THE COURT OF JUSTICE OF THE EUROPEAN UNION'S FIRST JUDGMENT ON NETWORK NEUTRALITY PRINCIPLES: A CASE STUDY OF ZERO-RATING PRACTICES

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บทคัดย่อ

บทความนี้ศึกษาหลักการความเป็นกลางทางเครือข่ายและบริการเข้าถึงเนื้อหาบนอินเทอร์เน็ตแบบไม่มีค่าใช้จ่าย วิเคราะห์กรณีศึกษาคำพิพากษาของศาลยุติธรรมแห่งสหภาพยุโรป และให้ข้อมูลสถานการณ์ปัจจุบันของไทยในประเด็นดังกล่าว โดยใช้วิธีวิจัยเอกสาร ผลการศึกษาพบว่า บริการเข้าถึงเนื้อหาอินเทอร์เน็ตแบบไม่มีค่าใช้จ่ายเป็นกลไกทางการตลาดที่ให้ประโยชน์กับผู้บริโภคและผู้ให้บริการเนื้อหาบนอินเทอร์เน็ตบางกลุ่ม แต่ขัดกับหลักการความเป็นกลางทางเครือข่ายที่เน้นการไม่เลือกปฏิบัติในการเข้าถึงอินเทอร์เน็ต โดยศาลยุติธรรมแห่งสหภาพยุโรปมีคำตัดสินว่า แพ็กเกจโทรศัพท์ที่ผู้ซื้อสามารถใช้บริการหรือเข้าถึงบางแอปพลิเคชันโดยไม่จำกัดและไม่นับการเข้าถึงข้อมูลรวมกับปริมาณข้อมูลของแพ็กเกจที่ซื้อ เมื่อปริมาณข้อมูลของแพ็กเกจหมดลง ผู้ให้บริการใช้มาตรการปิดกั้นหรือลดความเร็วการเข้าถึงบริการหรือแอปพลิเคชันอื่นที่ไม่ได้รวมในแพ็กเกจ พฤติการณ์ลักษณะนี้ไม่ชอบด้วยกฎหมายว่าด้วยความเป็นกลางทางเครือข่าย เมื่อพิเคราะห์บริบทของประเทศไทยพบว่า การควบรวมกิจการของคู่แข่งรายใหญ่ในตลาดโทรคมนาคมทำให้ตลาดกระจุกตัวสูง ส่งผลลบทั้งต่อคู่แข่งรายย่อยและผู้บริโภค ผู้กำกับดูแลกิจการโทรคมนาคมควรสนับสนุนการทำวิจัยเชิงลึกเกี่ยวกับความเป็นกลางทางเครือข่ายและบริการเข้าถึงเนื้อหาอินเทอร์เน็ตแบบไม่มีค่าใช้จ่ายเพื่อเตรียมรับมือกับปัญหาที่อาจเกิดขึ้นหลังการควบรวม

คำสำคัญ: ความเป็นกลางทางเครือข่าย บริการเข้าถึงเนื้อหาบนอินเทอร์เน็ตแบบไม่มีค่าใช้จ่าย กิจการโทรคมนาคม ศาลยุติธรรมแห่งสหภาพยุโรป

Abstract

This article aims to investigate the principles of net neutrality and zero-rating, analyze the Court of Justice of the European Union's (CJEU) first judgment, and provide Thailand's current situation on the issue. This paper uses a documentary research methodology. The research findings revealed that zero-rating favored some consumers or content providers, and interfered with network neutrality principles that emphasize non-discrimination in Internet access. The mobile zero-rated Internet packages allowing customers to use specific applications and services without any restrictions, without deducting from the purchased data volume, once this data volume is used up, there are measures that block or slow down Internet traffic to other applications and services. The CJEU ruled that this practice was against the net neutrality law. In Thailand, the telecommunications sector which was concentrated by large influential competitors due to mergers among telecommunications and broadband Internet providers, directly led to some negative impacts on small competitors and consumers. In terms of recommendations, Thailand's telecommunications regulator should encourage in-depth research on net neutrality and zero-rating practices to deal with any potential controversy the industry may encounter.

Keywords: network neutrality, zero-rating practices, telecommunications, Court of Justice of the European Union

1. Introduction

For years, some Thai mobile network providers have offered a variety of zero-rated packages to Thailand's mobile market (Santri, 2019, p. 250-254). The implementation of zero-rating packages has sparked concerns over consumer protection, competition, and net neutrality, especially since the aftermath of recent dominant mergers and acquisitions in the country. After the horizontal merger between True Corporation (True) and Total Access Communication (Dtac), number of main competitors in the mobile network operators' market decreased from three to two. Similarly, after the horizontal acquisition between Advanced Info Service (AIS) and Triple T Broadband (3BB), the number of main competitors in the broadband Internet providers' market was reduced from four to three. The merger and acquisition have consequently led to increased market concentration in the telecommunications market, as well as negatively impacting both small competitors and consumers (Benyaapikul & Manachotphong,

2023, p. 5, 21). However, the existing legal framework in Thailand does not encompass any laws or policies that regulate zero-rating and network neutrality. Therefore, it would be advantageous for Thailand to gain insights from a jurisdiction that has dealt with a genuine case involving law enforcement and a court's decision. This article thereby examines the Court of Justice of the European Union's first judgment on a dispute between "Telenor," one of the biggest Hungarian mobile service providers, and the telecommunications regulator of Hungary, the case of which directly relates to net neutrality principles and zero-rating practices. The paper incorporates an explanation of two technical terminologies, background development, related legislation, case analysis, academic criticisms and discussions, a brief contextual delineation of the network neutrality principles and zero-rating scenario in Thailand, and finally proposes some recommendations for future research.

