadband provider's network to directly or indirectly favor some traffic over other traffic, including through the use of techniques such as traffic shaping, prioritization, resource reservation, or other forms of preferential traffic management, either (a) in exchange for consideration (monetary or otherwise) from a third party, or (b) to benefit an affiliated entity.⁶¹ Paid prioritization appears when a broadband provider accepts payment to manage its network in a way that benefits particular content, applications, services, or devices. When compared with the above explained principles, this one is different than non-blocking and non-throttling principles, since for these two there is no “reasonable network management” exception to the paid prioritization rule because paid prioritization is inherently a business practice rather than a network management practice.⁶²

It is believed that paid prioritization violates the NN principle since it discriminates against particular content, and therefore does not respect the equal treatment pillar of the NN as well.⁶³ Thus, paid prioritization can be considered to be inconsistent with a NN regime in general and should be avoided; hence, by prohibiting such practices, democratic countries could show how they are committed to maintaining and protecting the NN as a legal norm and respect the openness of the internet.⁶⁴

There are several cases concerning prioritization both in commercial and non-commercial contexts, for example, in an Austrian case, the NRA reported a breach of Article 3(3) in relation to traffic management measures which were applied by the ISP “to enable the prioritization of a

⁶⁰ *ibid.*

⁶¹ “Net Neutrality Legislation: A Framework for Consensus | Internet ...”, n.d., accessed September 14, 2019, <https://www.internetsociety.org/resources/doc/2019/net-neutrality-legislation-a-framework-for-consensus/>.

⁶² 'Protecting And Promoting Open Internet' (Transition.fcc.gov, 2015) <https://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0312/FCC-15-24A1.pdf> accessed 3 September 2019.

⁶³ See "Zero-Rating And Net Neutrality". 2017. Tse-Fr.Eu. https://www.tse-fr.eu/sites/default/files/TSE/documents/ChaireJJL/DigitalWorkshop/zero_rating_tse_digital_seminar.pdf.

⁶⁴ “Net neutrality reloaded: zero rating, specialised service, ad blocking and traffic management. Annual report of the UN IGF Dynamic Coalition on Net Neutrality”/Edited by Luca Belli ; preface by Tim Wu. FGV Direito Rio, 2016. ISBN: 9788563265760, available at <http://www.ict-21.ch/com-ict/IMG/pdf/Net-Neutrality.pdf> pg.7.

VoD service which was qualified as a specialized service by the NRA”.⁶⁵ As the Study report points out this case when read in detail demonstrates once more the close relation between Article 3(3) and Article 3(5) especially with regard to specialized services by adding that “the prioritization of specialized services may lead to structural traffic management of other traffic”. Regarding the question whether this is allowed based on Article 3(3) shall depend on how these provisions are interpreted on the specific cases and facts at hand, nevertheless, it should be noted that any interpretation must be expected to be in line with both objectives of the Regulation: the protection of end-users and the aim that innovation should be enhanced and guaranteed.⁶⁶

4.2. Exemptions

This Chapter looks into the exemptions of NN principles. For this purpose, the below sub-chapters especially focus on the exemptions of the EU Open Internet Order (or Regulation). We believe this Regulation sets up a general framework for its exemptions, however, it should also be noted that these exemptions are not set up clearly. As it will be discussed later on the Report, while these exemptions aim to build strict conditions for their applications, some criticize the Regulation for not setting up an effective framework and believe that the exemptions are open to interpretation which may eventually be abused.

In the Regulation, there are three exceptions regarding the safeguarding of open internet access that are as follows: (i) to comply with legal obligations; (ii) preserve the integrity of the network; and (iii) manage impending network congestion in exceptional and temporary situations. Article 3(3) sets out that Providers must not engage in traffic management measures going beyond the ones set forth in the Article, and in particular they must not block, slow down, alter, restrict, interfere with, degrade or discriminate between specific content, applications or services, or specific categories thereof, except as necessary, and only for as long as necessary, in order to: comply with Union legislative acts, or national legislation that complies with Union law.⁶⁷

⁶⁵ Bird & Bird and ECORYS. 2019. "Study On The Implementation Of The Open Internet Provisions Of The Telecoms Single Market Regulation". Luxembourg: European Commission. <http://10.2759/922060>. pg.78.

⁶⁶*ibid.*

⁶⁷ Article 3(3) (a)

Secondly, to preserve the integrity and security of the network, of the services provided via that network, and of the terminal equipment of end-users.⁶⁸ Article 3 (3) (b) preserves the integrity and security of the network, of the services provided via that network, and of the terminal equipment of end-users. Further, traffic management measures going beyond such reasonable measures might be necessary to protect the integrity and security of the network, for example by preventing cyber-attacks that occur through the spread of malicious software or identity theft of end-users that occurs as a result of spyware.⁶⁹

Different countries employ this exemption in different ways. For example, in Poland, ISPs are required to block certain gambling websites – pursuant to the exception of Article 3(3)(a) of the Regulation – on the basis of the National Gambling Act. Moreover, as stated in a study on the implementation of the open internet provisions of the Telecoms Single Market Regulation, Urząd Komunikacji Elektronicznej (Polish Office of Electronic Communications) observed that traffic management measures are also often applied on the basis of the exception in Article 3(3)(b) of the Regulation to ensure the security and integrity of the network.⁷⁰ Conducting traffic management measures in order to preserve the integrity and security of the network could simply involve restricting connectivity or blocking of traffic to and from specific endpoints. Typical examples of such traffic management measures include: blocking of IP addresses, or ranges of them, because they are well-known sources of attacks or blocking of IP addresses from which an actual attack is originating.⁷¹ However, it must be noted that as provided in BEREC Guidelines “This exception could be used as a basis for circumvention of the Regulation because security is a broad concept. NRAs should therefore carefully assess whether the requirements of this exception are met and to request that ISPs provide adequate justifications when necessary.”⁷²

Thirdly, Article 3(3) letter (c) prevent impending network congestion and mitigate the effects of exceptional or temporary network congestion, provided that equivalent categories of traffic are

⁶⁸ Article 3(3) (b)

⁶⁹ BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, BoR (16) 94 Draft, 2016. pg.20-21.

⁷⁰ Bird & Bird and ECORYS. 2019. "Study On The Implementation Of The Open Internet Provisions Of The Telecoms Single Market Regulation". Luxembourg: European Commission. <http://10.2759/922060>. pg.349.

⁷¹ *ibid.*

⁷² BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, pg.21 BoR (16) 94 Draft 2016.

treated equally.⁷³ Regarding Article 3(3)(c), a justification is usually required to be made available proving why congestion is characterized as impending, exceptional or temporary, along with past data regarding congestion that confirms this characterization and why less intrusive and equally effective congestion management does not suffice. In exceptional cases, and for no longer than necessary, ISPs may engage in traffic management beyond the limits of Article 3(3) second subparagraph to manage certain types of network congestion, namely impending network congestion (which may be prevented) and exceptional or temporary network congestions (the effects of which may be mitigated). Recital 15 provides detailed information on identifying situations where exceptional and temporary congestion occurs. Impending network congestion is defined as situations where congestion is about to materialize, i.e. it is imminent. Recital 15 focuses on exceptional and temporary network congestion; thus, actions for preventing impending network congestion only apply to cases of such congestion.⁷⁴ Congestion management can be done on a general basis, independent of applications.⁷⁵

To sum up, the three exceptions relate to (a) national legislation or court orders, (b) the protection of the integrity and security of the network and (c) the prevention of (impending) network congestion and these should be applied very carefully not to over-use and refute the main purposes of the enforcement of the Regulation or the principle of NN itself.

4.3. Specialized Services

Specialized services are a short expression used by BEREC, for a longer term used in the Regulation, referring to the “services other than internet access services which are optimized for

⁷³ “Recital 15 Third, measures going beyond such reasonable traffic management measures might also be necessary to prevent impending network congestion, that is, situations where congestion is about to materialise, and to mitigate the effects of network congestion, where such congestion occurs only temporarily or in exceptional circumstances. The principle of proportionality requires that traffic management measures based on that exception treat equivalent categories of traffic equally. Temporary congestion should be understood as referring to specific situations of short duration, where a sudden increase in the number of users in addition to the regular users, or a sudden increase in demand for specific content, applications or services, may overflow the transmission capacity of some elements of the network and make the rest of the network less reactive...”

⁷⁴ BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, pg.21 BoR (16) 94 Draft 2016.

⁷⁵ See “IETF, RFC 6057, Comcast’s Protocol-Agnostic Congestion Management and IETF, RFC 6789, Congestion Exposure (Conex) Concepts and Use Cases” cited in BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, pg.22 BoR (16) 94 Draft 2016.

specific content, applications or services or a combination thereof, where the optimization is necessary in order to meet requirements of the content, applications or services for a specific level of quality.” The BEREC Guidelines give some examples of what may be seen as specialized services. These include VoLTE (high-quality voice calling on mobile networks) and linear (live) broadcasting IPTV services with specific quality requirements. Furthermore, another example that can be considered as specialized services can be real-time health services (e.g. remote surgery). BEREC considers such services to be allowed if they meet the strict requirements of the Regulation provided under Article 3(5).

Article 3(5) sets out the safeguards for the provisioning of specialized services which are characterized by the following features in Article 3 (5) first subparagraph: they are services other than IAS services; they are optimized for specific content, applications or services, or a combination thereof; the optimization is objectively necessary in order to meet requirements for a specific level of quality. To be able to give permission to specialized services pursuant to the Regulation, whether requirements are met should objectively be considered, as “they would have to be objectively necessary to meet requirements for a specific level of quality”⁷⁶. The BEREC Guidelines suggests that NRAs must carry out an assessment for this ‘necessity requirement’. If this step is successfully passed then, it is expected to satisfy the capacity requirement.

Special services are recognized as not to be subject to the core rules when considered with the FCC’s 2015 Open Internet Order as well.⁷⁷ Specialized services are sometimes called ‘Non-BIAS data services’, including applications such as enterprise services, videoconferencing for telesurgery, IPTV, and online, real-time gaming. These services are expected to be optimized for specific content, applications, or services and “optimization must be specifically necessary to meet service requirements for specific levels of quality that are not assured by the Internet access service.”⁷⁸ However, specialized services may only be prioritized if there is “sufficient network capacity to provide them in addition to Internet access service” and their availability does not

⁷⁶ “What Are Specialized Services and How Are They Relevant to the ...”, n.d., accessed September 14, 2019, https://berec.europa.eu/eng/netneutrality/specialised_services/.

⁷⁷ “Net Neutrality Experts’ Roundtable Series”, n.d., accessed September 14, 2019, https://www.internetsociety.org/wp-content/uploads/2019/05/Net-Neutrality-Experts-Round-Tables_Process-Report.pdf.

⁷⁸ *ibid.*

substantially degrade the “availability or general quality of Internet access services” for other users.⁷⁹

4.4. An Overview of Zero-Rating and NN Principles

Many tariffs that are available generally cover a maximum volume of monthly data (megabytes) to which the client is entitled. Consumption of the megabytes occurs every time the user goes online using cellular data, without the mobile phone being connected to a WIFI.⁸⁰ However, there is an exception to this common practice rule that is used in the telecommunications sector in the mobile ecosystem; this exception is called zero-rating which is “the practice of excluding some traffic from overall data caps”.⁸¹ In other words, zero-rating can be defined as a “commercial agreement or a unilateral decision of an internet service provider (ISP) that results in some content being exempted from end users’ monthly data cap”.⁸² The relationship between zero-rating offerings and NN has been a controversial issue in the debates surrounding the NN and the core principles attached to NN. Zero-rating offers have the potential to yield both positive and negative outcomes, which differ on a case by case basis and require questioning how these offerings are constructed, and to what extent consumers are benefiting from these services. Through the application of zero-rating, the barriers tariffs create are gone and an unlimited use of selected services or platforms are available free of charge. This allows consumers to use these selected online services or platforms without having to worry about how much of their package megabytes is left to reach the maximum volume allowed by the tariffs of mobile companies. Taking a step further, these practices may enhance the open nature of the internet and allows consumers to use the online services and applications such as Facebook, WhatsApp, Wikipedia, and Twitter. These are some of the most common examples of zero-rating offers. Being able to use these popular online services or applications may appear to be beneficial for those consumers who cannot afford

⁷⁹ Net Neutrality Legislation: A Framework for Consensus | Internet ...”, n.d., accessed September 14, 2019, <https://www.internetsociety.org/resources/doc/2019/net-neutrality-legislation-a-framework-for-consensus/>.

⁸⁰ “Zero-Rating Practices In Broadband Markets”. 2017. Ec.Europa.Eu. <https://ec.europa.eu/competition/publications/reports/kd0217687enn.pdf>.

⁸¹ “Zero Rating Vs Net Neutrality - A (Still) Uncertain Future In The EU And Serbia | Lexology”2017. Lexology.Com. <https://www.lexology.com/library/detail.aspx?g=8df9a669-06cc-4296-b9fc-04a5eb06af46>.

⁸² *Ibid* See also “What Is Zero-Rating?”. 2015. Berec.Europa.Eu. https://berec.europa.eu/eng/netneutrality/zero_rating/.

basic mobile internet services or simply worry that they may exceed their package allowance.⁸³ It is noteworthy to state that the possible opportunities, when offered on a non-exclusive basis, zero-rating programs can be highly beneficial for users. Through providing access to services free of charge that users would have had hardship in accessing otherwise is likely to enhance active participation of users in the zero-rated services and platforms.⁸⁴ Further, these free of charge services would particularly benefit low-income users since it allows them instant and continuous connectivity.⁸⁵ On a broader scale, through zero-rated services more people across the globe are brought online, which enhances accessibility and digital inclusion. Some opine that zero-rating can be an opportunity and a possible solution to the current digital divide by increasing internet access to underserved communities.⁸⁶ This benefit is perhaps more important for developing economies where the cost of access to data services could be prohibitive, and zero-rating can have a substantive impact.⁸⁷ However, if zero-rating offers are not implemented under certain principles that protects the rights of users and fair trade dynamics, zero-rating offerings do not always come without a cost.⁸⁸ Moreover, proponents contend that the positive effects, as it relates to innovation

⁸³ See “Net neutrality reloaded : zero rating, specialized service, ad blocking and traffic management. Annual report of the UN IGF Dynamic Coalition on Net Neutrality”/Edited by Luca Belli ; preface by Tim Wu. FGV Direito Rio, 2016. ISBN: 9788563265760, available at <http://www.ict-21.ch/com-ict/IMG/pdf/Net-Neutrality.pdf> pg.7.

⁸⁴ Jaunaux, Laure, and Marc Lebourges. 2019. "Zero Rating And End-Users' Freedom Of Choice: An Economic Analysis". Orange.Com. Accessed September 29. <https://www.orange.com/en/content/download/46015/1356612/version/2/file/ZRf%C3%A9vri2018.pdf>.

⁸⁵ See Falcon, Ernesto. 2019. "Countries with Zero Rating Have More Expensive Wireless Broadband Than Countries Without It". Electronic Frontier Foundation. <https://www.eff.org/deeplinks/2019/02/countries-zero-rating-have-more-expensive-wireless-broadband-countries-without-it>.

⁸⁶ “Net neutrality reloaded : zero rating, specialized service, ad blocking and traffic management. Annual report of the UN IGF Dynamic Coalition on Net Neutrality”/Edited by Luca Belli ; preface by Tim Wu. FGV Direito Rio, 2016. ISBN: 9788563265760, available at <http://www.ict-21.ch/com-ict/IMG/pdf/Net-Neutrality.pdf> pg.8.

⁸⁷ "Zero-Rating Practices In Broadband Markets". 2017. Ec.Europa.Eu. <https://ec.europa.eu/competition/publications/reports/kd0217687enn.pdf>.

⁸⁸ For further information see “Net neutrality reloaded : zero rating, specialized service, ad blocking and traffic management. Annual report of the UN IGF Dynamic Coalition on Net Neutrality”/Edited by Luca Belli ; preface by Tim Wu. FGV Direito Rio, 2016. ISBN: 9788563265760, available at <http://www.ict-21.ch/com-ict/IMG/pdf/Net-Neutrality.pdf> See also "Prioritization Vs Zero-Rating: Discrimination On The Internet". 2018. Mtakti.Hu. <https://www.mtakti.hu/wp-content/uploads/2018/08/Somogyi.pdf>. Walsh, Corynne McSherry, Jeremy Malcolm, and Kit. “Zero Rating: What It Is and Why You Should Care.” Electronic Frontier Foundation, February 18, 2016. <https://www.eff.org/deeplinks/2016/02/zero-rating-what-it-is-why-you-should-care>. Walsh, Corynne McSherry, Jeremy Malcolm, and Kit. “Zero Rating: What It Is and Why You Should Care.” Electronic Frontier Foundation, February 18, 2016. See for example "How 'Zero-Rating' Offers Threaten Net-Neutrality In The Developing World". 2019. Forbes.Com. <https://www.forbes.com/sites/davidebanis/2019/02/18/how-zero-rating-offers-threaten-net-neutrality-in-the-developing-world/#ba51a5a3b411>. "Zero-Rating and Net Neutrality". 2017. Tse-Fr.Eu. <https://www.tse->

[fr.eu/sites/default/files/TSE/documents/ChaireJLL/DigitalWorkshop/zero_rating_tse_digital_seminar.pdf](https://www.tse-fr.eu/sites/default/files/TSE/documents/ChaireJLL/DigitalWorkshop/zero_rating_tse_digital_seminar.pdf). Jaunaux, Laure, and Marc Lebourges. 2019. "Zero Rating And End-Users' Freedom Of Choice: An Economic Analysis". Orange.Com. Accessed September 29. <https://www.orange.com/en/content/download/46015/1356612/version/2/file/ZRf%C3%A9vri2018.pdf>. See

and user welfare by arguing that zero-rating programs could facilitate the launch of new and innovative content offerings from small providers, allowing them to enter the market and build scale more quickly since it will allow a non-discriminatory option to every provider without favoring one over the other. At a minimum, zero-rating programs that are non-exclusive, independent and non-affiliated, and transparent have the potential to benefit users and enhance fair competition. Another crucial argument is that zero-rating help enhance consumer welfare through product differentiation, both in terms of providing products that better suit the needs of particular types of customers and by increasing the service aspects upon which both broadband access and service providers may compete. Therefore, it could be concluded that zero-rating offers can be beneficial for the society in many ways. Overall, looking from a regulatory perspective, zero rating offers are increasingly popular around the world and come in many forms depending on the market, while some ZR offers may be occasionally problematic, others are viewed as beneficial to users depending on the details of the offer. Most jurisdictions, including the EU, evaluate zero-rating offers on a case-by-case basis to measure its possible harms and benefits. Although there are some concerns with regard to zero-rating programs, keeping the potential practical benefits of zero-rating offers in mind, it could be concluded that zero-rating is beneficial for several reasons, most importantly, for the purposes of bringing more equality and accessibility to everyone on equal terms by bringing society closer to technology and enhance user welfare while promoting innovation.

5. Regulatory Approach of Different Countries to Net Neutrality

Different geographies adopted different approaches to NN, ranging from heavy regulation to light-touch regulation. This chapter first looks into the applications of the EU and the US, two geographies that has differing approaches to NN. Later analyses the current state of NN in Turkey and provide examples of NN applications in Turkey.