2. Objectives

2.1 To analyze the network neutrality principles and zero-rating practices

2.2 To examine the Court of Justice of the European Union's first judgment on network neutrality principles and zero-rating practices

2.3 To conduct current contextual examination of network neutrality and zero-rating frameworks in Thailand

3. Study methods

The author adopted a documentary research method for this research article, consisting of both primary and secondary sources of information. As for the primary source, the author analyzed an original case (available in English) between "Telenor Magyarország Zrt. V Nemzeti Média- és Hírközlési Hatóság Elnöke," relating to network neutrality principles and zero-rating practices. The secondary source compiled textbooks, journal articles, conference papers, empirical statistics, and trustworthy media outlets. All documents contributed to the background development of network neutrality and zero-rating principles and discussions. Scope of the study covered telecommunications regulation and competition policy at an international level. The author concluded the paper by carrying out a comparative examination of network neutrality and zero-rating practices from current Thailand perspective.

4. Literature review

The concept of non-discrimination on the Internet was first introduced to international discussions during the first phase of the World Summit on the Information Society (WSIS), held with the endorsement of the United Nations General Assembly Resolution 56/183, occurring from December 10 to 12, 2003 (Sirilim, 2014, p. 5). As a result of the WSIS, there was an adoption of the "Geneva Declaration of Principle and Geneva Plan of Action," Article 27[1] of which emphasized "diversity of choice" as one of the key elements to promote accessibility to information and knowledge, and Article 56[2] of which upheld the fundamental values of "freedom in the information society." Following the second phase of the WSIS, held from November 16 to 18, 2005, Article 31[3] of the "Tunis Commitment and Tunis Agenda for the Information Society" incorporated the principle of a "non-discriminatory information society." Thus, the notions of diversity of choice, fundamental values of freedom, and non-discrimination in information society were rooted in the Geneva Declaration of Principles and the Tunis Agenda for the Information Society. However, those mentioned Declaration and Agenda were not a regulation nor a directive, but they were a stack of international agreements that enhanced cooperation from all the member countries or affiliated organizations. Network neutrality concepts under the Geneva Declaration of Principles and the Tunis Agenda for the Information Society accordingly lacked law enforcement. Later in 2011, the Human Rights Council of the United Nations declared "Internet access" a fundamental human rights and ensured that universal access to the Internet should be a priority for all states (La Rue, 2013, p. 70). The Human Rights Council considered cutting off users from Internet access, regardless of the justification provided, a violation of

[1] Article 27 of the Geneva Declaration of Principles states that "Access to information and knowledge can be promoted by increasing awareness among all stakeholders of the possibilities offered by different software models, including proprietary, open-source and free software, in order to increase competition, access by users, diversity of choice, and to enable all users to develop solutions which best meet their requirements. Affordable access to software should be considered as an important component of a truly inclusive Information Society."

[2] Article 56 of the Geneva Declaration of Principles states that "The Information Society should respect peace and uphold the fundamental values of freedom, equality, solidarity, tolerance, shared responsibility, and respect for nature."

[3] Article 31 of the Tunis Agenda for the Information Society states that "We recognize that Internet governance, carried out according to the Geneva principles, is an essential element for a people-centered, inclusive, development-oriented and non-discriminatory Information Society. Furthermore, we commit ourselves to the stability and security of the Internet as a global facility and to ensuring the requisite legitimacy of its governance, based on the full participation of all stakeholders, from both developed and developing countries, within their respective roles and responsibilities."

Article 19[4] Paragraph 3 (regarding "freedom of expression") of the International Covenant on Civil and Political Rights. This move of the Human Rights Council paved the way for the development of network neutrality principles.

Following the United Nations' recognition of Internet access as a fundamental human rights, its affiliated organizations started stimulating network neutrality principles. For example, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) affirmed that the principle of "freedom of expression" must apply not only to traditional media but also to the Internet. Net neutrality regulation would have one of the major implications for freedom of expression online. UNESCO further stated that freedom of expression should be protected by legal and regulatory measures that balance a variety of potentially conflicting values and interests in a complex global ecology of choice (Dutton et al., 2011, p. 5). Moreover, the United Nations Children's Fund (UNICEF) expressed concerns about the debate over whether the Internet is safe for children; UNICEF regarded net neutrality as the ethical standard that the private sector should prioritize when providing Internet access to children (UNICEF, 2017, p. 129). UNICEF also proposed that governments should enshrine and uphold the principle of network neutrality that all Internet traffic should be treated equally, as well as maintain fair and impartial systems for governing telecommunications (UNICEF, 2018, p. 10). In this regard, the United Nations and its affiliated organizations have consistently advocated the network neutrality principles as part of the right to Internet access and freedom of expression, both of which are recognized as fundamental human rights.

The Organization for Economic Co-operation and Development (OECD) pointed out that there was no standardized approach to network neutrality and that policy frameworks differed from one country to another. OECD member countries have implemented one of the three net neutrality policy approaches: the legislative approach, the co-regulation approach, and the non-regulation approach (OECD, 2015, p. 186). Zero-rating practices have emerged as a prominent novel strategy that has received much attention in the framework of network neutrality. From an economic standpoint, the impact of zero-rating on consumers' welfare

[4] Article 19 of the International Covenant on Civil and Political Rights contains substantive details as outlined below;
1. Everyone shall have the right to hold opinions without interference.
2. Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice.
3. The exercise of the rights provided for in paragraph 2 of this article carries with it special duties and responsibilities. It may therefore be subject to certain restrictions, but these shall only be such as are provided by law and are necessary:
   (a) For respect of the rights or reputations of others;
   (b) For the protection of national security or of public order, or of public health or morals.

could be either beneficial or detrimental. Zero-rating might provide consumers with unrestricted access to specific services and applications, but it could also reinforce the market's dominance of telecommunications services, content providers, and application providers. The outcomes of adopting zero-rating schemes might fluctuate across various markets as they are considerably impacted by the conditions prevailing in each specific national market (OECD, 2019, p. 4). Some countries have laid out a case-by-case approach for overseeing zero-rating programs, such as the United States and member states of the European Union (Belli, 2016, p. 19, 171). There have been only a few countries that have made explicit legislation against zero-rating as anti-competitive behavior or contravening national network neutrality regulations, such as Chile or India. (Jirakasem & Smerchuar, 2021) Nonetheless, there had been no single significant court ruling on zero-rating acts under net neutrality principles until the CJEU's judgment on September 15, 2020.

As the country that first developed the terminology and concept of net neutrality, the United States has no network neutrality-specific legislation in place and has heavily relied on a complaint system lodged with the sector regulator. The discussion in the United States of legislative and regulatory proposals to impose net neutrality culminated in the adoption by the Federal Communications Commission (FCC) of the "2010 Open Internet Order," which laid down three basic rules for the freedom and openness of the Internet: transparency, no blocking, and no unreasonable discrimination (Cave, 2011, p. 3). The 2010 Open Internet Order tried to prevent Internet Service Providers (ISPs) from blocking or slowing down consumer access to content on the Internet, but still left the possibility that ISPs might create a priority lane for certain content providers. In later years, President Barack Obama called on the FCC to implement the strongest possible rules to safeguard the net neutrality principle. As a result, in February 2015, the FCC intensified the old 2010 rule's detail and issued a new regulation, known as the "2015 Open Internet Order." The 2015 rule reclassified broadband Internet as a "telecommunication service," the scope of which applied to both fixed and mobile broadband Internet access services. In 2017, under the government of President Donald Trump, the FCC reexamined the regulatory framework established by the 2015 Open Internet Order and embraced a light-touch regulatory approach, as well as recategorizing broadband Internet access service from a common carrier to an information provider (Figliola, 2021, p. 10). In April 2024, under the administration of President Joe Biden, the FCC voted to restore the policy established in 2015 during the Obama era and then repealed in 2017 under the Trump administration. (Ingram, 2024) In summary, the network neutrality regulation framework in the United States has been a policy-based uncertainty issue, which the FCC has accounted for on a case-by-case basis.

In Asia, the Republic of Korea has recently encountered a case against a global player in an Over-the-top (OTT) media service challenging the country's net neutrality legislation, but the court rejected the global player's claims and arguments. In August 2020, Netflix, Inc., and its Korean subsidiary filed a lawsuit with the Seoul Central District Court to request that Netflix was not required to pay for network costs that SK Broadband, Inc.,[5] claimed to have installed interconnection infrastructures for an efficient distribution of Netflix's content and quality of services. Netflix maintained that it had no obligation to negotiate or pay for the viewer-side network's transmission, operation, expansion, or use. Furthermore, the OTT service provider insisted that imposing network usage fees only on specific services contravened the network neutrality principle. The Seoul Central District Court rendered a verdict on June 25, 2021, dismissing the argument about net neutrality and confirming that it was mandatory for Netflix to pay these expenses. The exact amount and payment procedure were subject to discussion between the two companies. Netflix subsequently appealed the decision on November 5, 2021. However, on September 18, 2023, SK announced in a joint statement with Netflix that they had reached a mutual agreement to develop a strategic partnership to resolve and end all disputes (Jitsuzumi, 2024, p. 3). Despite having explicit written legislation relating to net neutrality, the Seoul Central District Court dismissed the case without providing an elaborative explanation of why the case did not fall under network neutrality principle, nor did it concern zero-rating. Meanwhile, other research suggested that the Korean media industries perceived Netflix as both a prosperous investor that might facilitate the creation of diverse content and the global introduction of Korean products, as well as a rival that could pose significant risks to domestic media production. The increasing prevalence of Netflix in the domestic market could potentially reduce Korean media production's role as mere platform subcontractors (Kim, 2022, p. 1508). As a result, the case between Netflix and SK Broadband in the Republic of Korea did not provide legal interpretation or precedent for Korean network neutrality law and related subordinate legislation.