Falcon, Ernesto. 2019. "Countries With Zero Rating Have More Expensive Wireless Broadband Than Countries Without It". Electronic Frontier Foundation. <https://www.eff.org/deeplinks/2019/02/countries-zero-rating-have-more-expensive-wireless-broadband-countries-without-it>. Kramer, Jan, and Martin Peitz. 2018. "A Fresh Look At Zero-Rating". Cerre.Eu. https://cerre.eu/sites/cerre/files/CERRE_ZeroRating_FinalReport_0.pdf. Pg.24-25. For different approaches taken in various countries see "Zero-Rating Practices In Broadband Markets". 2017. Ec.Europa.Eu. <https://ec.europa.eu/competition/publications/reports/kd0217687enn.pdf>.

5.1. The EU

Even though there were official signs of network neutrality protection embedded in other regulations in EU, since 2016, the principle of net neutrality is officially and clearly protected with the adaptation of “laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users’ rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union”.⁸⁹ This Regulation gives the national telecom regulators the power and the mandate to protect NN in their respective countries. To ensure that the 31 regulators apply the Regulation uniformly throughout the EU and EEA, they must take “utmost account” of the Guidelines on net neutrality that were issued by the European umbrella organization of all telecom regulators, BEREC. NN Guidelines of BEREC provides detailed recommendations on what net neutrality means in Europe.

5.1.1. Brief History of NN in the EU

The 2002 regulatory framework for electronic communications networks and services in the European Union consisted of five directives, which are referred to as "the Framework Directive and the Specific Directives", or so called “EU Telecoms Framework”:

- Access Directive (Directive 2002/19/EC)
- Authorization Directive (Directive 2002/20/EC)
- Framework Directive (Directive 2002/21/EC)
- Universal Service Directive (Directive 2002/22/EC)
- Directive on privacy and electronic communications (Directive 2002/58/EC)

However, this framework was criticized for not effectively protecting customers' rights by not preventing network operators from degrading customers’ services. Pursuant to Article 22 of the EU Directive 2002/22/EC (EU Universal Service Directive) MSs are set to ensure that NRAs require network operators publish information on the QoS of their services and submit the same

⁸⁹ “Regulation (EU) 2015/ of the European Parliament and of the Council of 25 November 2015 Laying down Measures Concerning Open Internet Access and Amending Directive 2002/22/EC on Universal Service and Users’ Rights Relating to Electronic Communications Networks and Services and Regulation (EU) No 531/2012 on Roaming on Public Mobile Communications Networks within the Union,” n.d., 18.

with the national regulatory authorities.⁹⁰ Article 22(2) further states that NRAs may specify QoS parameters as the EU Universal Service Directive sets out QoS parameters that may be used by NRAs.

In December 2009, a Telecoms Package entered into force, which imposed all the member states to transpose the Directive by May 2011. The Telecoms Package comprises of:

- Directive 2009/140/EC (Framework, Authorization and Access directives)
- Directive 2009/136/EC (Universal services and E-privacy (also known as Cookie Directive) directives)
- Regulation No 1211/2009 establishing the Body of European Regulators for Electronic Communications (BEREC)

In 2009, the EU passed the EU Directive 2009/136/EC that further required MSs to establish minimum QoS requirements for network operators to be able to prevent “the degradation of service and the hindering or slowing down of traffic over networks,” as well as blocking of access according to Recital (34) of the EU Directive 2009/136/EC that also underscores the discriminatory behavior.

This package updated the EU Telecoms Framework of 2002, addressed notions such as access, interconnection, users’ rights, and finally created a new regulatory body, the Body of European Regulators of Electronic Communications (BEREC). The Package also included provisions regarding NN, such as ISPs obligations to provide information about their service to subscribers within the scope of transparency principle.⁹¹ So that the customers would be informed before signing a contract with their ISPs regarding the nature of the subscribed service, traffic management techniques and their impact on service quality, as well as any other limitations like bandwidth caps or available connection speed. Furthermore, regulators were allowed to set quality of service parameters on public communications network providers to prevent degradation of service or the slowing down of traffic across networks.

⁹⁰ See also OECD (2014), "Access Network Speed Tests", OECD Digital Economy Papers, No. 237, OECD Publishing, Paris, <https://doi.org/10.1787/5jz2m5mr66f5-en>. and

⁹¹ Directive 2009/136/EC Universal services directive, see Article 20, point 1(b) and Article 21, point 3 and point 4

In May 2015, the European Commission adopted the Digital Single Market Strategy to strengthen the EU telecoms single market. Later in June 2015, the European Parliament, Council and Commission reached two agreements regarding the end of roaming charges and on the first EU-wide NN rules, which overhauled the EU Telecoms Package in 2016. The Digital Single Market is part of the Digital Agenda for Europe 2020 program of the EU, an initiative of Europe 2020 strategy.

5.1.2. Digital Single Market Strategy

The Digital Single Market strategy was adopted on 6 May 2015 and it is among the European Commission's ("Commission") ten political priorities. The strategy aims to transform European society so that it can face with confidence what the digital technologies will bring in the future. With this purpose in mind, the Digital Single Market hopes to ensure the free movement of goods, persons, services and capital, as well as that individuals and businesses can access and exercise online activities under fair competition, and a high level of consumer and personal data protection, regardless of their nationality or place of residence⁹².

The Digital Single Market Strategy comprises of three pillars:

- *Better access for consumers and business to online goods and services across Europe:* The Commission asserts that this requires "rapid removal of key differences between the online and offline worlds to break down barriers to cross border online activity".
- *Creating the right conditions for digital networks and services to flourish:* The Commission posits that this requires "high-speed, secure and trustworthy infrastructure and content services, supported by the right regulatory conditions for innovation, investment, fair competition, and a level playing field".
- *Maximizing the growth potential for the European Digital Economy:* Finally, the Commission suggests that this pillar requires "investment in ICT infrastructure and technologies,

⁹² 'A Digital Single Market Strategy For Europe', Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions, Brussels, 6.5.2015, COM(2015) 192 final, 2015 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0192&from=EN>

and research and innovation to boost industrial competitiveness as well as better public services, inclusiveness, and skills”.

5.1.2.1. Better online access for consumers and business across Europe

Acknowledging that the Digital Single Market will provide business and entrepreneurs new opportunities to scale up across Europe, the Strategy aims to prevent unfair discrimination against consumers and business when they access content or buy goods and services online within the EU. While stressing the importance of having an affordable, high-quality cross-border delivery service in building consumer trust, the Commission also points out the grave impacts of limiting consumer opportunities and choice, and geo-blocking that results in consumer dissatisfaction and fragmentation of the Internal Market.

5.1.2.2. Creating the right conditions and a level playing field for advanced digital networks and innovative services

The Commission believes that the Digital Single Market must be built on reliable, trustworthy, high-speed, affordable networks and services that safeguard consumers’ fundamental rights to privacy and personal data protection while encouraging innovation. Within this dynamic, the dominant market power of certain online platforms poses various concerns, therefore, the Commission strives to make the telecom rules fit for purpose. With this goal in mind, in order for a market to function effectively, the Commission calls for the delivery of access to high-performance fixed and wireless broadband infrastructure at affordable prices. Carrying this further, it is deemed instrumental adapting the EU’s telecoms rules combined with the EU competition rules in ensuring that markets operate competitively, bringing lower prices and better quality of service to consumers and business. As an initial step, the adoption of the Telecoms Single Market package aims to provide clear and harmonized rules for net neutrality and help in eliminating roaming surcharges for data. This step is crucial particularly in effectively regulating the powerful online platforms role in providing access to online information and creating significant influence over various players in the market.

5.1.2.3. Maximizing the growth potential of the digital economy

As most economic activity moves towards digital ecosystems, integrating digital infrastructure, hardware and software, applications and data; to ensure the EU's competitiveness, all sectors should be digitized. To achieve this goal, the Commission promises to take the necessary steps in building an effective data economy, boosting competitiveness through interoperability and standardization, and creating an inclusive e-society.

The Commission acknowledges that achieving these goals will require significant investment, the collaboration of the key actors, political will and means, various legislative proposals and engagement of relevant stakeholders. Therefore, the Commission invites the European Parliament and the Council to endorse the Strategy so that it is effectively implemented.

5.1.3. Electronic Communication Code (ECC)

The Commission proposed the Electronic Communications Code (ECC) in September 2016, which modernized the previous EU telecoms rules, which were last updated in 2009. Before coming into effect, it needs to be transposed into national law by 21 December 2020. ECC merges the five different Directives of the 2009 Telecom Package, except the including e-Privacy Directive numbered 2002/58 EC.⁹³ ECC underlines open and strong internet and assigns a regulatory task to BEREC, which is *“to issue guidelines on the implementation of the Union regulatory framework for electronic communications, in particular, as referred to in Regulations (EU) No 531/2012 and (EU) 2015/2120 and Directive (EU) 2018/1972, on the implementation of National Regulatory Authorities' obligations as regards open internet access, in accordance with Article 5(3) of Regulation (EU) 2015/2120”*⁹⁴.

⁹³ "Regulation (EU) 2018/1971 Of The European Parliament And Of The Council Of 11 December 2018 Establishing The Body Of European Regulators For Electronic Communications (BEREC) And The Agency For Support For BEREC (BEREC Office), Amending Regulation (EU) 2015/2120 And Repealing Regulation (EC) No 1211/2009". 2018. Eur-Lex.Europa.Eu. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2018:321:FULL&from=EN>.

⁹⁴ Article 4 ECC.

The main provisions of ECC are⁹⁵:

- *Clear and inclusive rules*: the same rules apply in all over EU with a vision of an inclusive single market;
- *Higher quality of services*: ECC aims to enhance competition for investments, and bring higher connection speeds and higher coverage;
- *Competitive prices*: the prices are expected to go down;
- *Consumer protection*: ECC imposes a high level of protection for the end-users.

Under the ECC, 'electronic communications services' cover services provided over the internet such as messaging apps and email.

The Commission stated that the new end-user's rules in ECC will also: (i) Protect consumers subscribing to bundles, (ii) Enable change of provider and strengthen number portability; (iii) Improve comparison tools and consumption control; and (iv) Promote tariff transparency and comparison of contractual offers enabling end-users to make informed decisions.⁹⁶ Relevant recitals and articles that set forth some ECC's approach to NN and the open internet can be found on the Appendix A.

5.1.4. Regulation (EU) 2015/2120 - Open Internet Regulation

The European Parliament and the Council of Europe have adopted the "laying down measures concerning open internet access and amending the Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union", so called the Open Internet Regulation ("Regulation"), on 25 November 2015, which entered into force on 30 April 2016.

⁹⁵ "Electronic Communications Laws - Digital Single Market - European Commission". 2019. Digital Single Market - European Commission. <https://ec.europa.eu/digital-single-market/en/telecoms>.

⁹⁶ "European Commission - PRESS RELEASES - Press Release - Digital Single Market: Political Agreement On The Rules Shaping The Telecommunication Markets In The 5G Era". 2018. Europa.Eu. https://europa.eu/rapid/press-release_MEMO-18-4084_en.htm.

5.1.4.1. Purpose of the Regulation

Article 1 sets forth the purpose of the Regulation as establishing mutual rules to safeguard equal and non-discriminatory treatment of traffic relating to the internet access services and relevant end-users' rights.⁹⁷ Further, the Article also sets up a “new retail pricing mechanism for Union-wide regulated roaming services in order to abolish retail roaming surcharges without distorting domestic and visited markets.”⁹⁸

Among its main innovations, the Regulation states the principle of open internet access or “net neutrality” for the first time under European law, which promotes that internet traffic shall be treated without discrimination, blocking, throttling or prioritization. For this purpose, Article 3 of the Regulation sets the basic framework for ensuring net neutrality across the entire European Union.

5.1.4.2. Safeguarding of open internet access

Article 3 sets forth the necessary elements of safeguarding of open internet access. These provisions promote user's right to be “free to access and distribute information and content, run applications and use services of their choice”.⁹⁹ Further, they allow reasonable traffic management and, with the necessary safeguards, specialized services.¹⁰⁰

As regard to safeguarding of open internet access, Article of the Regulation sets forth the following rights and obligations of users and providers of internet access services (“providers”):

- End-users have the right to access and distribute information and content, to use and provide applications and services, and to use any terminal equipment of their choice to access the internet.¹⁰¹

⁹⁷ Article 1/1, Open Internet Regulation

⁹⁸ Article 1/2

⁹⁹ "All You Need To Know About Net Neutrality Rules In The EU". 2019. Berec.Europa.Eu. Accessed September 19. <https://berec.europa.eu/eng/netneutrality/>.

¹⁰⁰ "Open Internet - Digital Single Market - European Commission". 2019. Digital Single Market - European Commission. <https://ec.europa.eu/digital-single-market/en/policies/open-internet>.

¹⁰¹ Article 3/1

- Agreements between providers and end-users shall not limit the exercise of these rights.¹⁰²
- Providers must treat all types of internet traffic equally when providing internet access services.¹⁰³
- Providers must not engage in traffic management measures going beyond the ones set forth in the Article, and in particular they must not block, slow down, alter, restrict, interfere with, degrade or discriminate between specific content, applications or services, or specific categories thereof, except as necessary, and only for as long as necessary. The Regulation does not explicitly ban or allow specific commercial practices such as zero-rating.¹⁰⁴

Recital 19 states that in ensuring end-users to exercise their rights set forth under the Regulation are effectively implemented, national regulatory authorities play a pivotal role. Therefore, the text of the recital puts forward that regulatory authorities should have monitoring and reporting obligations and should ensure that providers comply with their obligations concerning the safeguarding of open internet access. In order to manage this, national regulatory authorities should have the power to impose the relevant requirements and protect the degradation of the general quality of service of internet access for end-users.¹⁰⁵

The Regulation mandates BEREC to issue Guidelines to contribute to the consistent application of the NN provisions, which should be taken in utmost account by national regulatory authorities.

5.1.4.3. Exemptions of the safeguarding of open internet access

There are three exceptions regarding the safeguarding of open internet access which are in summary: (i) to comply with legal obligations; (ii) preserve the integrity of the network; and (iii) manage impending network congestion in exceptional and temporary situations. More detailed analysis of these exemptions can be found in the sub-chapter 4.2. As given above, Article 3/3 states that Providers must not engage in traffic management measures going beyond the ones set forth in the Article, and in particular they must not block, slow down, alter, restrict, interfere with,

¹⁰² Article 3/2

¹⁰³ Article 3/3

¹⁰⁴ Article 3/3

¹⁰⁵ Recital 19

degrade or discriminate between specific content, applications or services, or specific categories thereof, except as necessary, and only for as long as necessary, in order to:

- comply with Union legislative acts, or national legislation that complies with Union law,¹⁰⁶
- preserve the integrity and security of the network, of the services provided via that network, and of the terminal equipment of end-users,¹⁰⁷ and
- prevent impending network congestion and mitigate the effects of exceptional or temporary network congestion, provided that equivalent categories of traffic are treated equally.¹⁰⁸

5.1.4.4. Transparency measures for ensuring open internet access

Regulations sets forth the transparency measures for ensuring open internet access in Article 4. The purpose of this rule is to strengthen the rights of customers set forth above.¹⁰⁹

Article 4 states that in order for users to make informed choices, providers of internet access services should:¹¹⁰

- inform end-users in a clear manner how traffic management practices deployed might have an impact on the quality of internet access services, end-users' privacy and the protection of personal data as well as about the possible impact of services other than internet access services to which they subscribe, on the quality and availability of their respective internet access services,
- inform end-users in the contract of the speed which they are able realistically to deliver, and,
- inform consumers of available remedies in accordance with national law in the event of non-compliance of performance.

¹⁰⁶ Article 3/3 (a)

¹⁰⁷ Article 3/3 (b)

¹⁰⁸ Article 3/3 (c)

¹⁰⁹ Recital 31

¹¹⁰ Article 4; Recital 18

5.1.4.5. Critiques of the regulation

The Open Internet Regulation has also been criticized for regulating NN in a way that leaves too many loopholes to be exploited. Some of which includes the ability to offer priority to "specialized services" such as remote surgery, driverless cars, and preventing terrorist attacks if they prove they still treat the "open" internet equally.¹¹¹ This has been criticized as allowing ISPs to offer an internet fast lane to the sites that pay.¹¹²

Further, some stakeholders claim that the EU regulations are not sufficiently clear in relation to zero-rating practices, as their assessment is left to national regulators in the relative country on a case-by-case basis. The director general of the European Consumer Organization Monique Goyens said, "What Europe is essentially saying here is that all internet data is born equal, but some are more equal than others. We applaud the new onus on Internet Service Providers (ISPs) to treat traffic equally, but safeguards against the impact of 'specialized services' are not strong enough."¹¹³ On the other hand, the European Digital Rights (EDRi) also criticized the regulation by stating that it is an "abdication of responsibility", which accusedly make the legal situation less clear and created confusion.¹¹⁴

5.1.5. BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules

The Body of European Regulators for Electronic Communications (BEREC)¹¹⁵ has published the "BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality

¹¹¹ Hern, Alex. "EU Net Neutrality Laws Fatally Undermined by Loopholes, Critics Say." *The Guardian*, October 27, 2015, sec. Technology. <https://www.theguardian.com/technology/2015/oct/27/eu-net-neutrality-laws-fatally-undermined-by-loopholes-critics-say>.

¹¹² *ibid.*

¹¹³ O'Reilly, Quinton. "The EU Decides on Net Neutrality Rules, but Not Everyone Is Happy with It." *TheJournal.ie*. Accessed September 11, 2019. <https://www.thejournal.ie/eu-net-neutrality-rules-2189681-Jun2015/>.

¹¹⁴ "Blurry, Ambiguous 'Net Neutrality' Deal Is an Abdication of Responsibility." *EDRi* (blog), June 30, 2015. <https://edri.org/blurry-ambiguous-net-neutrality-deal-is-an-abdication-of-responsibility/>.

¹¹⁵ "The Body of European Regulators for Electronic Communications (BEREC) was established by Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018. ... It replaced the European Regulators Group for electronic communications networks and services which was established as an advisory group to the Commission in 2002. ... BEREC assists the Commission and the national regulatory authorities (NRAs) in implementing the EU regulatory framework for electronic communications. It provides advice on request and on its

Rules” (“Guidelines”) on August 30, 2016 which is drafted in accordance with Article 5 (3) of the Regulation (EU) 2015/2120 (“Open Internet Regulation”) of the European Parliament and of the Council of 25 November 2015. The Guidelines aim to provide guidance on the implementation of the obligations of National Regulatory Authorities (NRAs). They also include recommendations to NRAs, of which NRAs should take utmost account. They specifically provide guidance on the obligations of NRAs to closely monitor and ensure compliance with the rules and enhance user rights set forth in Articles 3 and 4. BEREC hopes that the Guidelines will contribute to the efficient application of the Regulation, as well as to regulatory certainty.¹¹⁶

Safeguarding of open internet access (Article 3) and Transparency measures for ensuring open internet access (Article 4)

Article 3 mainly covers (i) measures to safeguard open internet access, (ii) the rights of the end-users of IAS, and (iii) obligations for the ISPs. Under Article 3(3), NRAs should require ISPs to provide transparent information about traffic management practices and the impact of these practices (see also Articles 4 and 5). Under Recital 18 the provisions on safeguarding of open internet access should be complemented by effective end-user provisions which address issues particularly linked to internet access services and enable end-users to make informed choices. Furthermore, it is stated that NRAs should ensure that ISPs include relevant information referred to in Article 4 (1) letters (a) to (e) in a clear, comprehensible and comprehensive manner in contracts that include IAS, and publish that information, for example on an ISP’s website.¹¹⁷

Regulations set out the transparency measures for ensuring open internet access in Article 4. The purpose of this rule is to strengthen the rights of customers ultimately enhancing open internet access. Article 4 states that in order for users to make informed choices, providers of internet

own initiative to the European institutions and complements at European level the regulatory tasks performed at national level by the NRAs. ... The NRAs and the Commission have to take utmost account of any opinion, recommendation, guidelines, advice or regulatory best practice adopted by BEREC.” **Source:** https://berec.europa.eu/eng/about_berec/what_is_berec/

¹¹⁶ BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules (Guideline), pg. 3

¹¹⁷ BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules NRAs should note that ISPs are also under an obligation to provide information to consumers before being bound by the contract under other EU instruments: the Consumer Rights Directive (<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0083&rid=1>), pg.29

access services should:¹¹⁸ inform end-users in a clear manner how traffic management practices deployed might have an impact on the quality of internet access services, end-users' privacy and the protection of personal data as well as about the possible impact of services other than internet access services to which they subscribe, on the quality and availability of their respective internet access services, inform end-users in the contract of the speed which they are able realistically to deliver, and inform consumers of available remedies in accordance with national law.