5. Terminology

This paper introduces two primary specific terminologies: network (or net) neutrality and zero-rating. Both emerging terms have been controversial topics for discussion in global telecommunications circles for years. This debatable issue has revolved around Internet regulation and policy. Starting with network neutrality, the principle simply means that all Internet traffic

[5] SK Broadband is a Korean telecommunications company providing media, communications, and data services to residential, business, governmental, and wholesale customers. It is one of the largest broadband Internet access providers in the Republic of Korea.

should be treated equally (Allen et al., 2017, p. 6). Tim Wu, a legal professor, introduced the term "network neutrality" to describe a principle of non-discrimination. The professor demonstrated that the fundamental principle of network antidiscrimination regime was to grant users the right to use non-harmful network attachments or applications, and to guarantee innovators the corresponding freedom to supply them (Wu, 2003, pp. 167-168). The principle was historically from the "common carrier" doctrine, which aimed to prohibit network operators from abusing their position as gatekeepers by setting up discriminatory practices, allowing them to profit from privileging some type of content and group of people (Pickard & Berman, 2019, p. 14). In the current era, net neutrality applies to Internet Service Providers (ISPs), including mobile and telecom operators who must treat all data and content online equally to ensure the free flow of information and unrestricted access (Carrillo, 2016, p. 368). One essential tenet of this principle is that the ability of Internet users to access content and services should not be affected by any differentiation through pricing, quality of services, or blocking of access (OECD, 2015, p. 185). On the other hand, ISPs should not create or prioritize the "fast lane" Internet for certain favored companies that pay for better access to customers (Hindman, 2018, p. 171-172).

The telecommunications industry applies the term "zero-rating" when some of the traffic sent and received by customers over the Internet is unmetered, allowing them to use the Internet as much as they want for a basic cost rather than paying the amount used. Internet users subscribing to zero-rating packages will not be charged by the minute, but they will be given unmetered access to the Internet for a fixed fee. Subscribers will have unlimited access to certain online content or services at set prices under zero-rating plans, with the selected content or services rated at no additional cost to customers. However, not all online content or applications are included; only those chosen by the ISPs can profit from this discriminatory marketing strategy. There are a minimum of four zero-rating practice models: single-site or single-service model, sponsored data model, compound model, and faux (or non-selective) model (Carrillo, 2016, pp. 372–383). First, in the single-site or single-service model, a content provider establishes agreements with one or more telecom companies to offer users free access to a particular version of its own site or service, such as Facebook Zero, Google Free Zone, or Wikipedia Zero. Second, in the sponsored data model, content or application providers reach out to telecom service providers and pay them to provide a range of services or information to users for free. For instance, a global music streaming application may sponsor a telecommunications provider to enable the latter to offer that music streaming application to consumers at no cost; all associated expenses are under the responsibility of the music

streaming app. Third, in the compound model, sponsor companies partner with a telecom service provider to grant subscribers access to a bundle of selected sites or applications. In contrast to the sponsored data model, the compound model does not necessitate payment from or to telecoms. Telecoms have the option to forego this price in exchange for providing enhanced offerings to customers and expanding their subscriber base. Fourth, in the faux (or non-selective) model, a content provider coordinates with one or more telecommunications companies to provide users with restricted amounts of free data in exchange for fulfilling specific criteria, such as viewing advertisements or installing an application.

The contentious argument is that zero-rating practices may violate the essence of the net neutrality principle; the latter accentuates non-discrimination in Internet accessibility, while the former is obviously a discriminatory marketing scheme. On one hand, the notion of network neutrality adheres to the core values of basic human rights. Conversely, zero-rating techniques illustrate the viewpoint of free market mechanisms in a capitalist economy. In a highly competitive telecommunications market, numerous zero-rating packages have the potential to benefit consumers because there will be product and pricing differentiations from which customers can choose what best meets their demands. Contrarily, there are harmful risks that zero-rating acts can possibly distort competition among content or application providers and limit users' choice of content. Obviously, non-zero-rated services will struggle to compete with those zero-rated ones. This tendency will distort competition among content or application providers that hope to persuade ISPs to incorporate their offerings in the ISPs' zero-rated plans. As a result, ISPs will be in the position to pick winners and losers online by favoring some content or applications over others. At this point, the ISPs will become the Internet's gatekeepers and may restrict access to any content or applications entirely (European Commission, 2017, p. 114–115). Regarding the consumers' side, subscribing to specific zero-rating promotions will direct users to the walled garden's selection of content. There has never been a consensus in the debate over net neutrality and zero-rating practices. Thus, the Court of Justice of the European Union's first benchmark decision on network neutrality principles addressing zero-rating approaches in 2020 piques the excited curiosity of telecommunications spectators throughout the world.