APPENDIX B provides a detailed roadmap of Article 3 and BEREC's specific recommendations to NRAs on the implementation of relevant subclauses for Article 3.¹¹⁹

APPENDIX C provides a detailed roadmap of Article 4 and BEREC's specific recommendations to NRAs on the implementation of relevant subclauses for Article 4.¹²⁰

5.1.6. Annual Country Reports on Open Internet from National Regulators

The European Commission has been publishing the annual country reports prepared by National Regulatory Authorities (NRAs) regarding their compliance with the provisions on open internet.¹²¹ According to Article 5 of the Open Internet Regulation, NRAs should closely monitor and ensure compliance with the provisions on open internet, and they are requested to publish how they are complying with the relevant provisions with the Commission and BEREC. Therefore, these reports are provided by NRAs to the Commission and the BEREC every year. The third and the last set of reports presents the NRAs work in ensuring open internet between the 1st of May, 2018 and the 30th of April, 2019. This Report is also expected to be used by the Commission in the next Digital Economy and Society Index (DESI) Report.¹²² BEREC publishes annually a Report on the implementation of Regulation (EU) 2015/2120 and BEREC Net Neutrality Guidelines, based on the information by national regulators. In 2018 it published its Opinion for the evaluation of the

¹¹⁸ Article 4; Recital 18

¹¹⁹ The Guideline, pg. 7-30.

¹²⁰ The Guideline, pg. 30-38

¹²¹ "Annual Country Reports on Open Internet from National Regulators - 2019." Digital Single Market - European Commission, July 5, 2019. <https://ec.europa.eu/digital-single-market/en/news/annual-country-reports-open-internet-national-regulators-2019>.

¹²² "Annual Country Reports on Open Internet from National Regulators - 2019."

application of Regulation (BoR (18) 244). In April 2019 the European Commission issued its opinion on the implementation of the open internet access provisions of Regulation (COM(2019) 203 final), concluding there was no need for a review of the Regulation.

These reports reflect improvements in NN practices, monitoring of NN violations, present insight on the respective country's approach to contested concepts such as zero-rating, and point out what else can be improved in the following year to enhance NN applications. Most of the NRS reports question whether open internet access continues to be provided at a quality level that reflects progress in technology. As noted above, BEREC will analyze all of the NRA reports and provide a general picture in which it portrays whether the NRAs did a good job in applying NN rules, how they can improve their applications, etc.

The Epicenter's Report on "The Net Neutrality Situation in the EU Evaluation of the First Two Years of Enforcement" shows that NRAs often refrain from publishing reports or do not follow the minimal requirements issued by the BEREC to provide at least a minimum level of transparency and comparability across Europe.¹²³ They also draw attention to the nature of penalty implementation of NN framework, which leaves it to the member states. The Epicenter concludes that this situation caused some member states to refrain from laying down the penalty rules.¹²⁴ It is expected that BEREC will address these ineffective actions or inactions.

5.2. The US

In the United States (US), NN has been an issue of conflict between network users and access providers since the 1990s. A core issue to NN is about how ISPs should be classified under the Communications Act of 1934. There are two alternatives which change the course of NN rules in the US: (i) ISPs can be classified under Title I as "information services", or (ii) under Title II as "common carrier services". The classification determines the Federal Communication Commission's (FCC) authority over ISPs: the FCC has significant ability to regulate ISPs if they are classified under Title II as common carriers. However, the FCC has little control over ISPs if

¹²³ "The Net Neutrality Situation in the EU Evaluation of the First Two Years of Enforcement". Epicenter. 2019. https://en.epicenter.works/sites/default/files/2019_netneutrality_in_eu-epicenter.works-r1.pdf

¹²⁴ *ibid.*

they are classified under Title I as information services. Between 2015 and 2017, ISPs were classified as Title II common carriers, which fell under FCC's regulatory power. Later, under Trump's administration, the FCC voted in favor of repealing its 2015 rule on NN which classified ISPs as common carrier services. The repeal of the FCC's rules took effect on June 11, 2018, which ended NN regulation in the US by classifying ISPs as information services.

5.2.1. Brief History of NN in the US

Between the 1980s and early 2000s, the Internet was viewed more as a commercial service than a domestic and societal system, therefore, since its creation it had been categorized as an information service under Title I. When the internet started to become more ubiquitous, legal scholars raised the issue of NN, which extended internationally in the early 2000s¹²⁵.

In 2004, the FCC announced a set of non-discrimination principles called "Network Freedom" that included freedom to access content, run applications, attach devices, and obtain service plan information.

In 2005, the FCC adopted network neutrality principles "to preserve and promote the vibrant and open character of the Internet as the telecommunications marketplace enters the broadband age."¹²⁶

Between 2005 and 2010 the FCC made several decisions about enhancing the NN. However, five attempts to pass bills in Congress containing net neutrality provisions failed between 2005 and 2012.

In 2010 the FCC voted in favor of the "Open Internet Order" which "established high-level rules requiring transparency and prohibiting blocking and unreasonable discrimination to protect Internet openness." With this, the FCC passed a set of six NN principles; transparency, no blocking, a level playing field, network management, mobile and vigilance.

¹²⁵ Krämer, Jan, and Lukas Wiewiorra. "Net Neutrality in the United States and Europe," 2012, 7.

¹²⁶ "Appropriate Framework for Broadband Access to the Internet over Wireline Facilities." Federal Communications Commission, December 22, 2015. <https://www.fcc.gov/document/appropriate-framework-broadband-access-internet-over-wireline>.

In 2014 the DC circuit Court determined in a case¹²⁷ that the FCC had no authority to enforce NN rules as long as service providers were not identified as common carriers under Title II. Subsequently, the FCC announced that it is working on formulating ways to resume enforcing NN¹²⁸. Later in the year President Obama recommended the FCC to reclassify ISPs as telecommunications service to preserve NN¹²⁹.

In 2015, as a response to legal challenges from ISPs challenging the FCC's ability to regulate NN, the FCC passed the “Open Internet Order” which reclassified ISPs as Title II services and giving them authority to enforce net neutrality.

In 2017, upon becoming FCC chairman as part of the Trump Administration, Ajit Pai proposed to repeal the neutrality policies, returning to the previous classification of ISPs as Title I services. The FCC voted in favor of repealing the Order, which went into effect in June 2018. As a result, over 20 states launched a joint lawsuit (*Mozilla v FCC*) against the FCC¹³⁰ while California passed its own state-level net neutrality law that is being challenged by the federal government.

From 2017 and onwards, various states have passed bills to restore NN at the state level and some of these bills have been challenged by the courts.

In 2018, fifty United States senators had endorsed legislative action under the Congressional Review Act (CRA) to reverse the repeal of Title II net neutrality¹³¹, which was not successful due to a set of reasons.

¹²⁷ “United States Court of Appeals FOR THE DISTRICT OF COLUMBIA CIRCUIT.” *Biotechnology Law Report* 25, no. 3 (June 2006): 363–65. <https://doi.org/10.1089/blr.2006.25.363>.

¹²⁸ “FCC Will Set New Net Neutrality Rules | Computerworld.” Accessed September 8, 2019. <https://www.computerworld.com/article/2487880/fcc-will-set-new-net-neutrality-rules.html>.

¹²⁹ “Obama Asks F.C.C. to Adopt Tough Net Neutrality Rules - The New York Times.” Accessed September 8, 2019. <https://www.nytimes.com/2014/11/11/technology/obama-net-neutrality-fcc.html>.

¹³⁰ “22 Attorneys General Sue to Block Net Neutrality Rollback - The Verge.” Accessed September 8, 2019. <https://www.theverge.com/2018/1/16/16898352/attorneys-general-lawsuit-fcc-net-neutrality>.

¹³¹ “The Senate’s Push to Overrule the FCC on Net Neutrality Now Has 50 Votes, Democrats Say - The Washington Post.” Accessed September 8, 2019. <https://www.washingtonpost.com/news/the-switch/wp/2018/01/15/the-senates-push-to-overrule-the-fcc-on-net-neutrality-now-has-50-votes-democrats-say/>.

In March 2019, Democratic Senators and Representatives presented the Save the Internet Act in both Houses of Congress, which cleared the House on a 232-190 vote on April 10, 2019. However, both Republican controlled Senate and President Trump stated that they will stop the bill's passage.

On October 1st, 2019, a federal appeals court upheld the FCC's ability to repeal NN rules, but decided that FCC failed to address public safety, pole attachment rights, and the subsidy program Lifeline¹³². Further, the Court decided that the FCC cannot prevent states from adopting their own rules.

5.2.2. FCC Open Internet Order (2015)

On March 12, 2015 the FCC released the Open Internet Report, which aimed to enact "strong, sustainable rules grounded in multiple sources of legal authority to protect the Open Internet and ensure that Americans reap the economic, social, and civic benefits of an Open Internet today and into the future"¹³³ This was the first time that NN rules would apply in full to mobile internet service.¹³⁴

The Order regulates three specific rules for internet service: no blocking, no throttling, and no paid prioritization. "A person engaged in the provision of broadband internet access service, insofar as such person is so engaged, shall not impair or degrade lawful internet traffic on the basis of internet content, application, or service, or use of a non-harmful device, subject to reasonable network management," the Order states.¹³⁵ ISPs were still allowed to take reasonable network management which can affect service, however, they had to abide by strict rules.

Following the publication of the FCC's ruling in 2015, several internet providers filed suit to challenge the FCC's ruling, which were combined under the United States Telecom Assn v. FCC

¹³² "United States Court of Appeals FOR THE DISTRICT OF COLUMBIA CIRCUIT." *Biotechnology Law Report* 25, no. 3 (June 2006): 363–65. <https://doi.org/10.1089/blr.2006.25.363>.

¹³³ "FCC Releases Open Internet Order." Federal Communications Commission, December 9, 2015. <https://www.fcc.gov/document/fcc-releases-open-internet-order>.

¹³⁴ Kastrenakes, Jacob. "FCC Will Apply Net Neutrality to Mobile for the First Time." *The Verge*, February 4, 2015. <https://www.theverge.com/2015/2/4/7977633/fcc-will-apply-net-neutrality-to-mobile-for-the-first-time>.

¹³⁵ "FCC Releases Open Internet Order." Federal Communications Commission, December 9, 2015.

825 F.3d 674 (2016) case. The court decided in favor of maintaining the FCC’s ruling, by stating that the internet should be treated as a utility, not as a luxury.¹³⁶

Until the FCC's 2017 vote which revoked this Order, it served as the main mechanism in preserving NN.

5.2.3. FCC Restoring Internet Freedom Order (2018)

On January 4, 2018 the FCC released the Restoring Internet Freedom Order, which ended NN protections that were established with the 2015 Open Internet Order. The Order entered into effect on June 11, 2018. The FCC’s Chairman Pai stated that this Order aims to establish a light-touch regulatory framework, while ending utility-style regulation of the Internet.¹³⁷

The Declaratory Ruling especially regulates three things: it (i) classifies ISPs as information services rather than common carriers, therefore, ISPs are no longer governed under Title II of the Communications Act of 1934,¹³⁸ (ii) “reinstates the private mobile service classification of mobile broadband Internet access service”, and (iii) “clarifies the effects of the return to an information service classification on other regulatory frameworks, including the need for a uniform federal regulatory approach to apply to interstate information services like broadband Internet access service”.¹³⁹

ISPs are required to inform consumers on traffic management practices; however, they are allowed to discriminate among information flowing through their networks, engage in anti-competitive behavior, and censorship. Further, the Order restores the Federal Trade Commission’s power to protect consumers online from any unfair, deceptive, and anticompetitive practices without burdensome regulations.¹⁴⁰

¹³⁶ “Court Backs Rules Treating Internet as Utility, Not Luxury - The New York Times.” Accessed September 8, 2019. <https://www.nytimes.com/2016/06/15/technology/net-neutrality-fcc-appeals-court-ruling.html>.

¹³⁷ Kelly, Makena. “Net Neutrality Is Dead — What Now?” The Verge, June 11, 2018. <https://www.theverge.com/2018/6/11/17439456/net-neutrality-dead-ajit-pai-fcc-internet>.

¹³⁸ “FCC Releases Restoring Internet Freedom Order.” Federal Communications Commission, January 4, 2018. <https://www.fcc.gov/document/fcc-releases-restoring-internet-freedom-order>.

¹³⁹ *ibid.*

¹⁴⁰ *ibid.*

The Order has already received a high volume of controversy and lead to initiatives like the Save the Internet Act, and other proliferating state bills that contradicts the Order.

5.2.4. Save the Internet Act (2019)

In mid-April, 2019, House Democrats introduced a new bill called the “Save the Internet Act” which aims to reestablish NN rules that were in effect between 2015 and 2018.¹⁴¹ The Act was approved by the House, however, it still needs to be approved by the Senate and the President. Senate leader Mitch McConnell stated that the bill is “dead on arrival once it’s brought in front of the Senate” and added that the President Trump will veto it.¹⁴²

According to the Save the Internet Act Fact Sheet published by the Committee on Energy & Commerce, the Act “creates popular, bipartisan, and targeted net neutrality protections, and puts a cop on the beat to protect consumers, small businesses, and competition from abusive practices of internet service providers.”¹⁴³

The Act has not been brought in front of the Senate and still needs to be approved by the Senate and the President to become a law.¹⁴⁴

5.2.5. NN Regulations at the State Level (From 2017 to October 1st, 2019)

As a counteract to the FCC’s Restoring Internet Freedom Order, various states have taken action to establish NN rules within the state. More than 35 states have either proposed or passed a

¹⁴¹ Doyle, Michael F. “Text - H.R.1644 - 116th Congress (2019-2020): Save the Internet Act of 2019.” Congress, April 29, 2019. <https://www.congress.gov/bill/116th-congress/house-bill/1644/text>.

¹⁴² “McConnell: Net Neutrality Bill ‘dead on Arrival’ in Senate | TheHill.” Accessed September 8, 2019. <https://thehill.com/homenews/senate/438133-mcconnell-net-neutrality-bill-dead-on-arrival-in-senate>.

¹⁴³ “Save the Internet Fact Sheet”. Committee on Energy and Commerce, March 2019. <https://energycommerce.house.gov/sites/democrats.energycommerce.house.gov/files/documents/Save%20the%20Internet%20Fact%20Sheet.pdf>

¹⁴⁴ Doyle, Michael F. “Text - H.R.1644 - 116th Congress (2019-2020): Save the Internet Act of 2019.” Congress, April 29, 2019. <https://www.congress.gov/bill/116th-congress/house-bill/1644/text>.

resolution, bill, or executive summary order.¹⁴⁵ By the end of 2018, six states—Hawaii, New Jersey, New York, Montana, Rhode Island, and Vermont—had executive orders preventing the state from contracting with ISPs that didn’t adhere to net neutrality principles.¹⁴⁶ Further, the mayors of 122 cities and “Santa Cruz County (CA) have pledged to require entities contracting with the city or using city services to adhere to Net Neutrality rules”.¹⁴⁷ Finally, more than twenty states filed a protective petition for review against the FCC’s ruling.¹⁴⁸

As a response to the state NN regulations, the Department of Justice (DoJ) sued some of these states. For instance, California passed the strictest state-level NN law and almost immediately after California’s law was signed, the state was sued by the DoJ. California agreed to put enacting S.B. 822 on hold until the D.C. Circuit case is resolved.¹⁴⁹ The FCC stated that with its 2018 Order, it preempted states from passing their own NN rules however this statement is considered to be controversial.¹⁵⁰

While these were happening, a new research showed that throttling -especially towards videos- are applied very often. By the ISPs¹⁵¹ The researchers found that from early 2018 to early 2019, AT&T Inc. throttled Netflix Inc. 70% of the time and Google’s YouTube service 74% of the time.¹⁵² These facts raised various concerns over NN, which lead a few senators to ask FCC to investigate

¹⁴⁵ “Net Neutrality Legislation in States.” Accessed September 8, 2019. <http://www.ncsl.org/research/telecommunications-and-information-technology/net-neutrality-legislation-in-states.aspx>.

¹⁴⁶ Falcon, Ernesto and Trendacosta, Katharine. “The Year Without the Open Internet Order: 2018 Year in Review.” Electronic Frontier Foundation, December 23, 2018. <https://www.eff.org/deeplinks/2018/12/year-without-open-internet-order-2018-year-review>.

¹⁴⁷ “Net Neutrality Tracker.” NARUC. Accessed September 8, 2019. <https://www.naruc.org/nrri/nrri-activities/net-neutrality-tracker/>.

¹⁴⁸ “The Debate Over Net Neutrality.” Accessed September 8, 2019. <http://www.ncsl.org/research/telecommunications-and-information-technology/the-debate-over-net-neutrality.aspx>.

¹⁴⁹ Bode, Karl. “Why Feds Can’t Block California’s Net Neutrality Bill.” The Verge, October 2, 2018. <https://www.theverge.com/2018/10/2/17927430/california-net-neutrality-law-preemption-state-lawsuit>.

¹⁵⁰ EFF and other legal experts believe that by giving up its authority to regulate NN, the FCC also gave up the authority to tell the states what to do regarding NN. Source: Falcon, Katharine Trendacosta and Ernesto. “The Year Without the Open Internet Order: 2018 Year in Review.”

¹⁵¹ Li, Fangfan, Arian Akhavan Niaki, David Choffnes, Phillipa Gill, and Alan Mislove. “A Large-Scale Analysis of Deployed Traffic Differentiation Practices.” In *Proceedings of the ACM Special Interest Group on Data Communication - SIGCOMM ’19*, 130–44. Beijing, China: ACM Press, 2019. <https://doi.org/10.1145/3341302.3342092>.

¹⁵² *ibid.*

“whether U.S. wireless carriers are throttling popular apps without telling consumers”.¹⁵³ Recently, in June 2019, Maine governor signed a net neutrality bill, which states that internet service providers can only receive state funding if they “agree to provide net neutral service”.¹⁵⁴

5.2.6. Federal Appeal Court’s Decision on the FCC’s Repeal (October 1st, 2019 - Present)

Most recently, on the 1st of October 2019, the US Court of Appeals for the District of Columbia upheld the FCC’s ability to repeal NN rules, but decided that FCC failed to address public safety, pole attachment rights, and the subsidy program Lifeline.¹⁵⁵ Further, the Court decided that the FCC cannot prevent states from adopting their own rules because it found that the FCC had overstepped its authority when it banned states from enacting their own NN rules. It is expected that states will be moving forward with passing their own NN rules.¹⁵⁶ Five states - California, New Jersey, Oregon, Vermont and Washington - have already enacted rules to preserve NN, and thirty-four states and the District of Columbia have introduced bills and resolutions.¹⁵⁷

While the US Court of Appeals for the District of Columbia decision opened the way to let states set their own NN rules by endorsing FCC repeal of Obama-era standards, the judgment also is seen to create uncertainty into regulation.¹⁵⁸ Because since each state can decide their own rules, the FCC and broadband companies are concerned that this may lead to “patchwork of state regulations will make it difficult to deliver service, since broadband by its nature crosses state lines”.¹⁵⁹ For instance, California passed the most strict NN regulation, which was stopped from being enacted

¹⁵³ “Wireless Carrier Throttling of Online Video Is Pervasive.” Accessed September 8, 2019. <https://www.bloomberg.com/news/articles/2019-08-19/wireless-carrier-throttling-of-online-video-is-pervasive-stud>.

¹⁵⁴ “Maine Governor Signs Net Neutrality Bill | TheHill.” Accessed September 8, 2019. <https://thehill.com/homenews/state-watch/450461-maine-governor-signs-net-neutrality-bill-into-law>.

¹⁵⁵ “United States Court of Appeals FOR THE DISTRICT OF COLUMBIA CIRCUIT.” *Biotechnology Law Report* 25, no. 3 (June 2006): 363–65. <https://doi.org/10.1089/blr.2006.25.363>.

¹⁵⁶ Reardon, Marguerite. “Net Neutrality Battle Moves to the States.” CNET. Accessed October 24, 2019. <https://www.cnet.com/news/net-neutrality-battle-moves-to-the-states/>.

¹⁵⁷ Reardon, Marguerite. “The Net Neutrality Battle Lives on: What You Need to Know after the Appeals Court Decision.” CNET. Accessed October 24, 2019. <https://www.cnet.com/news/net-neutrality-battle-lives-on-what-you-need-to-know-after-the-appeals-court-decision/>.

¹⁵⁸ Stacey, Kiran. 2019. “US Court Ruling Could Let States Set Their Own Net Neutrality Rules”. Financial Times. <https://on.ft.com/2n3sDIA>.

¹⁵⁹ Reardon, Marguerite. “The Net Neutrality Battle Lives on: What You Need to Know after the Appeals Court Decision.” CNET. Accessed October 24, 2019.

after the Department of Justice filed a lawsuit against California in 2017. California agreed to hold off on enacting their rules until the FCC litigation has been settled.¹⁶⁰ However, after the Court of Appeals' decision, California will be able to enact this regulation and bring the strongest NN rules. On the other hand, defenders of the FCC argue that the agency can still challenge individual states' laws on a case by case basis.¹⁶¹

The only way to stop this patchwork legislation is to have Congress pass legislation. Save the Internet Act is an attempt from Congress to restore 2015 NN rules, however as stated above, the senate won't likely approve the Act under the current presidency. As the 2020 presidential elections approach, some of the Democrat candidates stated that they would appoint FCC commissioners who are in favor of restoring NN.¹⁶² One thing is for sure, NN remains as a hot topic in the US.

5.3. Turkey

5.3.1. Legal Background - The Missing Piece in the Puzzle

There is no clear regulation or guidance in the Turkish legislation with respect to the principle of NN. However, Turkey does have certain rules in place under its legislative framework for electronic communications, aiming to ensure provision of electronic communications services in a non-discriminatory and transparent manner, where consumer rights and fair competition between the operators are preserved and promoted. Although there is no mention of NN, these pieces of legislation, in most cases, exhibit the core idea behind NN, yet fall short in many aspects of NN. The norms that are currently in force, if interpreted broadly, may be enforced by the authorities and judiciaries in order to pursue objectives similar to those aimed with NN. APPENDIX D provides a list of the relevant legislation currently in place.

¹⁶⁰ Reardon, Marguerite. "California Agrees to Back off Net Neutrality Enforcement...for Now." CNET. Accessed October 24, 2019. <https://www.cnet.com/news/california-agrees-to-not-enforce-net-neutrality-law-for-now/>.

¹⁶¹ Reardon, Marguerite. "Net Neutrality Battle Moves to the States." CNET. Accessed October 24, 2019. <https://www.cnet.com/news/net-neutrality-battle-moves-to-the-states/>.

¹⁶² "These 2020 Dems Are Promising an FCC That Will Restore Net Neutrality," The Daily Dot. August 13, 2019. <https://www.dailydot.com/layer8/net-neutrality-2020-democrats-fcc/>.

5.3.2. Signals of Net Neutrality - So Close yet So Far

5.3.2.1. ICTA Fines Major ISP for Blocking Access to Websites

In 2012, the ICTA rendered a decision whereby it imposed an administrative fine to TNet A.Ş., a major ISP in Turkey, for temporarily blocking access to certain websites, including YouTube.¹⁶³ Turkish legislation on regulation of online content allows the judiciary and the ICTA to ban access to certain unlawful online content. But ISPs are required to implement the access ban decisions, with no discretion. The administrative fine of TRY 250k (around EUR 40k) followed TNet A.Ş.'s blocking access to certain websites although there were not any judicial or administrative measures concerning such websites. TNet A.Ş. was found to be in breach of its obligations under the legislation on regulation of online content¹⁶⁴ and its obligations under authorization legislation.

The ICTA's administrative fine has been largely considered among the Turkish internet community as a manifestation of NN enforcement. Even though an ISP blocking access to certain websites is a *prima facie* violation of NN, the decision of the ICTA finds its grounds in the Turkish legislation on regulation of online content and obligations of ISPs within the same context. While there is no mention in the ICTA's published decision, any of the legislation cited above, which could arguably be associated with NN, the ICTA decision also follows an investigation conducted by the Presidency of Telecommunication and Communication, which was in charge of regulation of online content, rather than an investigation conducted by the ICTA's departments handling consumer rights or authorization. Nonetheless, the decision is perceived by the internet community as a step towards NN.

5.3.2.2. ICTA Bans the Fair Usage Practice

Until 2019, ISPs in Turkey have been offering 3 types of broadband subscriptions; (i) broadband with no caps, (ii) broadband with data caps, and (iii) broadband with fair usage caps. Broadband with no caps have always been quite heavy on budget in Turkey. Broadband with data caps, on the

¹⁶³ "TNet AŞ Hakkında Yapılan Soruşturma". 2012. Btk.Gov.Tr. <https://www.btk.gov.tr/uploads/boarddecisions/ttnet-as-hakkinda-yapilan-sorusturmaya-iliskin-kurul-karari.pdf>.

¹⁶⁴ The Regulation on the Principles and Procedures Governing the Regulation of Publishing on the Internet.

other hand, where the internet service is suspended once the data cap is reached, became more popular, due its cost per value but complete suspension after reaching the data cap has been a cause for complaint, which helped fair usage caps to emerge. Users, who opted to subscribe for broadband services offered with a “fair usage cap”, would be using the bandwidth specified under their subscription, until they reached a predetermined fair usage cap. If the fair usage cap is surpassed, bandwidth is decreased (throttled) drastically, to a point where the user can still access the internet but cannot enjoy it fully. Fair usage cap has considered as a mechanism allowing ISPs to manage traffic more efficiently. Similar to the US case where FCC fined AT&T for USD 100 million, the Turkish ISPs marketed subscription plans with fair usage caps as “unlimited plans”, aiming to differentiate from plans with data caps. However, because of the legal principles cited above, ISPs used to transparently provide in their subscription plans, details of the fair usage cap and the amount of speed decrease which users would suffer if they surpass the fair usage cap. Thereby, heavy users could opt for a plan which offers a higher fair usage cap.

The ICTA fined ISPs where, they have misinformed consumers regarding their fair usage practices and in 2016 published for public opinion, a number of solutions to improve fair usage practice.¹⁶⁵ Shortly after, the ICTA decided to ban the fair usage cap practice in 2016, by gradually limiting the use starting from May 2017 and completely banning by the end of 2018.¹⁶⁶

The ICTA explains the reason for intervening with such practice with the fair usage cap practice being unable to meet the growing demand of consumers for higher amounts of data and in increased speeds, and commercial practices where data plans with fair usage data caps were being misleadingly marketed as “unlimited” data plans. The ICTA does not refer to NN, however banning the fair usage practice is undeniably in line with the Regulation (EU) 2015/2120, that it cannot be ignored. The Regulation (EU) 2015/2120 touches this topic almost clearly in its Recital 7 of “National regulatory and other competent authorities should be required, as part of their monitoring and enforcement function, to intervene when agreements or commercial practices would result in the undermining of the essence of the end-users’ rights”.

¹⁶⁵ “Adil Kullanım Noktası (AKN) Uygulaması” Bilgi Teknolojileri ve İletişim Kurulu Kararı. 01.09.2016. 2016/DK-THD/393. <https://www.btk.gov.tr/uploads/boarddecisions/adil-kullanim-noktasi-akn-uygulamasi.pdf>

¹⁶⁶ “Adil Kullanım Noktası (AKN) Uygulaması” Bilgi Teknolojileri ve İletişim Kurulu Kararı. 27.12.2016. 2016/DK-THD/518. <https://www.btk.gov.tr/uploads/boarddecisions/adil-kullanim-noktasi-akn.pdf>

The ICTA’s intervention to the fair usage cap practice may be considered as an enforcement aiming to maintain or at least bring Turkish one step closer to NN, as it effectively meant discriminating between users with respect to the internet speed the user is allowed to enjoy. Technically, this limitation could qualify as “throttling” the connections of such users. The question of whether such application is in violation of the principle of NN has been discussed by the BEREC in the past. BEREC has found that such application was not in violation of the principle of net-neutrality, as differential treatment was not based on the type of data.¹⁶⁷ We concur with BEREC’s approach on the issue. When such approach is applied to the fair usage point, we observe that the discrimination between the users were based on the terms of the agreement between the user and the relevant ISP, rather than the type of data – meaning that the fair usage cap practice *per se* was not in violation of NN and the subscribers were transparently informed before purchasing their internet plans.

Since the ban of the fair usage practice, under the rough economic times where customer purchase power is low, ISPs aiming to keep their prices low, have found refuge in focusing on their broadband subscription plans with data caps and launching new plans, which offer different bandwidths during peak times and off-peak times.

5.3.3. Demand and Necessity – Looking Ahead

Regulatory authorities resort to their powers to make new regulations usually in two cases; where there is regulatory necessity or where there is public demand.

The necessity for regulating NN may not have arisen thanks to the ICTA’s demanding quality of service (“**QoS**”) reporting scheme in relation to the integrity of the electronic communications networks. In comparison, the EU telecommunications legislation sets forth a range of QoS requirements. Art. 13a(3) of the EU Directive 2002/21/EC (EU Framework Directive) states that “*Member States shall ensure that undertakings providing public communications networks or*

¹⁶⁷ “BEREC’s Response to the European Commission’s Consultation on the Open Internet and Net Neutrality in Europe.” Accessed September 15, 2019. https://berec.europa.eu/eng/document_register/subject_matter/berec/opinions/188-berecs-response-to-the-european-commissions-consultation-on-the-open-internet-and-net-neutrality-in-europe.

publicly available electronic communications services notify the competent national regulatory authority of a breach of security or loss of integrity that has had a significant impact on the operation of networks or services.” Furthermore, Art. 22 of the EU Directive 2002/22/EC (EU Universal Service Directive) states that member states shall ensure that national regulatory authorities require network operators publish information on the QoS of their services and submit the same with the national regulatory authorities. Art. 22(2) carries on by stating that national regulatory authorities may specify QoS parameters, while the EU Universal Service Directive provides a set of QoS parameters under its Annex 3, which may be used by the national regulatory authorities. In 2009, the EU passed the EU Directive 2009/136/EC, which amended Art. 22 of the EU Universal Service Directive, now also requiring member states to set minimum QoS requirements for network operators in order to prevent “*the degradation of service and the hindering or slowing down of traffic over networks*”, as well as blocking of access according to Recital (34) of the EU Directive 2009/136/EC, which also makes an emphasis on addressing discriminatory behavior.

The ICTA issued its “Regulation on Quality of Service in the Electronic Communications Sector” in 2010, which required operators submit to the ICTA, quarterly reports on their QoS measurements subject to the parameters specified in the Regulation and explain to the ICTA, the reasons for any variations between two figures belonging to subsequent quarters. The QoS parameters for ISPs and parameters for GSM (2G) and IMT-2000/UMTS (3G) services set out under the Regulation are mostly in parallel with the parameters listed under Annex 3 of the EU Directive 2002/22/EC. More importantly in 2012, the ICTA issued its “Communique on Quality of Service concerning Internet Service Providers”, which covers ISPs with more than 4% market share and expands the scope of each QoS parameter, by regulating how each parameter would be measured and by listing which scenarios are covered under each parameter and set forth a monthly reporting regime. According to the Communiqué, the data download and upload speed measurements are expected be at least 75% of the speeds promoted under the operators’ relevant subscription plans. The Communiqué also requires that measurements be reported under separate categories depending on the groups of transfer speeds marketed to subscribers.

The ICTA’s QoS reporting regime, although precedes the Regulation (EU) 2015/2120, allows the ICTA to monitor any significant or continuous difference between the actual performance of the

service and the performance indicated to the end-user, which is one of the issues addressed in the Regulation (EU) 2015/2120, under Art. 5(1) as well as Recital (18). Although not mentioned clearly under the ICTA's regulations, the QoS reporting regime is a significant tool to prevent, monitor and detect various traffic management practices, which might have been in violation of the principles of NN.

Considering the lack of regulatory necessity, as described above, the reason why Turkey never attempted to regulate net neutrality is quite simple – there has not been sufficient demand. No business-oriented ISP would ever ask for regulation of NN, but the Turkish public have not demonstrated any demand either. According to its Recital 3, the EU passed the Regulation (EU) 2012/2120 because “a significant number of end-users are affected by traffic management practices which block or slow down specific applications or services.” Although Turkey does not host a large number of ISPs, low broadband penetration rates in comparison to the OECD countries allow ISPs to manage traffic without resorting to measures such as blocking, slowing down, altering, restricting, interfering with, degrading or discriminating between specific content, applications or services. At least there is no proven case yet, except for the ICTA fine mentioned above.

Even if the Turkish ISPs' practices or the public have not triggered the need to regulate NN in Turkey, it is clear that demand and necessity, act as the driving forces for a regulatory authority to enact regulation in relation to responding to predominantly “contemporary” circumstances. However in terms of regulatory strategy, it should always be taken into consideration, the future, and especially the potential scenarios in which contemporary circumstances may promptly change and harm the values, which the regulation was meant to protect, even before there is time to adjust the regulation with respect to the recent developments.

While the decision to adopt a regulation may require reasons or triggers, which arguably may not be present in Turkey, the decision to not adopt a regulation, that is considered to be one of the foundations of the EU Digital Single Market policy, deserves equivalent reasons. The regulations governing the Turkish electronic communications market, especially the principles on transparency and non-discrimination may be sufficient for the Turkish ISPs to act in compliance with an unapparent expectation of NN, and the QoS reporting regime may be sufficient to monitor

and detect any unwelcomed practice. However, there would be a time in the near future, where the general principles and reporting regimes would prove to be inadequate to act as a backstop against violation of the core values, which the electronic communications regulations seek to protect, that is end-user rights. The case of Cambridge Analytica proved the world that, what initially looks to be a discriminatory practice for the purposes of generating advertisements, resulted in social engineering and allegedly affected the outcome of an election. No subsequent regulation would be able to change the outcome that was already materialized. Issues of open internet, much like privacy, are universal and critical, which justifies and requires the states to learn from each other's experiences. The need to regulate NN, which already actualized in the EU, will certainly reveal itself in Turkey, but not without potential harm to end-users or the market in general. For instance, the current Turkish legislation does prohibit discrimination between other ISPs or end-users but does not specifically prohibit discrimination among OTTs or websites. In the digital community, where service level expectations are high, consistently slowing down internet access to one OTT in favor of its competitor, may have great impacts in disrupting the competitive market. Any regulation that may follow would not be able to re-adjust consumer preferences and the previous competition. This may especially be more concerning in terms of information society services, where number of providers are relatively low and the end-user expectation on connection reliability is high, such as OTT map and navigation services.

It is considered that, even though there are no alarming circumstances in Turkey, or any harm proven to have actualized due the lack of NN regulation, there are certainly possible risks threatening the rights of end-users as well as openness and neutrality of the internet. Therefore, not regulating NN in Turkey may be considered as a decision of regulatory strategy, to bear any risks that may actualize by the virtue of the regulatory absence. In that sense, this would practically be similar to a car manufacturer not installing any seat belts, on grounds that the specific car model has not been involved in any incidents yet. We are of the opinion that Turkey should break its silence regarding NN and that a multi-stakeholder debate is initiated to determine Turkey's strategic position in terms of NN, and that hopefully Turkey decides to align with the EU's open internet regulations, on its path to EU harmonization and a digital single market, that one day would include Turkey.

6. Reflections of International Organizations

Based on their respective roles either in shaping policies or setting the ground rules for internet infrastructure, international organizations have various approaches to the NN. While some of them prefers taking a distant stance and avoid expressing any views due to having a more technical scope of work; some of them either actively participates in the NN debates or provide a platform at which relative stakeholders convene to tackle issues regarding NN.

6.1. ISOC

Until 2018, the Internet Society (ISOC) refrained from participating in the legal and political debates, particularly in the US. However, as of June 2018, ISOC brought various stakeholders together to create a baseline set of principles for an open internet in the US, which they called “The Net Neutrality Experts’ Roundtable”.¹⁶⁸ These roundtable series included representatives and experts from various fields such as the technical community, providers, academia, industry, and both left and right leaning civil society groups. The purpose of these gatherings was to create a sustainable solution for net neutrality that “protect the interests of Internet users while fostering an environment that encourages investment and innovation”, which they presented as the “Net Neutrality Principles”.¹⁶⁹ These principles provide a basis for “Net Neutrality Legislation: A Framework for Consensus”.¹⁷⁰ These principles include:

- Governments’ role in protecting the open internet and making it accessible for users,
- Calls for a legislative framework for NN in the US that clearly protects the interests of internet users,
- The internet should follow Powell’s Principles¹⁷¹ which fosters freedoms such accessing and conveying content, attaching personal devices, etc.,
- Purpose of any regulations should be to promote user choice over their broadband internet access service,

¹⁶⁸ “Net Neutrality Experts’ Roundtable Series”. 2018. Internet Society <https://www.internetsociety.org/tag/net-neutrality/>

¹⁶⁹ *ibid.*

¹⁷⁰ These principles do not represent the ISOC’s view, they only represent the consensus reached among the US NN experts during the The Net Neutrality Experts’ Roundtable.

¹⁷¹ Powell, Michael K. “Preserving Internet Freedom: Guiding principles for the industry” 2004. 3 (n.d.): 18.

- Providers should still be able to protect the needs of public safety, national security interests, law enforcement, and copyright infringement, and
- Any regulation should preserve the FCC’s authority to address topics such as universal service, public safety, and accessibility.

These principles further suggest that one agency should be responsible for making sure these principles are upheld, therefore, this agency should have qualifications such as the adequate capacity, technical expertise, support from multistakeholders, and that anyone can bring a complaint or a recommendation to the agency. This agency should not have rulemaking authority, but it should enforce the rules on a case-by-case basis. However, the agency should have the authority to declare an act or practice unlawful showing evidence that the consumer’s welfare is not protected, and the act or practice either causes injury to consumers and it is not avoidable by consumers.