6. Results

The results of this study are divided into three main parts: principles of network neutrality and zero-rating practices; the Court of Justice of the European Union's first judgment on network neutrality principles and zero-rating practices; and network neutrality and zero-rating in Thailand,

respectively. The first section sums up core issues of this research regarding the controversial paradox between network neutrality and zero-rating principles. Second, an elaborated scrutinization on the Court of Justice of the European Union's decision will be anatomized in expansive aspects and details. Third, a succinct investigation of the current circumstances of network neutrality and zero-rating riddles in Thailand will be recapitulated to show an overall picture.

6.1 Principles of network neutrality and zero-rating practices

Network neutrality principles ensure equal treatment of all Internet traffic, promote non-discrimination, and grant Internet users the right to use reasonable traffic management network attachments or applications. Meantime, zero-rating practices have emerged as an increasingly prevalent and novel technique that has garnered significant attention in the discourse surrounding network neutrality. The point in question is that zero-rating tactics may infringe upon the core principle of net neutrality. Net neutrality accentuates equal treatment in terms of Internet access, whereas zero-rating practices are clearly a discriminatory marketing strategy. The argument surrounding net neutrality and zero-rating approaches has never reached a consensus. ISPs, content providers, and consumers are the three key players in the Internet business landscape. The principle of network neutrality prohibits ISPs from unjustly obstructing or disadvantaging customers' access to broadband services or online content, as well as content providers' capacity to offer Internet-based content. From this perspective, the Internet functions as a battleground for competition among diverse developers, companies, and service providers, all vying for the attention and engagement of end users. In this scenario, the Internet platform should maintain neutrality to guarantee that competition is meritocratic. If the Internet were centrally controlled by the ISPs rather than by the peripheral content of developers and consumers, the ISPs would dominate innovation (Schuleman, 2018, p. 151). In fact, market forces have primarily influenced the development of Internet-based business models and network management practices, and commercial agreements with ISPs are largely unregulated in most of the telecommunications industry around the world (Layton, 2017, p. 49). Concurrently, there are concerns that stringent network neutrality regulation may limit innovation to a narrow range of opportunities, specifically those that align with the equitable treatment of all data packets. In addition, the prohibition of charging for higher quality of service on the public Internet may reduce incentives for ISPs to innovate in services that are contingent on differentiated network support (Bauer & Knieps, 2018, p. 175). As explained above, net neutrality regulation, scalability and improvement in innovation, and competition among Internet-based business players are intercorrelations that will consequently affect consumer welfare.

6.2 The Court of Justice of the European Union's judgment on network neutrality principles and zero-rating practices

An attention-grabbing legal case between Telenor Magyarország Zrt. ('Telenor,' the second-largest mobile operator in Hungary) and Nemzeti Média- és Hírközlési Hatóság Elnöke[6] ('NMHH'—the National Media and Infocommunications Authority of Hungary) marks the first lawsuit requesting an interpretation of Article 3 of Regulation (EU) 2015/2120 of the European Parliament and of the Council of November 25, 2015 laying down measures concerning open Internet access. Regulation 2015/2120, also known as the Open Internet Regulation, has been criticized for its ambiguous wording and lack of concrete enforcement. Arguments on network neutrality frequently bring up the topic of zero-rating techniques. Despite this, the Open Internet Regulation does not explicitly feature the exact concept of zero-rating practices in its substantial legislation. The Telenor lawsuit against NMHH thus sets a precedent for interpreting the vagueness around net neutrality and zero-rating principles. In this section, the author attentively summarizes a related provision of Regulation 2015/2120, which is the main legislation for network neutrality principles, as well as the overall description of the disputes and judgment.

6.2.1 The related law: Article 3 of Regulation (EU) 2015/2120 of the European Parliament and of the Council of November 25, 2015[7]

Article 3 of Regulation 2015/2120, entitled "Safeguarding of Open Internet Access," states in paragraphs 1 to 3 thereof:

"1. 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.

2. Agreements between providers of internet access services and end users on commercial and technical conditions and the characteristics of internet access services such as price, data volumes or speed, and any commercial practices conducted by providers of internet access services, shall not limit the exercise of the rights of end users laid down in paragraph 1.

[6] The CJEU's Judgment of September 15, 2020, Telenor Magyarország Zrt. v Nemzeti Média- és Hírközlési Hatóság Elnöke, is available at https://curia.europa.eu/juris/documents.jsf?num=C-807/18

[7] Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 can be accessed at https://eur-lex.europa.eu/eli/reg/2015/2120/oj

3. Providers of internet access services shall treat all traffic equally, when providing internet access services, without discrimination, restriction or interference, and irrespective of the sender and receiver, the content accessed or distributed, the applications or services used or provided, or the terminal equipment used.

The first subparagraph shall not prevent providers of internet access services from implementing reasonable traffic-management measures. In order to be deemed reasonable, such measures shall be transparent, non-discriminatory and proportionate, and shall not be based on commercial considerations but on objectively different technical quality of service requirements of specific categories of traffic. Such measures shall not monitor the specific content and shall not be maintained for longer than necessary.

Providers of internet access services shall not engage in traffic-management measures going beyond those set out in the second subparagraph, and in particular shall 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:

(a) comply with Union legislative acts, or national legislation that complies with Union law, to which the provider of internet access services is subject, or with measures that comply with Union law giving effect to such Union legislative acts or national legislation, including with orders by courts or public authorities vested with relevant powers;

(b) preserve the integrity and security of the network, of services provided via that network, and of the terminal equipment of end users;

(c) prevent impending network congestion and mitigate the effects of exceptional or temporary network congestion, provided that equivalent categories of traffic are treated equally.