Most recently, on May 29, 2019 the Net Neutrality Experts’ Roundtable Series published its Process Report, which states that the internet needs a stable environment to thrive and the political ping-pong is damaging both companies and consumers.¹⁷² The report stresses the need for sustainable solutions that enhance core values of global and open internet. For this purpose, the NN Principles aim to form the basis for a comprehensive and sustainable legislation in the US.¹⁷³

Prior to this Report, the ISOC laid out some guiding principles on its “Network Neutrality: An Internet Society Public Policy Briefing” dated 2015. The briefing emphasizes the importance of enabling access, choice, and transparency in empowering users to benefit from access to services, applications, and online content.¹⁷⁴

¹⁷² “Net Neutrality Experts’ Roundtable Series Process Report”. 2019. Internet Society. https://www.internetsociety.org/wp-content/uploads/2019/05/Net-Neutrality-Experts-Round-Tables_Process-Report.pdf

¹⁷³ These principles show that stakeholders agree with the purpose of the possible NN legislation, which is to “ensur[e] that Internet users are able to access the content they want, when they want” and that “there should be a legislative framework for net neutrality that clearly and explicitly protects the interests of Internet users while fostering an environment that encourages investment in innovation.” “Net Neutrality Experts’ Roundtable Series Process Report”. 2019. Internet Society. https://www.internetsociety.org/wp-content/uploads/2019/05/Net-Neutrality-Experts-Round-Tables_Process-Report.pdf

¹⁷⁴ “Network Neutrality: An Internet Society Public Policy Briefing”. 2015. Internet Society. <https://www.internetsociety.org/wp-content/uploads/2017/06/ISOC-PolicyBrief-NetworkNeutrality-20151030-nb.pdf>

6.2. ICANN

The Internet Corporation for Assigned Names and Numbers (ICANN), the domain name system technical body that is also described as the “telephone book of internet” stays more on the technical side of the internet infrastructure.¹⁷⁵ Therefore, the political and regulatory wavings have no impact on ICANN’s work as the CEO of ICANN explained.¹⁷⁶ Consequently, ICANN has neither showed any support on NN debates, nor published any opinion about how the NN policy should be shaped.

6.3. IGF

The Internet Governance Forum (IGF) is a multistakeholder platform, where people from various backgrounds meet annually to discuss public policy issues relating to the internet.¹⁷⁷ Within the scope of these policy debates, various stakeholders formed a working group called “Dynamic Coalition on Network Neutrality”, which aims to contribute to the elaboration of best practices, policies, and regulations on NN. The Dynamic Coalition on NN has been gathering annually at the IGF and this year it will be held on the 26th of November, in Berlin. The Coalition believes that NN plays a crucial role in making sure the internet is open, enhance human rights, promotes competition and equal opportunity, while spreading the benefits of the internet to everyone.¹⁷⁸

6.4. ITU

International Telecommunication Union (ITU) was founded in 1865 as the United Nations specialized agency for information and communication technologies (ICTs) to facilitate international connectivity in communications networks.¹⁷⁹ As to NN, ITU has formed a group of experts to look at the issue of net neutrality.¹⁸⁰ ITU stated that the debate around these issues are

¹⁷⁵ “US Decision On Net Neutrality Will Not Impact ICANN’s Work, ICANN CEO Says.” *Intellectual Property Watch* (blog), December 19, 2017. <https://www.ip-watch.org/2017/12/19/us-decision-net-neutrality-will-not-impact-icanns-work-icann-ceo-says/>.

¹⁷⁶ “US Decision On Net Neutrality Will Not Impact ICANN’s Work, ICANN CEO Says.” *Intellectual Property Watch* (blog), December 19, 2017.

¹⁷⁷ For more information about the IGF is available at <https://intgovforum.org/multilingual/tags/about>.

¹⁷⁸ Network Neutrality Coalition. Accessed September 11, 2019. <http://networkneutrality.info/home.html>.

¹⁷⁹ More information about ITU is available at <https://www.itu.int/en/about/Pages/default.aspx>

¹⁸⁰ “Understanding Net Neutrality.” ITU News, August 12, 2015. <https://news.itu.int/understanding-net-neutrality/>.

not just about the right to access and impart information, they also include how telecommunication markets work as well.¹⁸¹ Therefore, ITU stated that this requires understanding the technical issues, its impacts on different stakeholders and possible outcomes of regulation.¹⁸²

ITU also asserted that due to the limited capacity of telecommunication networks and ever growing demand for data/bandwidth, traffic management is employed to “ensure that a basic quality of service is always available, meaning pure net neutrality is rare.”¹⁸³ However, due to various concerns about the transparency of the ITU’s decision-making process, experts such as the communications manager at Public Knowledge (PK) believe that the agency should stay out of major policy debates and be more concerned about internet access and deployment issues.¹⁸⁴

7. The Impact of NN and Network Bias Have on Internet Actors

NN has considerable impact on different stakeholders, its effects on the Internet actors are beyond question; its absence results in *Network Bias* and touches everyone’s lives at different levels. The NN aims to preserve the internet’s open architecture, maintaining the user’s power of choice therefore enhancing their rights, fostering innovation by application providers, free competition, as well as protect fundamental rights including freedom of expression. Proponents of NN contend that promoting open access will also promote innovation and competition, and ensure the protection of fundamental rights such as freedom of expression and right to information. This chapter first provides a brief overview of end-users’ rights focusing on the EU Open Internet Regulation and BEREC Guidelines and further explains network biases’ effects on human rights. Lastly, it provides a concise summary of NN’s role in competition, touching on the economic aspect underscoring the importance of NN to promote business, innovation, and competition.

¹⁸¹ Available at www.itu.int/ITU-D/treg/bestpractices.html

¹⁸² *ibid.*

¹⁸³ “Understanding Net Neutrality.” ITU News, August 12, 2015. <https://news.itu.int/understanding-net-neutrality/>.

¹⁸⁴ “Digital Rights Groups Ask ITU to Stay out of Net Neutrality Debate.” PCWorld, October 21, 2014. <https://www.pcworld.com/article/2836892/digital-rights-groups-ask-itu-to-stay-out-of-net-neutrality-debate.html>.

7.1. Perspective of End-Users

The internet is regarded as an “agnostic platform” especially regarding the online content available and the purposes such content can be used for, therefore, allowing end-users to decide freely how to make use of their applications.¹⁸⁵ The EU Open Internet Regulation gives end-users “directly applicable right to access and distribute the lawful content and services of their choice via their Internet access service”.¹⁸⁶ Article 3(1) of the EU Open Internet Regulation confers the following rights to end-users¹⁸⁷: “*End-users shall have the right to access and distribute information and content, use and provide applications and services and use terminal equipment of their choice, irrespective of the end-user’s or provider’s location or the location, origin or destination of the information, content, application or service, via their internet access service.*”¹⁸⁸ Firstly, under Article 3(1) of the Regulation, the end-users are given the right to access and distribute information and content. For the purposes of the Regulation and BEREC Guidelines, this right, namely, having the right to “access and distribute” connote and indicate that the laws and rules set out in this Regulation are applicable to “sending” and “receiving” data over the IAS. In addition, BEREC Guidelines further confirm that “information and content” is intended to cover any type and form of data which can be sent or received over the IAS.¹⁸⁹ Article 3(2) sheds light on the agreements/contracts between ISPs and end-users on commercial and technical terms and the characteristics of IAS such as price, data volumes, or speed. In addition to any such practice that may be deemed as “commercial” carried out by ISPs are permitted. However, such commercial practices are prescribed as not limit the exercise of the rights of end-users laid down in Article 3(1).

¹⁸⁵ Belli, Luca. 2016. "End-To-End, Net Neutrality And Human Rights". *Thehinducentre.Com*. https://www.thehinducentre.com/multimedia/archive/02801/9783319264240-c1_2801992a.pdf.

¹⁸⁶ 'Open Internet - Digital Single Market - European Commission' (Digital Single Market - European Commission) <<https://ec.europa.eu/digital-single-market/en/open-internet-net-neutrality>> accessed 1 September 2019.

¹⁸⁷ According to the Framework Directive,⁴ “end-user” means a user not providing public communications networks or publicly available electronic communications services. In turn, “user” means a legal entity or natural person using or requesting a publicly available electronic communications service. On that basis, BEREC understands “end-user” to encompass individuals and businesses, including consumers as well as CAPs. in BEREC Guidelines pg4 BoR (16)94.

¹⁸⁸ Regulation (EU) 2015/2120, Article 3(1).

¹⁸⁹ BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, pg.8 BoR (16) 94 Draft

Although Article 3(1) recognizes the right to access and distribute information and content and to use and provide applications and services of their choice, in theory, for end-users to be able to exercise their rights additional details are provided in Recital 7 that further states “..*End-users should be free to agree with providers of internet access services on tariffs for specific data volumes and speeds of the internet access service. Such agreements, as well as any commercial practices of providers of Internet access services, should not limit the exercise of those rights and thus circumvent provisions of this Regulation safeguarding open internet access.*” As it can be seen Recital 7 emphasizes the importance of end users’ freedom to agree on the tariffs available to them.

Regarding the second component of Article 3(1), namely, with regard to the right to use and provide applications and services and ensuring that end-users enjoy this right without discrimination and further obstacles, the practical implications of this right is important to understand. BEREC Guidelines explain as follows: “use and provide” means that the right applies both to consumption and provision of applications and services. “Applications and services” mean both applications (including client and server software) as well as services. Therefore, as clarified by BEREC Guidelines, end-users encompass individuals and businesses, including consumers as well as CAPs (content and application providers).¹⁹⁰

Finally, the third component of end-users’ rights that are granted by the Regulation set out under Article 3(1), gives users the right to use terminal equipment of their choice. Looking at the terminology used Directive 2008/63/EC defines “terminal equipment” as “equipment directly or indirectly connected to the interface of a public telecommunication network”.¹⁹¹ In considering whether end-users may use the terminal equipment of their choice, the Guidelines further provide that “NRAs should assess whether an ISP provides equipment for its subscribers and restricts the end-users’ ability to replace that equipment with their own equipment”.¹⁹²

¹⁹⁰ BEREC Guidelines - CAPs make content (e.g. web pages, blogs, video) and/or applications (e.g. search engines, VoIP applications) and/or services available on the Internet. CAPs may also make content, services and applications available via specialized services.

¹⁹¹ More specifically, “the right to choose terminal equipment therefore covers equipment which connects to the interface of the public telecommunications network. This interface, the network termination point (NTP), is defined in Article 2 letter (da) of the Framework Directive (2002/21/EC), meaning the physical point at which a subscriber is provided with access to a public communications network.” See page of BEREC Guidelines 16, 94.

¹⁹² *ibid.*

The practice of restricting tethering, which allows an end-user to share the internet connection of a phone or tablet with other devices such as laptops, can be a good example for this, such practice is most probably would be regarded as a restriction on choice of terminal equipment since under Recital 5, ISPs “*should not impose restrictions on the use of terminal equipment connecting to the network in addition to those imposed by manufacturers or distributors of terminal equipment in accordance with Union law.*”¹⁹³ Having open access to the internet, being able to access internet services freely allow end-users to access, communicate, find, deliver, and share content, information and internet applications. Generally, end-users are likely to expect internet traffic that they send and receive to be conveyed in a manner that is independent of its source, content, or destination and in a manner, which respects their privacy as well as their other rights.

The ever-growing success of the internet, the rapidly changing and developing technologies and the internet's role as a communications medium and an open free engine for “innovation and growth depends upon the continued enablement of new services and applications and end-user Internet traffic not being blocked or otherwise degraded by internet service providers or other actors in the internet ecosystem.” Making free and informed choices and respect for the principle of transparency have great impact on end user’s internet experience. This is because through these, end-users are allowed to be in control of their own internet experience, and in that way they are allowed to benefit from, and participate in, the open internet. Internet subscribers may choose to block, prioritize, or otherwise change internet traffic they send or receive but do not expect to have these choices made for them by third parties without their consent.¹⁹⁴

7.2. Human Rights Perspective

The debates and issues around NN and open internet access¹⁹⁵ have a human rights aspect as well, put differently, undermining the principle of NN and having network bias have tangible impact on

¹⁹³ This example is taken from the BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, BoR (16) 94 Draft, 2016. pg.8.

¹⁹⁴ *ibid.*

¹⁹⁵ "Access To Internet And Freedom To Receive And Impart Information And Ideas". 2019. *Echr.Coe.Int.* https://www.echr.coe.int/Documents/FS_Access_Internet_ENG.pdf.

internet users' enjoyment of human rights. Freedom of opinion, freedom of expression and the right to information are fundamental human rights and are widely recognized as forming the cornerstones of democracy.¹⁹⁶ These rights and freedoms are some of the bedrock constituents of Universal Declaration of Human Rights (“UDHR”)¹⁹⁷, firstly, Article 19 of the UDHR states as follows: “*Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers*”.¹⁹⁸

Also, Article 11 of the Charter of Fundamental Rights of the European Union¹⁹⁹ recognizes freedom of expression and information as one of the essential fundamental rights by stating that “(1) *Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers. (2) The freedom and pluralism of the media shall be respected.*” In addition, the freedom to receive and impart information is guaranteed by Article 10 of the Convention for the Protection of Human Rights and Fundamental Freedoms of the Council of Europe.²⁰⁰ Article 10 of the European Convention on Human Rights²⁰¹ provides as follows: “(1) *Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and*

¹⁹⁶ See “Freedom of Expression | International Cooperation and Development”, n.d., accessed September 14, 2019, https://ec.europa.eu/europeaid/freedom-expression_en. “Freedom of Expression: A Fundamental Human Right Underpinning All ...”, n.d., accessed September 14, 2019, https://en.unesco.org/70years/freedom_of_expression. “Freedom of expression is the cornerstone of democracy. UNESCO is mandated to protect and promote freedom of expression, both online and offline. Its Constitution calls on Member States to advance mutual knowledge and understanding between peoples through the “free flow of ideas by word and image.”; See also “Freedom of Expression in Europe”, n.d., accessed September 14, 2019, [https://www.echr.coe.int/LibraryDocs/DG2/HRFILES/DG2-EN-HRFILES-18\(2007\).pdf](https://www.echr.coe.int/LibraryDocs/DG2/HRFILES/DG2-EN-HRFILES-18(2007).pdf).

¹⁹⁷ 'Universal Declaration Of Human Rights' (Un.org, 1948) <<https://www.un.org/en/universal-declaration-human-rights/>> accessed 1 September 2019.

¹⁹⁸ *ibid.*

¹⁹⁹ 'Charter Of Fundamental Rights Of The European Union' (Europarl.europa.eu, 2000) <http://www.europarl.europa.eu/charter/pdf/text_en.pdf> accessed 1 September 2019.

²⁰⁰ IRIS plus 2011-5, Why Discuss Network Neutrality? (Susanne Nikoltchev (Ed.), European Audiovisual Observatory, Strasbourg 2011) available at <https://rm.coe.int/1680783bca>; 'Convention For The Protection Of Human Rights And Fundamental Freedoms As Amended By Protocols No. 11 And No. 14' (*Rm.coe.int*, 1950) <<https://rm.coe.int/1680063765>> accessed 1 September 2019.

²⁰¹ *ibid.*

regardless of frontiers. This Article shall not prevent States from requiring the licensing of broadcasting, television or cinema enterprises.”²⁰²

In 2014, the Council of the European Union adopted “the EU Human Rights Guidelines on Freedom of Expression Online and Offline”²⁰³ that gives further information on how the basic principles should be applied and implemented in a democratic society.²⁰⁴ Although freedom of expression is a globally recognized fundamental right, it is noteworthy to mention that the mere recognition of fundamental rights in theory does not necessarily mean that individuals are allowed to enjoy their rights in their daily lives. The intersection between the NN and the freedom of expression is a great example where one can observe despite this fundamental right’s recognition citizens may be deprived of their enjoyment of their rights and freedoms. A United Nations report states that disconnecting people from the internet constitutes a human rights violation and in fact should be considered being against international law.²⁰⁵

Right to information is strongly interconnected with the freedom of expression and right to access internet since in the absence of any of these in online environments, the other rights will directly be affected.²⁰⁶ Belli contends that, “the very design of the original Internet architecture was not

²⁰² https://www.echr.coe.int/Documents/Convention_ENG.pdf “Article 10 (2) *The exercise of these freedoms, since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society, in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation or rights of others, for preventing the disclosure of information received in confidence, or for maintaining the authority and impartiality of the judiciary.*”

²⁰³ 'EU Human Rights Guidelines On Freedom Of Expression Online And Offline' (Eeas.europa.eu, 2014) <https://eeas.europa.eu/sites/eeas/files/eu_human_rights_guidelines_on_freedom_of_expression_online_and_offline_en.pdf> accessed 6 September 2019.

²⁰⁴ 'Freedom Of Expression - International Cooperation And Development - European Commission' (International Cooperation and Development - European Commission) <https://ec.europa.eu/europeaid/freedom-expression_en> accessed 1 September 2019.

²⁰⁵ See "Report Of The Special Rapporteur On The Promotion And Protection Of The Right To Freedom Of Opinion And Expression, Frank La Rue". 2011. Www2.Ohchr.Org. https://www2.ohchr.org/english/bodies/hrcouncil/docs/17session/A.HRC.17.27_en.pdf.

²⁰⁶ See Belli, Luca. 2016. "End-To-End, Net Neutrality And Human Rights". Thehinducentre.Com. https://www.thehinducentre.com/multimedia/archive/02801/9783319264240-c1_2801992a.pdf. United Nations (UN) Special Rapporteur on Freedom of Opinion and Expression, the Organization for Security and Co-operation in Europe (OSCE) Representative on Freedom of the Media, the Organization of American States (OAS) Special Rapporteur on Freedom of Expression and the L. Belli 29 African Commission on Human and Peoples’ Rights (ACHPR) Special Rapporteur on Freedom of Expression and Access to Information. (2011). Joint Declaration on Freedom of Expression and the Internet; Can, Ugur. 2019. "Is Internet Access A Human Right?". Amnesty International USA. Accessed September 1. <https://www.amnestyusa.org/is-internet-access-a-human-right/>. While blocking and filtering measures deny users access to specific content on the Internet, states have also taken measures to cut off access to the Internet

only instrumental to allow thousands of heterogeneous networks to interoperate, but also played a key role allowing end-users to fully enjoy freedom of expression and innovation”.²⁰⁷ Regarding the right to freedom of expression, for internet users, to be able to enjoy their right to freedom of expression, first of all, they need to be able to communicate with others, so that they can express themselves. In today’s world, most of our daily communication and interaction with others are “made possible through a wide array of communications outlets including the Internet”.²⁰⁸ The preservation of free speech rights on the Internet has been cited as a reason for mandating net neutrality.²⁰⁹

Open internet access and NN are crucial for such protection, in the absence of open and non-discriminatory internet access, practices that undermine the core principles explained in Chapter IV would create great risks, resulting in an unbalanced, weak, and unsustainable *model* for the future. This *model* would certainly jeopardize users’ rights and freedoms. Predominantly, discussions surrounding NN focus on the effects that ITM practices realized by network operators can have crucial effects and negative impacts on users’ rights and, mainly, on their ability to, without difficulty, look for, find, receive and impart information or ideas of other Internet users. Certain ITM techniques are indeed targeted at discriminating against specific content, applications, and services. Thus, such techniques can possibly, and most likely, to significantly restrict, put obstacles to the end users’ internet experience and affect their rights and freedoms negatively.²¹⁰

Although mainly the discussions about the principle of NN and fundamental rights are taken into consideration with a strong emphasis on the right to freedom of expression, other rights including the right to privacy and right to data protection be enhanced through allowing users to benefit from a neutral network, ensuring a safe, open, transparent internet ecosystem where the principles

entirely. The Special Rapporteur considers cutting off users from internet access, regardless of the justification provided, including on the grounds of violating intellectual property rights law, to be disproportionate and thus a violation of article 19, paragraph 3, of the International Covenant on Civil and Political Rights.