6.2.2 The Disputes between Telenor Magyarország Zrt. versus Nemzeti Média- és Hírközlési Hatóság Elnöke

Telenor, with its roots in Hungary, is an influential player in the telecommunications industry and a provider of Internet access services. Two bundles, “MyChat” and “MyMusic,” are available to Telenor’s prospective clients. MyChat is a package that allows subscribing customers to purchase 1 GB of data and use it without restriction until the data is exhausted. This package allows the subscribing clients to access an extra bundle of applications and services without restriction. This MyChat “zero tariff” Internet package exempts bundling subscriptions

of six exclusive online platforms, specifically Facebook, Facebook Messenger, Instagram, Twitter, Viber, and WhatsApp, from deduction from the allocated 1 GB data limit. Moreover, the MyChat package provides that once the 1 GB of data has been used up, subscribers may continue to use those six specific applications without restriction, whereas measures slowing down data traffic are applied to the other unbundling applications and services. Another bundle package of Telenor, MyMusic, is a bundle that comes in three variations: "MyMusic Start," "MyMusic Nonstop," and "MyMusic Deezer." Purchasers with a MyMusic Internet access package are the only ones who can access these features. With the bundle, subscribers may listen to music online via six different radio stations and four different music streaming applications: Tidal, Apple Music, Deezer, and Spotify. The bundling format purchased does not reduce the amount of data used for those zero-tariff applications and services. If a subscriber uses up their allotted data volume in the MyMusic package, they can continue using the bundling applications and services without any limitations, while the data traffic of other unbundling applications and services may be throttled or blocked. After initiating two procedures to ascertain whether MyChat and MyMusic, respectively, comply with Article 3 of Regulation 2015/2120, the NMHH finds that those two zero-rating practices introduce traffic management measures that do not abide by the obligation of equal and non-discriminatory treatment laid down in Article 3(3) of that regulation. Consequently, the NMHH orders Telenor to terminate those measures. The President of the NMHH subsequently affirmed both decisions, determining that it is not necessary to evaluate the impact of the traffic management measures on the exercise of end users' rights as stated in Article 3(1) of Regulation 2015/2120 to assess their compatibility with Article 3(3) of the same regulation.

Afterward, Telenor brought legal action against the NMHH decisions before the Budapest High Court. The Budapest High Court recognizes the importance of Regulation 2015/2120 in adopting an emerging legal principle-Internet neutrality. So, the High Court holds the disputes pending, acknowledging that the cases will eventually raise to the world novel legal issues relating to a central provision of network neutrality. The High Court remarks that Article 3(1) and (2) of Regulation 2015/2120 aim to protect a variety of end users' rights to Internet access services and prohibit ISPs from implementing agreements or commercial practices that restrict the exercise of those rights. While Article 3(3) establishes the general obligation of ISPs to treat Internet traffic equally and without discrimination. However, the High Court could not determine from the wording of that regulation whether packages made available by ISPs through agreements concluded with their customers and which provide:

(i) that those customers may benefit from a "zero tariff," enabling them to use certain specific applications and services without restriction, without that use being deducted from the data volume purchased, and

(ii) that once that data volume has been used up, measures blocking or slowing traffic are to be applied to the other applications and services available; fall within the scope of Article 3(2), Article 3(3), or Article 3(2) and (3) of that regulation. The High Court also indicates that a methodology to be applied to ascertain whether the conduct is in compliance with Regulation 2015/2120 cannot be scrutinized from the wording of Article 3(2) and (3) once it has been elaborately interpreted which of the two paragraphs are applicable to the conduct in question. For these reasons, the High Court decides to stay the proceedings and refers the aforementioned questions to the Court of Justice of the European Union (CJEU) for a preliminary ruling. Before the main proceedings, the CJEU briefly summarizes that the Budapest High Court asks whether the zero-tariff cases in question are incompatible with Article 3(2) of Regulation 2015/2120 and, alternatively or cumulatively, with Article 3(3) of the Regulation.

6.2.3 The CJEU's judgment

In the main proceedings, the information demonstrated to the CJEU can classify four characteristics of Telenor's Internet packages. First, an Internet Service Provider (ISP) offers its Internet packages for sale to potential consumers. The telecom operator implements the packages via bilateral contracts with interested customers. Second, these packages grant subscribers the unrestricted right to utilize all available applications and services up to the data limit specified in their purchased tariff. Furthermore, consumption of exclusive applications and services covered by a zero tariff does not contribute to this limitation. Third, the packages ensure that once the allocated data volume has been depleted, zero-rating subscribers are able to continue employing the designated applications and services without any restriction. Fourth, once the data volume included in the packages has been used up, the ISP applies measures to each customer that result in blocking or slowing down Internet traffic arising from the use of any non-zero-tariff applications or services. With respect to the European Union's regulation of net neutrality-Regulation 2015/2120, the CJEU suggests that Article 3(2) must be interpreted in conjunction with Article 3(1). The rights that Article 3(1) serves to safeguard for end users of Internet access services intend to be exercised "via providers of Internet access