²⁰⁷ Belli, Luca. “End-to-End, Net Neutrality and Human Rights.” In *Net Neutrality Compendium*, edited by Luca Belli and Primavera De Filippi, 13–29. Cham: Springer International Publishing, 2016. https://doi.org/10.1007/978-3-319-26425-7_2.

²⁰⁸ *ibid.*

²⁰⁹ See http://voices.washingtonpost.com/shortstack/2009/10/protecting_free_speech_in_the.html in November 2009 “EU study on the New rules for a new age? Legal analysis of a Single Market for the Information Society” DLA Piper pg. 4

²¹⁰ Belli, Luca. 2016. "End-To-End, Net Neutrality And Human Rights". *Thehinducentre.Com*. https://www.thehinducentre.com/multimedia/archive/02801/9783319264240-c1_2801992a.pdf.

presented in Chapter IV are made a priority. Accordingly, the Regulation 2015/2120 clearly states that it “respects the fundamental rights and observes the principles recognized in particular by the Charter, notably the protection of personal data, the freedom of expression and information, the freedom to conduct a business, non-discrimination and consumer protection.”²¹¹

Information and communication technologies and internet use are undeniably ubiquitous in people’s daily lives and indeed became an important part of their lives offering many opportunities for the fulfilment of human rights and for social and economic development. It is therefore of utmost importance that network bias, non-discriminatory access to internet and accordingly to information and freedom of expression as well as other relevant human rights for all individuals online must be guaranteed and safeguarded.²¹² It is noteworthy to remember that freedom of expression is a fundamental human right and its recognition nor its legitimacy is not even open to debate. However, on the other hand, NN, not being an absolute principle, its limitations should be foretold and anticipated. Nevertheless, considering NN’s instrumental and influential role in order to protect Internet users’ rights, it is crucial to mention that exceptions to this principle where limitations are brought should merely be permitted “when necessary and proportionate to the achievement of a legitimate aim”²¹³.

²¹¹ (Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users’ rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union (Text with EEA relevance)) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=urisrv:OJ.L_.2015.310.01.0001.01.ENG&toc=OJ:L:2015:310:TOC see also “Amendment to Directive 2002/22/EC In Article 1 of Directive 2002/22/EC, paragraph 3 is replaced by the following: ‘3. National measures regarding end-users’ access to, or use of, services and applications through electronic communications networks shall respect the fundamental rights and freedoms of natural persons, including in relation to privacy and due process, as defined in Article 6 of the European Convention for the Protection of Human Rights and Fundamental Freedoms.’”

²¹² "EU Human Rights Guidelines On Freedom Of Expression Online And Offline". 2014. Eeas.Europa.Eu. https://eeas.europa.eu/sites/eeas/files/eu_human_rights_guidelines_on_freedom_of_expression_online_and_offline_en.pdf. (Promoting and respecting human rights in cyberspace and other information and communication technologies: “The EU will: a) Advocate for the application of all human rights, including the right to freedom of opinion and expression, both offline and online. b) Support the efforts of third countries to increase and improve their citizens’ access to and safe use of the Internet and digital communications. c) Promote unhindered, uncensored and non-discriminatory access to ICTs and online services for all, in accordance with international law. d) Work against any attempts to block, jam, filter, censor or close down communication networks or any kind of other interference that is in violation of international law. e) Provide technical support to individuals on the ground to help counter such attempts, when necessary. f) Continue work towards maintaining and strengthening the multi-stakeholder model for the governance of the Internet.”

²¹³ Belli, Luca. 2016. "End-To-End, Net Neutrality And Human Rights". Thehinducentre.Com. https://www.thehinducentre.com/multimedia/archive/02801/9783319264240-c1_2801992a.pdf. "Net Neutrality

In fact, these more recent activities build on earlier Council of Europe instruments such as the Committee of Ministers Recommendation on the public service value of the Internet.²¹⁴ This value should be understood as people's significant reliance on the Internet as an essential tool for their everyday activities (communication, information, knowledge, commercial transactions) and the resulting legitimate expectation that Internet services be accessible and affordable, secure, reliable and on-going.

Without a doubt, in the internet ecosystem, the right and freedom to seek, receive and communicate information and ideas is directly reflected on users' ability to freely and openly access and share content, applications and services, using the device of their choice, without being unjustifiably affected by discriminatory delivery of Internet traffic.²¹⁵

7.3. Business and Economic Perspective

One of the main issues discussed on NN is its impact on businesses, economies as well as competition due to the rapidly changing and developing business world, particularly with the shift in business models, technological trends and the evolving role of new content and application providers in the market. More complication appears when the long term and fundamental freedom and their link with unrestricted access to "the internet" are brought under the spotlight. Internet openness is essentially beneficial for consumers since internet openness likely to enhance levels of competition and innovation.²¹⁶ Openness and accessibility are in the internet's intrinsic nature, and therefore not adhering to these principles may mean weakening the internet itself. Practices and approaches that carry the risk to curb the open internet access as well as other features such as

Matters For Human Rights Across The Globe - Access Now". 2017. Access Now. <https://www.accessnow.org/net-neutrality-matters-human-rights-across-globe/>.

²¹⁴ Recommendation CM/Rec(2007)16 of the Committee of Ministers to member states on measures to promote the public service value of the Internet (Adopted by the Committee of Ministers on 7 November 2007 at the 1010th meeting of the Ministers' Deputies) cited in <https://rm.coe.int/1680783bca>

²¹⁵ Belli, Luca. 2016. "End-To-End, Net Neutrality And Human Rights". Thehinducentre.Com. https://www.thehinducentre.com/multimedia/archive/02801/9783319264240-c1_2801992a.pdf.

²¹⁶ Faulhaber, Gerald R, Gary Madden, and Jeffrey Petchey. 2012. Regulation And The Performance Of Communication And Information Networks. Cheltenham: E. Elgar.

the free flow of information in order to retain and tighten control bear the risk of facing the dramatic consequences from different aspects as discussed above.

Adopting an inclusive, or in other words, a non-discriminatory approach is vital in the Internet ecosystem to foster the free market dynamics. The NN principle embraces the inclusive nature of the internet and allows users of Internet to freely access services and share content and enjoy their rights to freely choose the content that they are going to share with other Internet users themselves in addition to applications and online services of their choice, when legally entitled to access or share such content. Accordingly, when such an approach is taken toward the Internet usage and the enjoyment of end-users' rights are ensured and respected in the Internet governance ecosystem, the economies that live on today's internet ecosystem and rapidly ameliorating technologies would prosper as well. In view of that, the market participants should avoid acting in an anti-competitive manner carrying the risk to affect consumers or competition negatively. To safeguard NN it is essential to preserve effective competition among providers of access services to the internet as well as in all other elements of the internet ecosystem to ensure transparency to end users by providing clear and meaningful information that facilitates informed consumer choices when matching offers with their heterogeneous demands. As discussed in the previous chapters, the impact of zero-rating programs on the internet actors should also be scrutinized on a case-by-case basis, keeping the potential benefits and advantages of zero-rating offerings in mind.

Proponents of NN are concerned broadband providers may use their infrastructure to block Internet websites, services, or protocols and eliminate competition, forcing consumers to use their services; whilst opponents often say service providers have no plans to block content or degrade network performance, even though there have been cases of this type of anti-competitive activity. Moreover, opponents contend that some data discrimination is necessary to guarantee quality of service.²¹⁷ Those who support and believe in NN contend that Network Bias will result in major internet companies (many of which already hold substantial monopolies over customers' internet access) to squeeze smaller competitors out of the market and reduce consumer choice. To be able to benefit from the advantages Internet ecosystem brings for economic growth, business world, and innovation, it is crucial to adopt an approach that supports maintaining a broadly available,

²¹⁷ "Network Neutrality". 2014. Media Policy Planner. <https://blogs.lse.ac.uk/media-policy-planner/2014/02/27/network-neutrality/>.

fast, and robust Internet as a platform for economic growth, innovation, competition, and broadband investment and deployment.²¹⁸

NN and respecting the Internet's openness and promoting accessibility are believed to enhance and encourage innovation and competition. This is because an open internet guarantees that giant companies do not get an additional advantage over smaller companies, for example, small start-ups that are just founded; “it is a level playing field on the internet, where everything is delivered as fast as possible to the end user.”²¹⁹ For Turkey, enhancing internet’s open nature and promoting it with the laws and regulations can help smaller, local Turkish content providers reach their intended audience without fear of being blocked or discriminated against. Thus, it could be concluded that such an approach would be beneficial for the economy and the content providers’ ecosystem. However, on the other hand, it is argued that NN can have negative effects on investment and innovation believing that NN can result in less network innovation. To give an example, the rise of bandwidth-heavy web services like video streaming and content downloads would mean that ISPs have less budget to use in order to upgrade their networks, if they can charge large companies such as Google for carrying their resource-intensive services, they could use the money they get from such companies to invest in their upgrading their networks and extending them beyond. However, ironically, looking at the statistics, there is available information which muddles this aspect of the discussion, the FCC's own industry-funded research showed that while investment fell 2% in 2015 and 3% in 2016 under net neutrality, the largest ISP increased spending, as well as others.

On the one hand, proponents of the NN principle argue that operators could prefer to utilize discriminatory ITM measures to block or downgrade the content, applications, and services that compete with their own offerings, or with the offerings of their commercial partners, and therefore this would get in the way of free competition and undermine the competition in the ecosystem.²²⁰ With regard to competition, FCC’s set of policy principles adopted in 2013 can be given as an

²¹⁸ Wheeler, Tom. “Finding the Best Path Forward to Protect the Open Internet.” Federal Communications Commission, April 29, 2014. <https://www.fcc.gov/news-events/blog/2014/04/29/finding-best-path-forward-protect-open-internet>.

²¹⁹ “The Pros and Cons of Net Neutrality | IT PRO”, n.d., accessed September 14, 2019, <https://www.itpro.co.uk/strategy/28115/the-pros-and-cons-of-net-neutrality>.

²²⁰ Lemley, Mark, & Lessig, Lawrence. “The end of end-to-end: preserving the architecture of the Internet in the broadband era.” *UCLA Law Review*, 48 , 925, 2001, available at: <http://ssrn.com/abstract=247737>

example, stating that “to encourage broadband deployment and preserve and promote the open and interconnected nature of the public Internet, consumers are entitled to competition among network providers, application and service providers, and content providers (getting competition among network providers, applications and service and content providers).”²²¹

Besides, according to the opponents, there is no current problem, competition is sufficient to ensure and therefore, commercially negotiated arrangements will not negatively affect consumers, and net neutrality regulation will discourage investment in network infrastructure.²²² Stressing the fundamental role competition plays, the EU framework, and revised rules put forward the tools to make this competition effective, addressing market failures and empowering the customer (representing the demand side of this two-sided market). Furthermore, accordingly, the need for NRA’s promotion and support “the ability of end users to access and distribute information or run applications and services of their choice” is overtly underscored.²²³ Also, the Digital Agenda proposes to better exploit the potential of ICTs in order to foster innovation, economic growth and progress and therefore openly addressing the importance of the economic aspect by explicitly referring to it in the Digital Agenda.²²⁴

Different countries have different perspectives and it is noteworthy to state that a “one size fits all” approach would not best benefit every country in the same way since each can have distinct dynamics; however, it is also a fact that the Internet is a global concept and regulating internet access should respect Internet’s nature and thus promote access and openness, while encouraging network operators and Internet players to innovate and deliver the ample range of services demanded by customers, ensure an adequate user experience that meets the expectations and promote the goal of universal internet connectivity.

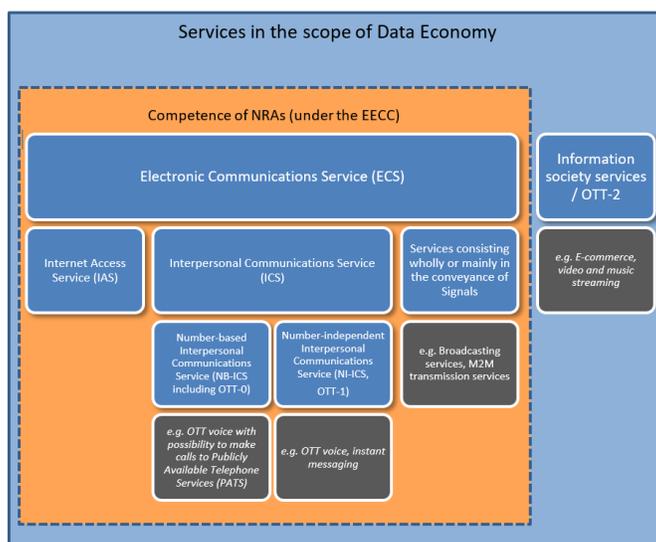
²²¹ Jasserand, Catherine, (2013). Critical Views on the French Approach to “Net Neutrality” cited in Yilmaz, Ramazan, Network Neutrality, Technology and Regulatory Approaches, Boston University PhD Thesis, available at: <https://www.btk.gov.tr/uploads/thesis/network-net-neutrality-technology-and-regulatory-approaches-5d663bc06f66d.pdf>

²²² See Yilmaz, Ramazan. “Network Neutrality, Technology and Regulatory Approaches”, Boston University PhD Thesis, available at: <https://www.btk.gov.tr/uploads/thesis/network-net-neutrality-technology-and-regulatory-approaches-5d663bc06f66d.pdf>

²²³ “Net Neutrality Expert Working Group”, n.d., accessed September 12, 2019, https://berec.europa.eu/eng/about_berec/working_groups/net_neutrality_expert_working_group/.

²²⁴ Europe 2020 Strategy "Shaping The Digital Single Market - Digital Single Market - European Commission". 2019. Digital Single Market - European Commission. Accessed September 2. <https://ec.europa.eu/digital-single-market/en/policies/shaping-digital-single-market?cookies=disabled>.

From a commercial aspect, having the opportunity to offer commercially differentiated options, including specialized services (as explained in Chapter 4) while providing strong protections maintaining and enhancing open, free, and robust Internet access services can play an important role benefiting the business world in general. This is because provision of these would help to develop the novel new business models that may not have been foreseen or anticipated beforehand along the digital value chain have to be preserved as a mean to increase customer choice. Allowing customers different choices may promote competition while offering customers different options.



Source: BEREC Report on the Data Economy BoR (19) 106 pg. 6²²⁵

In general, as Hogendorn points out open access requires openness of channels such as TV cable and DSL to intermediaries, whereas the NN principle requires openness to advanced content such as streaming videos.²²⁶ BEREC report on differentiation practices and related competition issues in the scope of net neutrality report examines which differentiation practices may or may not in principle harm the user's interest and have a negative impact on competition and innovation, both in electronic communications markets ('networks') and in content, application and services markets ('content'). "Reasonable Internet traffic management is justified provided it is done in a transparent, non-discriminatory and proportionate manner."²²⁷

²²⁵ BEREC Report on the Data Economy BoR (19) 106 pg. 6, dated June 13, 2019, accessed September 12, 2019, https://berec.europa.eu/eng/document_register/subject_matter/berec/reports/8599-berec-report-on-the-data-economy

²²⁶ Hogendorn, Christiaan. 2007. "Broadband Internet: Net Neutrality Versus Open Access." Chogendorn.Web.Wesleyan.Edu. <http://chogendorn.web.wesleyan.edu/oa.pdf>.

²²⁷ ("Net Neutrality Statement" 2019) available at <https://www.eurodig.org/index.php?id=494>

In the Regulation (EU) 2015/2120 it is explicitly stated that the rules and laws set out aim “to protect end-users and simultaneously to guarantee the continued functioning of the internet ecosystem as an engine of innovation”.²²⁸ These are some of the examples where it can be seen that open internet access and relevant rules relating to the principle of NN are associated with innovation and competition and are explicitly recognized in the legal framework set out.

Overall, it could be concluded that in line with the above discussed perspectives, namely, end-users’ rights and human rights perspectives, open internet access and respecting the principle of NN allows users to enjoy their fundamental rights to access and distribute information, but also enables “businesses to reach consumers and thus access was vital for competition and innovation.”²²⁹ Therefore, when creating a framework with regard to NN, it is crucial that the role it plays in competition and innovation, affecting the business world and the overall economy should be taken into account.

8. Conclusion

The NN is the basic principle that all online traffic should be treated equally.²³⁰ Today, the question of how NN should be regulated is still one of the most complex internet governance related topics both in the EU and the US as well as other countries all around the world. This question is inevitable since the internet has become a part of people’s lives and is linked to a wide range of multiple aspects that touch governments and citizens including but are not limited to fundamental rights and competition. The reason for the complexity regarding the regulation of NN and that its being one of the most debated topics in internet governance ecosystem stem from the fact that the stakes are especially high for the ideal of networked deliberative democracy, where ISPs seize every opportunity to exercise its power both on content and networks.²³¹ Furthermore, it appears to be a burdensome and a challenging task to define NN, because ironically enough, even though

²²⁸ Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 available at <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32015R2120&from=EN>

²²⁹ *ibid.*

²³⁰ Wu, Tim. Network Neutrality, Broadband Discrimination, *Journal of Telecommunications and High Technology Law*, Vol. 2, p. 141 (2003)

²³¹ Barratt, Neil, and Leslie Regan Shade. “Net Neutrality: Telecom Policy and the Public Interest.” *Canadian Journal of Communication* 32, no. 2 (June 21, 2007). <https://doi.org/10.22230/cjc.2007v32n2a1921>.

the FCC's 2015 Open Internet Order and the FCC's 2018 Restoring Internet Freedom Order regulates NN at a pendulum's opposite ends, they both argue for an open and free internet that is also visible from these orders' names.

The role and importance of NN, relating concepts such as maintaining open internet access and ensuring connectivity have been discussed in the Report. This Report carried out the discussions rotating around NN by specifically focusing on the main themes of the relationship between NN and, connectivity and access; NN principles, exemptions, and the relationship between NN and zero-rating programs; regulatory approach of different countries to NN; reflections of international organizations; and finally, the impact of NN and network bias on internet actors. The main objective of this Report was to shed light on the issues surrounding regulating NN and provide a roadmap for Turkey in the future. As stated above and discussed in detail in Chapter 5 covering different jurisdictions including Turkey; there is a lack of regulation or any guidance in Turkish legislation concerning the principle of NN. Overall, NN researchers believe that neither NN principles nor its controversies will disappear because of its progressive nature and its importance in today's modern society.²³²

It is expected that many contested NN topics such as exemptions, how to preserve user rights, and managing the competing policy priorities and interests of stakeholders will occupy the NN policy making agenda in the EU and the US in the coming years.²³³ This occupation will not be limited to the EU and the US, and it will surely affect other jurisdictions in the world, calling for a thorough discussion, careful consideration and possible solutions. The constant struggle of shifting power between relative stakeholders (ISPs, users, regulators, etc.) seems to continue because of the NN's political and complex nature. The history has proved that none of the NN regulations can be taken for granted, therefore, each time the pendulum swings to the opposite end, the balance between stakeholders likely will change. It is a question of mystery whether regulators can come up with a neutral approach to NN in a way that balances the pendulum's swing in the future.

²³² Pothong, Kruakae. "Convergence, Internet, and Net Neutrality Policy: What the Future Holds for the Internet and Online Content." In *Second International Handbook of Internet Research*, edited by Jeremy Hunsinger, Lisbeth Klastrup, and Matthew M. Allen, 1–21. Dordrecht: Springer Netherlands, 2018. https://doi.org/10.1007/978-94-024-1202-4_20-1.