service." Additionally, Article 3(2) mandates that such a service must not impose any restrictions on the exercise of those end users' rights. The CJEU finds that an agreement in which a particular customer subscribes to an Internet package that leads to unrestricted access to only certain applications and services covered by a zero tariff after the data volume included in the purchased tariff has been consumed is likely to be in violation of the exercise of the rights outlined in Article 3(1). Moreover, the compatibility of such an agreement with Article 3(2) needs a multifaceted evaluation on a case-by-case basis from National Regulator Authorities (NRAs). Considering the cumulative effect of zero-rating agreements in Telenor's Internet packages, MyChat and MyMusic fall within the scope of a commercial practice defined in Article 3(2). Both the packages are likely to increase usage of certain specific applications and services, namely those that may be accessed without restriction on a zero tariff once the data volume included has been reached. Simultaneously, the two packages tend to lessen deployment of other non-zero-rated applications and services, having regard to traffic management measures by which the ISP makes that accessibility technically more difficult. The CJEU elaborates that if a massive number of clients sign subscription agreements for zero-rating packages, there is a high possibility that the combined impact, due to their scale, will drastically constrain the exercise of end users' rights or potentially undermine the essence of the rights in question.

As regards Article 3(3) of Regulation 2015/2120, the first subparagraph of that provision imposes on the ISP a general obligation of equal treatment, without discrimination, restriction, or interference with Internet traffic, from which derogation is not possible in any circumstances. The CJEU rules that the Internet access service provider can still implement reasonable traffic management measures under Article 3(3)'s second subparagraph. However, this option is conditional on such measures being based on "objectively different technical quality of service requirements of specific categories of traffic" rather than "commercial considerations." Any measure of an ISP with respect to Internet end users that, without objective differences, causes the various content, applications, or service providers to not be treated equally and without discrimination must be considered "commercial considerations." All actions that block, slow down, change, restrict, interfere with, degrade, or favor certain applications or services are not reasonable according to the second subparagraph of Article 3(3) unless they have been put in place for a fixed duration and are required for an ISP to (i) comply with a legal obligation, (ii) preserve the network's integrity and security, or (iii) prevent or remedy network congestion.

Otherwise, those practices must be regarded as incompatible with Article 3(3). To identify an incompatibility, the CJEU prescribes that no assessment of the impact on Internet end users' rights is necessary, as Article 3(3) does not call for such an assessment to evaluate compliance with the ISP's general obligation. The Grand Chamber of the CJEU hereby judges that the referring cases from the Budapest High Court are incompatible with Article 3(2) of Regulation 2015/2120, read together with Article 3(1), where those packages, agreements, and measures blocking or slowing down traffic deter the exercise of end users' rights. The CJEU further establishes that the referring cases contradict Article 3(3) of the Regulation when the measures impeding or lowering Internet traffic flow are motivated by commercial incentives.

6.3 Network neutrality and zero-rating in Thailand

Research indicates that in markets with insufficient competition, zero-rating practices may adversely impact competition among different online content providers (OECD, 2019, p. 9). The practices can contribute to market dominance when the content of a dominant player is exempt from data charges while the content of its competitors is not. To deal with the effects of zero-rating arising from its impact on competition amongst ISPs and content providers, co-existence of net neutrality regulations and competition assessments needs to be taken into account (European Commission, 2017, p. vi). In Thailand, a legislative approach towards net neutrality and zero-rating regulations have never been introduced. Even though a limited number of academic discussions regarding net neutrality and zero-rating exist, the national regulator still follows the free market mechanism. One Thai article reveals that only Thai mobile operators with their own telecom network are able to offer zero-rating services, including bundling and unbundling zero-rating mobile service packages. Major Thai mobile operators differentiate those zero-rating packages based on factors like Internet speed, data capacity, and accessibility to zero-rated content. This article raises a question about how Thailand should regulate zero-rating practices, which will depend on the national network neutrality policy the national regulator may adopt (Santri, 2019, p. 256). The other research suggests that Thailand has been more suitable for a non-net neutrality position, with regulations that are either ex-post or light-touch, until there is a compelling incentive to make an overhaul (Jirakasem & Smerchuar, 2021, p. 138). Recently, there has been a growing motivation to take action, particularly due to the aftermath of controversial mergers among Thai mobile operators that possess telecom networks, for which the author will provide a contextual analysis in the discussion section.

7. Discussions

In this part, the author brings forth three topics for discussions: discussion on network neutrality principles and zero-rating practices; academic comments on the ruling adjudicated by the Court of Justice of the European Union (CJEU); and network neutrality and zero-rating practices' status quo analysis in Thailand. The section begins with a condensed review of network neutrality principles and zero-rating contradiction. As for the academic commentary on the verdict, the discourse concerns not only substantive interpretation of the wording behind the Open Internet Regulations but also expansive areas of related fields of study. As for Thailand's network neutrality and zero-rating situation, the author concisely portrays points of concern after the skeptical merger and acquisition among main players in the Thai telecommunications industry.