²³³ *ibid.*

As it is discussed in the previous Chapters, debates around NN are multifaceted, which includes but is not limited to the topics below:

- blocking,
- traffic management,
- quality of service,
- competition,
- preferential treatment of specific (types of) content,
- congestion management and capacity planning and provisioning,
- application of the antitrust doctrines on refusals to deal, non-discrimination and unfair pricing,
- relevant market definition and assessment of market power,
- scope of the EU Regulatory Framework for Electronic Communications,
- incentives of market players to invest and innovate,
- pluralism on the Internet,
- the aims of competition law enforcement,
- application of competition law to the “new economy”,

The above-mentioned topics, in fact, shows the depth and complexity of the principle of NN, making one of the most debated topics of the current internet governance issues. Therefore, it is not an easy task to come up with a regulation that is well rounded, adheres to users’ rights but does not hinder competition. There are lessons to learn from both of these geographies’ approach to NN. Especially for countries like Turkey, that is relatively at the beginning of its journey in regulating NN. Accordingly, to be able to achieve to adopt a balanced and optimum approach, best practices may be drawn from these very different two political approaches. Even though Turkey has taken some steps towards preserving NN principles, there is still so much to do in making sure the open nature of the internet and users’ rights are preserved. After carefully considering the needs of today’s modern society and the opportunities, Turkey may take the optimal approach in determining its stance and practices on regulating NN. Taking into account the developments around the world as well as the recently increasing discussions concerning different approaches adopted globally and the role of internet in today’s modern society, we opine that Turkey should

break its silence regarding NN through which multi-stakeholder debate is initiated to determine Turkey's strategic position in terms of NN.

In short, we believe that it may be ideal for Turkey to decide to take the necessary steps in order to align with the EU's approach and the EU's Open Internet Regulation, on its path to EU harmonization and a digital single market strategy. We note that potentially, the reason for the lack of steps or attempts to regulate NN may be a result of the insufficient demand from the Turkish public. However, it should be noted that, the need to regulate NN, as it has already become a soaring topic globally, and which already realized in the EU, would undoubtedly appear in Turkey, but not without potential harm to end-users or the market in general. Although there are no alarming circumstances in Turkey or any harm proven to have actualized due to the lack of NN regulation, there are undoubtedly potential possible threats menacing to put the rights of end-users as well as connectivity, accessibility, openness, and neutrality of the internet at risk. Even though the Turkish ISPs' practices or the Turkish public have not initiated nor actively encouraged the need to regulate NN in Turkey, it is clear that demand and necessity, act as the driving forces for a regulatory authority to enact regulation in relation to responding to largely existing, contemporary circumstances. Nevertheless, with regard to regulatory strategy, it should be kept in mind that the future scenarios in which currently existing circumstances might quickly change and potentially harm the values, which the Regulation was meant to protect, even before there is time to adjust the Regulation with respect to the recent developments. The change is inevitable and there are risks attached to it. Hence, not regulating NN in Turkey may be considered as a decision of regulatory strategy, to bear any risks that may actualize by the virtue of the regulatory absence.

Consequently, we believe that rather than a light touch approach that is adopted by the US, we believe that a regulation with clear exemptions that preserves the users' rights, enhances the internet's open nature, and allows fair competition likely will be more beneficial for Turkey's future NN regulatory directions. Any attempt in drafting a new regulation along these lines may take the EU's current regulations into account and build on top of its best practices, so that Turkey can do better in applying more transparent rules that both protect the users and the economy.

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APPENDIX A

European Union Electronic Communications Code (ECC)

“Articles and Recitals Regarding NN and Open Internet Principles”

| Recital / Article No²³⁴ | Text |
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| Recital 13 | <p>In accordance with the principle of technology neutrality, other technologies and transmission media should not be excluded, where they compare with that baseline scenario in terms of their capabilities. The roll-out of such ‘very high capacity networks’ is likely to further increase the capabilities of networks and pave the way for the roll-out of future wireless network generations based on enhanced air interfaces and a more densified network architecture.</p> |
| Recital 23 | <p>The regulatory framework should, in addition to the existing three primary objectives of promoting competition, the internal market and end-user interests, pursue an additional connectivity objective, articulated in terms of outcomes: widespread access to and take-up of very high capacity networks for all citizens of the Union and Union businesses on the basis of reasonable price and choice, effective and fair competition, open innovation, efficient use of radio spectrum, common rules and predictable regulatory approaches in the internal market and the necessary sector- specific rules to safeguard the interests of citizens of the Union. For the Member States, the national regulatory and other competent authorities and the stakeholders, that connectivity objective translates, on the one hand, into aiming for the highest capacity networks and services economically sustainable in a given area, and, on the other, into pursuing territorial cohesion, in the sense of convergence in capacity available in different areas.</p> |

²³⁴ This list is not exclusive, there may be other recitals and articles that are related to NN and open internet principles.

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| <p>Recital 26</p> | <p>Both efficient investment and competition should be encouraged in tandem, in order to increase economic growth, innovation and consumer choice.</p> |
| <p>Recital 27</p> | <p>Competition can best be fostered through an economically efficient level of investment in new and existing infrastructure, complemented by regulation, where necessary, to achieve effective competition in retail services. An efficient level of infrastructure-based competition is the extent of infrastructure duplication at which investors can reasonably be expected to make a fair return based on reasonable expectations about the evolution of market shares.</p> |
| <p>Recital 28</p> | <p>It is necessary to give appropriate incentives for investment in new very high capacity networks that support innovation in content-rich internet services and strengthen the international competitiveness of the Union. Such networks have enormous potential to deliver benefits to consumers and businesses across the Union. It is therefore vital to promote sustainable investment in the development of those new networks, while safeguarding competition, as bottlenecks and barriers to entry remain at the infrastructure level, and boosting consumer choice through regulatory predictability and consistency.</p> |
| <p>Recital 36</p> | <p>This Directive does not include substantive provisions on open internet access or roaming and is without prejudice to the allocation of competences to national regulatory authorities in Regulation (EU) No 531/2012 of the European Parliament and of the Council (2) and in Regulation (EU) 2015/2120. However, this Directive provides, in addition, for national regulatory authorities to be competent for assessing and monitoring closely market access and competition issues which potentially affect the rights of end-users to an open internet access.</p> |

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| <p>Recital 102</p> | <p>Optimal use of radio spectrum resources depends on the availability of appropriate networks and associated facilities. In that regard, Member States should aim to ensure that, where national regulatory or other competent authorities apply fees for rights of use for radio spectrum and for the rights to install facilities, they take into consideration the need to facilitate continuous infrastructure development with a view to achieving the most efficient use of the resources. Member States should seek to ensure the application, to the best extent possible, of arrangements for the payment of the fees for rights of use for radio spectrum linked with the actual availability of the resource in a manner that supports the investments necessary to promote such infrastructure development and the provision of related services. The payment arrangements should be specified in an objective, transparent, proportionate and non-discriminatory manner before opening procedures for the granting of rights of use for radio spectrum.</p> |
| <p>Recital 103</p> | <p>It should be ensured that procedures exist for the granting of rights to install facilities that are timely, non-discriminatory and transparent, in order to guarantee the conditions for fair and effective competition. This Directive is without prejudice to national provisions governing the expropriation or use of property, the normal exercise of property rights, the normal use of the public domain, or to the principle of neutrality with regard to the rules in Member States governing the system of property ownership.</p> |
| <p>Recital 107</p> | <p>Radio spectrum is a scarce public resource with an important public and market value. It is an essential input for radio-based electronic communications networks and services and, insofar as it relates to such networks and services, should therefore be efficiently allocated and assigned by national regulatory or other competent authorities in accordance with harmonised objectives and principles governing their action as well as to objective, transparent and non-discriminatory criteria, taking into account the democratic, social, linguistic and cultural interests related to the use of radio spectrum. Decision No</p> |

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| | <p>676/2002/EC establishes a framework for harmonisation of radio spectrum.</p> |
| Recital 115 | <p>Radio spectrum users should also be able to choose freely the services they wish to offer over the radio spectrum. <i>On the other hand, measures should be allowed which require the provision of a specific service to meet clearly defined general interest objectives such as safety of life, the need to promote social, regional and territorial cohesion, or the avoidance of the inefficient use of radio spectrum to be permitted where necessary and proportionate.</i> Those objectives should include the promotion of cultural and linguistic diversity and media pluralism, as defined by the Member States in accordance with Union law. Except where necessary to protect the safety of life or, by way of exception, to fulfil other general interest objectives as defined by the Member States in accordance with Union law, exceptions should not result in certain services having exclusive use, but should rather grant them priority so that, insofar as possible, other services or technologies could coexist in the same radio spectrum band. It lies within the competence of the Member States to define the scope and nature of any exception regarding the promotion of cultural and linguistic diversity and media pluralism.</p> |
| Recital 116 | <p>As the allocation of radio spectrum to specific technologies or services is an exception to the principles of technology and service neutrality and reduces the freedom to choose the service provided or technology used, any proposal for such allocation should be transparent and subject to public consultation.</p> |

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| Recital 117 | Where Member States decide, by way of exception, to limit the freedom to provide electronic communications networks and services based on grounds of public policy, public security or public health, Member States should explain the reasons for such a limitation. |
| Recital 129 | <i>In deciding whether to renew already granted rights of use for harmonised radio spectrum, competent authorities should take into account the extent to which renewal would further the objectives of the regulatory framework and other objectives under Union and national law. Any such decision should be subject to an open, non-discriminatory and transparent procedure and based on a review of how the conditions attached to the rights concerned have been fulfilled.</i> When assessing the need to renew rights of use, Member States should weigh the competitive impact of renewing assigned rights against the promotion of more efficient exploitation or of innovative new uses that might result if the band were opened to new users. Competent authorities should be able to make their determination in this regard by allowing for only a limited duration for renewal in order to prevent severe disruption of established use. While decisions on whether to renew rights assigned prior to the applicability of this Directive should respect any rules already applicable, Member States should also ensure that they do not prejudice the objectives of this Directive. |

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| <p>Recital 215</p> | <p>The speed of internet access experienced by a given user depends on a number of factors, including the providers of internet connectivity as well as the given application for which a connection is being used. It is for the Member States, taking into account BEREC’s report on best practices, to define adequate broadband internet access in light of national conditions and the minimum bandwidth enjoyed by the majority of consumers within a Member State’s territory in order to allow an adequate level of social inclusion and participation in the digital economy and society in their territory. The affordable adequate broadband internet access service should have sufficient bandwidth to support access to and use of at least a minimum set of basic services that reflect the services used by the majority of end-users. To that end, the Commission should monitor the development in the use of the internet to identify those online services used by a majority of end-users across the Union and necessary for social and economic participation in society and update the list accordingly. The requirements of Union law on open internet access, in particular of Regulation (EU) 2015/2120, should apply to any adequate broadband internet access service.</p> |
| <p>Article 3/2 (a)</p> | <p>promote connectivity and access to, and take-up of, very high capacity networks, including fixed, mobile and wireless networks, by all citizens and businesses of the Union;</p> |
| <p>Article 3/2 (c)</p> | <p>contribute to the development of the internal market by removing remaining obstacles to, and facilitating convergent conditions for, investment in, and the provision of, electronic communications networks, electronic communications services, associated facilities and associated services, throughout the Union, by developing common rules and predictable regulatory approaches, by favouring the effective, efficient and coordinated use of radio spectrum, open innovation, the establishment and development of trans-European networks, the provision, availability and interoperability of pan-European services, and end-to-end connectivity;</p> |

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| <p>Article 3/2 (d)</p> | <p>promote the interests of the citizens of the Union, by ensuring connectivity and the widespread availability and take-up of very high capacity networks, including fixed, mobile and wireless networks, and of electronic communications services, by enabling maximum benefits in terms of choice, price and quality on the basis of effective competition, by maintaining the security of networks and services, by ensuring a high and common level of protection for end-users through the necessary sector-specific rules and by addressing the needs, such as affordable prices, of specific social groups, in particular end-users with disabilities, elderly end-users and end-users with special social needs, and choice and equivalent access for end-users with disabilities.</p> |
| <p>Article 3/4 (b)</p> | <p>ensure that, in similar circumstances, there is no discrimination in the treatment of providers of electronic communications networks and services;</p> |
| <p>Article 3/4 (d)</p> | <p>promote efficient investment and innovation in new and enhanced infrastructures, including by ensuring that any access obligation takes appropriate account of the risk incurred by the investing undertakings and by permitting various cooperative arrangements between investors and parties seeking access to diversify the risk of investment, while ensuring that competition in the market and the principle of non-discrimination are preserved;</p> |
| <p>Article 5/1 (e)</p> | <p>assessing and monitoring closely market-shaping and competition issues regarding open internet access;</p> |
| <p>Article 73/2 (c)</p> | <p>the need to ensure technology neutrality enabling the parties to design and manage their own networks</p> |
| <p>Article 73/2 (f)</p> | <p>the need to safeguard competition in the long term, with particular attention to economically efficient infrastructure- based competition and innovative business models that support sustainable competition, such as those based on co- investment in networks</p> |

Article 76/1 (d)

access seekers not participating in the co-investment can benefit from the outset from the same quality, speed, conditions and end-user reach as were available before the deployment, accompanied by a mechanism of adaptation over time confirmed by the national regulatory authority in light of developments on the related retail markets, that maintains the incentives to participate in the co-investment; such mechanism shall ensure that access seekers have access to the very high capacity elements of the network at a time, **and on the basis of transparent and non-discriminatory terms**, which reflect appropriately the degrees of risk incurred by the respective co-investors at different stages of the deployment and take into account the competitive situation in retail markets;

APPENDIX B

BEREC Guidelines on the Implementation by National Regulators of European Net

Neutrality Rules

“Article 3 and Relevant Recommendations for NRAs”

| Article and Subclause | Context/Text of the Article | BEREC’s Recommendations to NRAs |
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| Article 3(1) | Lists the rights of end-users: (i) access and distribute information and content, (ii) use and provide applications and services, and (iii) user terminal equipment of their choice | <ul style="list-style-type: none"> - <i>In considering whether end-users may use the terminal equipment of their choice, NRAs should assess whether an ISP provides equipment for its subscribers and restricts the end-users’ ability to replace that equipment with their own equipment.</i> - <i>NRAs should consider whether there is an objective technological necessity for the obligatory equipment to be considered as part of the ISP network. If there is not, and if the choice of terminal equipment is limited, the practice would be in conflict with the Regulation.</i> |
| Article 3(2) | Limits on the commercial and technical contractual conditions that may be applied to IAS, and the commercial practices of ISPs providing IAS | <ul style="list-style-type: none"> - <i>When assessing whether an ISP limits the exercise of the rights of end-users, NRAs should consider to what extent end-users’ choice is restricted by the agreed commercial and technical conditions or the commercial practices of the ISP. BEREC considers that a comprehensive assessment of such commercial and technical conditions may be required.</i> |
| Article 3(3), first subparagraph | Constraints ISP’s traffic management practices by requiring ISPs to treat all data traffic equally when providing internet access services, without | <ul style="list-style-type: none"> - <i>In assessing whether an ISP complies with this principle, NRAs should apply a two-step assessment:(i) assess whether all traffic is treated equally, (ii) assess whether situations are comparable or different and whether there are objective grounds which could justify a different treatment of different</i> |

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| | <p>discrimination, restriction or interference irrespective of the sender and receiver, the content accessed or distributed, the applications or services used or provided, or the terminal equipment used</p> | <p><i>situations.</i></p> <ul style="list-style-type: none"> - <i>NRAs should ensure that traffic on an IAS is managed: (i) “without discrimination, restriction or interference”, (ii) “irrespective of the sender and receiver, the content accessed or distributed, the applications or services used or provided, or the terminal equipment used”.</i> - <i>NRAs should take into account that equal treatment does not necessarily imply that all end-users will experience the same network performance or quality of service (QoS). Thus, even though packets can experience varying transmission performance, packets can normally be considered to be treated equally as long as all packets are processed agnostic to sender and receiver, to the content accessed or distributed, and to the application or service used or provided.</i> - <i>NRAs should consider network-internal mechanisms of ISPs which assist endpoint-based congestion control to be in line with equal treatment, and therefore permissible, as long as these network-internal mechanisms are agnostic to the applications running in the endpoints and a circumvention of the Regulation does not take place.</i> |
| <p>Article 3(3), second subparagraph</p> | <p>Establishes that the providers of internet access services can implement reasonable traffic management measures, which are transparent, non-discriminatory and</p> | <ul style="list-style-type: none"> - <i>In considering whether a traffic management measure is reasonable, NRAs should assess whether the traffic management measure is transparent, non-discriminatory and proportionate.</i> - <i>NRAs should require ISPs to provide transparent information about traffic management practices and the impact of these practices.</i> - <i>When considering whether a traffic management</i> |

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| | <p>proportionate, and are not based on commercial considerations but on objectively different technical quality of services requirements of specific categories of traffic that do not monitor the specific content and are not maintained for longer than necessary</p> | <p><i>measure is non-discriminatory, NRAs should consider the following: objectively different situations should be treated differently and similar technical requirements should receive similar treatment.</i></p> <ul style="list-style-type: none"> - <i>When considering whether a traffic management measure is proportionate, NRAs should consider the following: there has to be a legitimate aim, the measure has to be suitable to achieve this aim, the measure has to be necessary to achieve this aim, there is not a less interfering and equally effective alternative way of managing this aim, and the measure has to be appropriate.</i> - <i>In assessing whether a traffic management measure is reasonable, NRAs should assess the justification put forward by the ISP.</i> - <i>In assessing traffic management measures, NRAs should ensure that such measures do not monitor the specific content.</i> - <i>In assessing traffic management measures, NRAs should take into account that such measures shall not be maintained longer than necessary.</i> |
| <p>Article 3(3), third subparagraph</p> | <p>Establishes that the providers of internet access services cannot engage in traffic management measures going beyond those set out in the second subparagraph, and in particular shall not block, slow down, alter, restrict,</p> | <ul style="list-style-type: none"> - <i>In assessing ISP's practices, NRAs should take the following non-exhaustive principles into account: no blocking, no slowing down, no alteration, no restriction, no interference with, no degradation, and no discrimination.</i> - <i>Article 3/3 (a): If an ISP applies traffic management measures which cannot be regarded as reasonable, NRAs should assess whether an ISP does so because it has to do so for legal reasons, namely to comply with the legislation or measures by public authorities</i> |

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| | <p>interfere with, degrade or discriminate between specific content, applications or services, or specific categories unless it is necessary:</p> <p>(a) to comply with law, (b) to preserve the integrity and security of the network, services and the terminal equipment of end users, and (c) to prevent impending network congestion and mitigate the effects of exceptional or temporary network congestion, provided that equivalent categories of traffic are treated equally</p> | <p><i>specified in that exception.</i></p> <ul style="list-style-type: none"> - <i>Article 3/3 (b): NRAs should consider that, in order to identify attacks and activate security measures, the use of security monitoring systems by ISPs is often justified. In order for this exception to be exploited by the ISPs, NRAs should carefully assess whether the requirements of this exception are met and to request that ISPs provide adequate justifications when necessary.</i> - <i>Article 3/3 (c): When assessing congestion management exceptions under (c), NRAs should refer to the general criteria of strict interpretation and proportionality set out in Article 3(3) third subparagraph. Furthermore, NRAs should check that congestion management is not used to circumvent the ban on blocking, throttling and discrimination. NRAs should consider whether throttling of traffic, as opposed to blocking of traffic, would be sufficient and equally effective to manage congestion.</i> |
| Article 3(4) | <p>Sets out the conditions under which traffic management measures may entail the processing of personal data, which are: (i) necessity, and (ii) proportionality to achieve the objectives set out in paragraph 3</p> | <ul style="list-style-type: none"> - <i>NRAs should assess whether the processing of personal data undertaken by ISPs is necessary and proportionate to achieve the objectives set out in Article 3(3).</i> - <i>The competent national authority should assess whether the processing of personal data complies with Union law on data protection.</i> |
| Article 3(5), first subparagraph | <p>Establishes that providers of electronic communications to the public, including providers</p> | <ul style="list-style-type: none"> - <i>NRAs should verify whether the application could be provided over IAS at the specific levels of quality which are objectively necessary in relation to the application, or whether they are instead set up in</i> |

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| | <p>of internet access services, and providers of content, applications and services shall be free to offer services other than internet access services which are optimised for specific content, applications or services, or a combination thereof, where the optimisation is necessary in order to meet requirements of the content, applications or services for a specific level of quality.</p> | <p><i>order to circumvent the provisions regarding traffic management measures applicable to IAS, which would not be allowed.</i></p> <ul style="list-style-type: none"> - <i>When assessing whether the practices used to provide specialised services comply with Article 3(5) first subparagraph, NRAs should apply the approach set out in paragraphs 108-115).</i> - <i>NRAs could request from the provider relevant information about their specialised services.</i> - <i>NRAs should verify whether, and to what extent, optimised delivery is objectively necessary to ensure one or more specific and key features of the applications, and to enable a corresponding quality assurance to be given to end-users.</i> |
| <p>Article 3(5), second subparagraph</p> | <p>Establishes that providers of electronic communications to the public, including providers of internet access services, may offer or facilitate such services only if the network capacity is sufficient to provide them in addition to any internet access services provided. Such services shall not be usable or offered as a replacement for internet access services, and shall</p> | <ul style="list-style-type: none"> - <i>NRAs should assess whether, in order to ensure the quality of specialised services, ISPs have ensured sufficient network capacity for both any IAS offers provided over the infrastructure and for specialised services. If not, provision of specialised services would not be allowed under the Regulation.</i> - <i>NRAs could request information from ISPs regarding how sufficient capacity is ensured, and at which scale the service is offered.</i> - <i>NRAs should assess whether or not there is sufficient capacity for IAS when specialised services are provided, for example, by performing measurements of IAS.</i> - <i>NRAs could assess whether the provision of specialised services reduces general IAS quality by</i> |

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| | <p>not be to the detriment of the availability or general quality of internet access services for end-users</p> | <p><i>lowering measured download or upload speeds or, for example, by increasing delay, delay variation or packet loss.</i></p> <ul style="list-style-type: none">- <i>NRAs should intervene if persistent decreases in performance are detected for IAS.</i>- <i>NRAs should assess whether a specialised service is a potential substitute for the IAS, and if the capacity needed for their provision is to the detriment of the capacity available for IAS.</i>- <i>In deciding whether a specialised service is considered as a replacement for an IAS, one important aspect that NRAs should assess is whether the service is actually providing access to the internet but in a restricted way, at a higher quality, or with differentiated traffic management. If so, this would be considered a circumvention of the Regulation.</i> |
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APPENDIX C

BEREC Guidelines on the Implementation by National Regulators of European Net

Neutrality Rules

“Article 4 and Relevant Recommendations for NRAs”

| Article and Subclause | Context | BEREC’s Recommendations to NRAs |
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| Article 4 (1) | Establishes that providers of internet access services shall ensure that any contract which includes internet access services specifies the minimum information listed in the article | <ul style="list-style-type: none"> - <i>NRAs should ensure that ISPs include relevant information referred to in Article 4(1) (a) to (e) in a clear, comprehensible and comprehensive manner in contracts that include IAS, and publish that information, for example on an ISP’s website.</i> - <i>NRAs should also note that the transparency requirements laid down here are in addition to the measures provided in directive 2002/22/EC (the Universal Service Directive).</i> - <i>NRAs should look to ensure that ISPs adhere to the following practices in order to ensure that the information is clear and comprehensible: easily accessible and identifiable, accurate and up to date, meaningful to end-users, should not create an incorrect perception of the service provided, should be comparable.</i> - <i>NRAs should ensure that ISPs include in the contract and publish the information referred to in Article 4(1) (a) to (e). The first part should have a high level (general) information, and the second part should have more detailed information.</i> |
| Article 4 (1) (a) | Establishes that providers should provide information on how traffic | <ul style="list-style-type: none"> - <i>NRAs should ensure that ISPs include in the contract and publish a clear and comprehensive explanation of traffic management measures applied in</i> |

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| | <p>management measures applied by that provider could impact on the quality of the internet access services, on the privacy of end-users and on the protection of their personal data</p> | <p><i>accordance with the second and third subparagraphs of Article 3(3), including the following information: (i) how the measures might affect the end-user experience in general and with regard to specific applications, (ii) the circumstances and manner under which traffic management measures possibly having an impact as foreseen in Article 4(1) (a) are applied, and (iii) any measures applied when managing traffic which uses personal data, the types of personal data used, and how ISPs ensure the privacy of end-users and protect their personal data when managing traffic.</i></p> |
| Article 4 (1) (b) | <p>Establishes that providers should provide a clear and comprehensible explanation as to how any volume limitation, speed and other quality of service parameters may in practice have an impact on internet access services, and in particular on the use of content, applications and services</p> | <p><i>- NRAs should ensure that ISPs provide end-users with information which is effects-based. End-users should be able to understand the implications of these parameters to the usage of applications and whether certain applications cannot in fact be used due to the long delay or slow speed of the IAS. Categories of applications or popular examples of these affected applications could be provided.</i></p> |
| Article 4 (1) (b) | <p>Establishes that providers should provide a clear and comprehensible explanation of how any services referred to in Article 3(5) to which the end-user subscribes might</p> | <p><i>- NRAs should ensure that ISPs include in the contract and publish clear and comprehensible information about how specialised services included in the end-user's subscription might impact the IAS.</i></p> |

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| | in practice have an impact on the internet access services provided to that end-user | |
| Article 4 (1) (d) | Establishes that providers should provide a clear and comprehensible explanation of the minimum, normally available, maximum and advertised download and upload speed of the internet access services in the case of fixed networks, or of the estimated maximum and advertised download and upload speed of the internet access services in the case of mobile networks, and how significant deviations from the respective advertised download and upload speeds could impact the exercise of the end-users' rights | <ul style="list-style-type: none"> - <i>NRAs could set requirements on defining minimum speeds, for example that the minimum speed could be in reasonable proportion to the maximum speed.</i> - <i>NRAs could set requirements on defining maximum speeds, for example that they are achievable a specified number of times during a specified period.</i> - <i>NRAs could set requirements on defining normally available speeds, for example requiring that the normally available speed should be in reasonable proportion to the maximum speed.</i> - <i>NRAs could set requirements on how speeds defined in the contract relate to advertised speeds.</i> |
| Article 4 (1) (e) | Establishes that providers should provide a clear and comprehensible explanation of the remedies available to the | - <i>Remedies available to consumers as described in Article 4(1) (e) are defined in national law. Examples of possible remedies for a discrepancy are price reduction, early termination of the contract, damages, or rectification of the non-conformity of</i> |

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| | <p>consumer in accordance with national law in the event of any continuous or regularly recurring discrepancy between the actual performance of the internet access service regarding speed or other quality of service parameters and the performance indicated in accordance with points (a) to (d)</p> | <p><i>performance, or a combination thereof. NRAs should ensure that ISPs provide consumers with information specifying such remedies.</i></p> |
| Article 4 (2) | <p>Providers of internet access services shall put in place transparent, simple and efficient procedures to address complaints of end-users relating to the rights and obligations</p> | <p><i>- NRAs should ensure that ISPs adhere to certain good practices regarding procedures for addressing complaints, such as: informing end-users in the contract as well as on their website, in a clear manner, about the procedures put in place, including the usual or maximum time it takes to handle a complaint, and providing a description of how the complaint will be handled, etc.</i></p> |
| Article 4 (3) | <p>The requirements laid down in paragraphs 1 and 2 are in addition to those provided for in Directive 2002/22/EC and shall not prevent Member States from maintaining or introducing additional monitoring, information and transparency</p> | <p><i>- This provision is aimed at Member States and no guidance to NRAs is required.</i></p> |

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| | <p>requirements, including those concerning the content, form and manner of the information to be published. Those requirements shall comply with this Regulation and the relevant provisions of Directives 2002/21/EC and 2002/22/EC</p> | |
| <p>Article 4 (4)</p> | <p>Any significant discrepancy, continuous or regularly recurring, between the actual performance of the internet access service regarding speed or other quality of service parameters and the performance indicated by the provider of internet access services in accordance with points (a) to (d) of paragraph 1 shall, where the relevant facts are established by a monitoring mechanism certified by the national regulatory authority, be</p> | <ul style="list-style-type: none"> - <i>The Regulation does not require Member States or an NRA to establish or certify a monitoring mechanism. The Regulation does not define how the certification must be done. If the NRA provides a monitoring mechanism implemented for this purpose it should be considered as a certified monitoring mechanism according to Article 4(4).</i> - <i>NRAs should consider BoR (14) 117²³⁵ when implementing a measurement methodology. Measurements should mitigate, to the extent possible, confounding factors which are internal to the user environment, such as existing cross-traffic and the wireless/wireline interface.</i> - <i>When implementing measurement methodologies, NRAs should consider guidance on methodologies developed during BEREC's work on QoS in the context of Net Neutrality.</i> |

²³⁵ BoR (14) 117 “Monitoring quality of Internet access services in the context of net neutrality”

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| | deemed to constitute non-conformity of performance for the purposes of triggering the remedies available to the consumer in accordance with national law. | |
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APPENDIX D

“List of the Relevant Legislation in Turkey Regarding Net Neutrality”

| Article and Subclause | Text and Brief Background Information | Commentary |
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| Electronic Communications Law (Law No. 5809)²³⁶ | | |
| <p>Art. 4(1)(b) Art. 4(1)(d) Art. 4(1)(j)</p> | <p>Electronic Communications Law, which is mostly drafted in line with EU Directive 2002/21/EC (EU Framework Directive), functions as the framework legislation governing electronic communications law. Article 4 regulates the principles which should be taken into account in regulation and provision of electronic communications services, similar in a sense to Article 8 and 9 of the EU Framework Directive:</p> <p><i>b) Protection of consumer rights and their interests.</i> ...</p> <p><i>d) Ensuring non-discrimination among similarly-situated subscribers, users and operators, and ensuring that services are accessible to similarly-situated persons under the same conditions, except for presence of objective grounds or cases where facilitation is provided specifically</i></p> | <p>Arguably, sub-paragraph (j) is the provision most directly-related to NN. One can establish a clear link between “neutrality of provision and regulation of electronic communications services”, and the NN. The original language of the provision burdens the ICTA to maintain “<i>impartiality</i>” in executing its regulatory powers, and burdens operators to act “<i>objectively</i>” in provision of electronic communication services. Such principles may be interpreted in association with the main principles of NN, such as non-discrimination and non-prioritization.</p> <p>“<i>Equal treatment among similarly-situated users</i>” is a frequently used terminology in the Turkish electronic communications legislation. Sub-paragraph (d) and other coinciding norms in the legislation facilitates a pro-net-neutrality approach for the ICTA and where applicable, for operators. The provision clearly prohibits discrimination among the same group of subscribers, users or operators, except for under objective conditions. Yet it does not demonstrate the entirety of NN, as clearly the provision does not cover discrimination against OTTs or websites.</p> |

²³⁶ English translation of the Electronic Communications Law may be found at: https://www.unodc.org/res/cld/document/tur/electronic-communications-law_html/Electronic_Communications_Law_Turkey.pdf (Minor revisions were made in the English translation for clarity)

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| | <p><i>for people in need and under clearly defined scope and limits.</i> ...</p> <p><i>j) Ensuring neutrality in provision of electronic communication services and relevant regulations.</i></p> | <p>Sub-paragraph (b) could also be considered as related to NN, since NN ultimately relates to “<i>equal and non-discriminatory treatment of traffic in the provision of internet services and related end-users’ rights</i>”, as stated in EU Regulation 2015/2120.</p> |
| <p>Art. 14(1)(b)</p> | <p>Article 14(1) lists a number of principles that the ICTA should take into account while regulating tariffs One of the principles is as follows:</p> <p><i>b) Ensuring non-discrimination among similarly-situated subscribers on unjust grounds, without prejudice to cases of facilitation provided under clearly defined scope and limits, and specifically for people in need subject to Article 3(1)(c) of the Law no. 5369 [i.e., the Turkish Universal Service Law]</i></p> | <p>Please see above.</p> |
| <p>Art. 16(5)</p> | <p>Article 16 regulates that the ICTA, considering the free competition environment, may impose upon ISPs, the obligation to provide access to other operators in relation to electronic communications networks, infrastructure and/or services. Article 16(5) further stipulates that the ICTA may impose upon such operators additional obligations:</p> <p><i>The Authority may require operators obliged to provide access, to assess other operators’ reasonable access requests in compliance with equality, nondiscrimination, transparency, clarity, and [for pricing] acting</i></p> | <p>Access requirements relate to inter-operator relations and do not directly affect the relation between operators and end-users. However, by regulating the commercial and technical conditions in agreements between operators, Art. 16(5) provides some level of alignment with Art. 3(2) of the Regulation (EU) 2015/2120. BEREC evaluates in its report that such provision aims to ensure that agreements between ISPs and end-users do not limit the exercise of end-users’ rights. The Turkish provision on the other hand, does not reach out to end-users, except for indirect consequences. Art. 16(5) provides that the ICTA is entitled to impose further requirements on operators already obliged to provide access, to ensure that operators do not discriminate between operators which request</p> |

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| | <p><i>cost and reasonable profit-based, and to provide access services under the same conditions and quality which they would provide to their partners, subsidiaries or partnerships.</i></p> | <p>access. This would indirectly affect the quality of service end-user would receive.</p> |
| <p>Art. 47</p> | <p><i>Right to receive equal service</i></p> <p><i>Operators are obliged to provide electronic communications services with equal conditions and in a non-discriminatory manner to consumers and end users which are under similar situations ...</i></p> | <p>This is one of the few norms that directly imposes an obligation upon operators not to discriminate between consumers and end-users. The reasoning of the provision emphasizes that non-discrimination in access to services and terms of use are basic consumer rights, and that Art. 47 sets forth that all consumers and end-users are to benefit from services independent of all prejudices and disadvantageous conditions. The provision does not directly regulate treatment of traffic, however management of consumers' and end-users' traffic is surely subject to this requirement of non-discrimination and equal treatment. In that sense, Art. 47 echoes Art. 3(3) of the Regulation (EU) 2015/2120, but surely does not provide a requirement as extensive or as clear in terms of end-users' rights.</p> |

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| <p>Art. 48</p> | <p><i>The Authority determines the procedures and principles regarding the consumers’ and end users’ access to electronic communications services under equal conditions and regarding the protection of their rights and interests.</i></p> | <p>Similar to Art. 47 above, Art. 48 emphasizes the consumers’ and end users’ right to access the electronic communication services under equal conditions. The provision is the legal basis of the ICTA’s Regulation on the Consumer Rights in Electronic Communications Sector.</p> |
| <p>Art. 49</p> | <p><i>Ensuring transparency and provision of information</i></p> <p><i>(1) The Authority may impose obligations on the operators regarding service types, quality of service, publishing tariffs and tariff packages and enlightening of subscribers about similar issues with a view to ensure that end users and consumers take maximum benefit of these services and to offer services in conformity with the principle of transparency.</i></p> <p><i>(2) Operators, without necessarily being requested, shall inform consumers under every circumstance regarding considerations that will affect their decisions especially when they are making choices between services and signing subscriber contracts, as per the principle of good faith.</i></p> | <p>Transparency is a key concept in the Regulation (EU) 2015/2120. Art. 49 is the legal basis of the ICTA’s requirements concerning transparency. In practice, the ICTA does not allow operators to enforce of any action or condition, which are against the interests of consumers of end-users, except where allowed by the legislation. Therefore, Art. 49 ensures that operators fully disclose the terms and conditions of each of their subscription plans in a comprehensible manner and duly inform or obtain approval, if needed, regarding any changes on the service or pricing. These usually include provision of information concerning data caps or fair usage caps, however, the Turkish provision clearly does not provide the same legal effect as Art. 4 of the Regulation (EU) 2015/2120.</p> |
| <p>Universal Service Law (Law No. 5369)</p> | | |
| <p>Art. 3</p> | <p><i>Below-listed principles shall be taken into account in provision of the universal service and drafting of regulations:</i></p> <p><i>a) Anyone living in the territory of Republic of Turkey shall benefit</i></p> | <p>Although the concept of universal service takes its roots from a different necessity, open internet regulations and NN regulations ultimately seek provision of the same quality of internet access for users irrespective of their conditions. These principles underscore</p> |

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| | <p><i>from the universal service without any discrimination in respect of region and place of residence.</i></p> <p><i>b) The universal service ... shall be offered at reasonable prices.</i></p> <p>...</p> <p><i>d) The universal service shall be provided in pre-determined service quality standards.</i></p> <p><i>e) Continuity is essential in provision of and access to the universal service.</i></p> | <p>the reasonable prices and a minimum quality standard for internet access, which are – although in a different context- also one of the core principles of NN.</p> |
| <p>Regulation on the Consumer Rights in Electronic Communications Sector</p> | | |
| <p>Art. 5(1)(a)</p> | <p><i>Consumers who benefit from electronic communication services shall have at least the below-listed rights:</i></p> <p><i>a) Right of the similarly-situated consumers to benefit from the services in equal conditions and over non-discriminatory and fair prices.</i></p> | <p>This article is also directly related to and may be implemented in a way that ensures NN. The provision regulates rights of the users in relation to two NN-related areas: equal conditions and reasonable pricing. Equal conditions of service imply regulation of certain NN-related concepts such as degrading or slowing-down whereas non-discriminatory and fair prices support end-users’ right to access, both relating to Art. 3(1) of the Regulation (EU) 2015/2120.</p> |
| <p>Regulation on Access and Interconnection</p> | | |

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| <p>Art. 5(1)(d)</p> | <p>The Regulation regulates -rights and obligations of electronic communications operators in relation to access and interconnection. According to the Regulation, requirements for operators include;</p> <p><i>d) Equal treatment to the users and operators who are in equal conditions, provision of access to services in equal conditions for similarly-situated users.</i></p> | <p>Please see our remarks above.</p> |
| <p>Regulation on Service Quality in Electronic Communications Sector</p> | | |
| <p>Art. 4(1)(d)</p> | <p>This Regulation regulates the obligations of the operators in electronic communication sector in relation to the quality of the service they provide. One of the main principles set forth by the Regulation is:</p> <p><i>d) Non-discrimination between similarly-situated users and provision of the services in the same quality to similarly-situated users.</i></p> | <p>Please see our remarks above.</p> |
| <p>Regulation on Tariffs</p> | | |

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| <p>Art. 5(1)(b)</p> | <p>This Regulation regulates the tariffs applied to the end-users by the operators including ISPs.</p> <p><i>Below-listed principles are essential in implementing hereby Regulation:</i></p> <p>...</p> <p><i>b) Notwithstanding the clear and limited facilitations provided exclusively to the people in need as stated in Article 3/1-(c) of the Universal Service Law dated 16 June 2005 and numbered 5369, not discriminating between similarly-situated end-users without a just cause, determination of fair and transparent tariffs.</i></p> | <p>Please see above.</p> |
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