7.1 Discussion on network neutrality principles and zero-rating practices

Zero-rating practices can have both positive and negative effects on consumers' welfare. While the practices can provide unhindered access to services and applications, they can also reinforce market dominance. Network neutrality standpoint aligns with basic human rights; on the other hand, zero-rating tactics demonstrate free market mechanisms in a capitalist economy. In a competitive telecommunications market, zero-rating packages can benefit consumers by offering product and pricing differentiation. However, in a non-competitive telecom market, these acts can distort competition among content or application providers, as well as limit Internet users' choice of content. As a result of adopting a zero-rating policy, ISPs may have the ability to act as gatekeepers, limiting users' access to certain applications or content. The regulatory framework for zero-rating schemes varies across the multiplicity of markets, with some countries implementing a case-by-case approach and some jurisdictions, such as Chile and India, having explicit legislation against zero-rating as anti-competitive behaviors. As for the European Union, the entity has an explicit regulation advocating network neutrality, but there is nowhere in its law mentioning "zero-rating." According to the CJEU's decision, the court does not per se prohibit zero-rating practices. Instead, the CJEU leaves the door open for a case-by-case examination by each member state's national regulatory authority to evaluate the pros and cons.

7.2 Academic discussion on the CJEU's judgement

In its press release, the CJEU explains that, to protect Internet users' rights and to treat traffic in a non-discriminatory manner, Internet access service providers cannot favor certain applications and services by offering packages that give them a zero tariff and subject other applications and services to traffic blocking or slowing down (Court of Justice, 2020, p. 1). There have been some academic reviews criticizing the CJEU verdict. One legal article says that in the CJEU's opinion, commercial practices and agreements involving "zero tariffs" are not prohibited per se. This concept aligns with the Body of European Regulators for Electronic Communication's (BEREC) assertion that the rights of Internet end users may be impacted differently by diverse variations of zero-rating practices, some of which are comparatively uncontroversial. The CJEU's ruling and the BEREC's guidelines[8] indicate that zero tariffs may be incompatible with Article 3(2) of the Regulation if they result in the explicit restriction of end-users' choices of content and the slowing down or barring of Internet traffic. National Regulatory Authorities (NRAs) are the ones responsible for evaluating the incompatibility of Article 3(2). This assessment requires analyzing the market share of the businesses involved and evaluating the impact of their conduct on the related market. Nevertheless, if the traffic control methods implemented by an ISP contravene Article 3(3) of the Regulation, there is no need to analyze their impact on the exercise of end users' rights. Thus, if the NRAs ascertain whether a traffic management measure applied by an ISP is in line with Article 3(2), Article 3(3), or both provisions, it is most sensible to address the contradiction with Article 3(3) first, as this does not necessitate a complicated and expensive market assessment (Nałęcz, 2021, pp. 115-116). Another legal article concurs with the previous one, emphasizing that, from the CJEU's judgment, a failure to comply with the requirements of Article 3(3) of the Regulation automatically results in the failure to fulfill the obligations of Article 3(2). In consequence, there is no need for NRAs to perform case-by-case assessments. The CJEU establishes a strict interpretation of the European Union's net neutrality regulation from this point forward (Samek, 2021, p. 197). Another legal scholar underlines that the CJEU's decision establishes a distinct hierarchy between Article 3(3) and Article 3(2) of the Regulation, with Article 3(3) preceding Article 3(2) (Schewick, 2022, p. 12).

[8] The BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules (also known as "the BEREC Net Neutrality Guidelines"), published in June 2016, is accessible at https://www.berec.europa.eu/en/document-categories/berec/regulatory-best-practices/guidelines/berec-guidelines-on-the-implementation-by-national-regulators-of-european-net-neutrality-rules.

Other than critiques on an interpretation of the wording under Regulation 2015/2120, there are some constructive recommendations. One case analysis notes that the CJEU's verdict offers essential clarification regarding the inconsistency between certain zero-rating products, which involve data traffic throttling, and the tenet of net neutrality. Yet, the CJEU gives no clear answers to several major issues about zero-rating techniques that are accessible to all applications within a specific category and are devoid of the restriction or deceleration of Internet traffic. For instance, the verdict fails to take into account two scenarios: (i) the practice of zero-rating products that charge a higher price for data traffic from a specific application or group of applications but do not block or slow down the traffic once the data limit is reached; and (ii) the existence of "open zero-rating programs" that allow all applications within a specific category to be zero-rated (Maller & Asakura, 2021, p. 63). One case note reveals that the CJEU analyzes the popularization effect that zero-rating practices have on the ISPs, and how this contributes to reducing online diversity remains unexplored. The CJEU should henceforth consider how monopolistic control of a small number of ISPs could impede constitutional principles such as competition, pluralism, and diversity. Moreover, the Telenor case reasoning does not make any reference to the provisions of the European Union's Charter of Fundamental Principles, which include the rights to freedom of expression and freedom to conduct business (Layton, 2017, p. 16, 18). A competition law review delineates that by adhering to the principle of net neutrality, non-discriminatory zero-rating offers can potentially benefit consumers by encouraging the consumption of broadband services and the development of product differentiations without necessarily excluding content providers. Therefore, it is vital to revise the net neutrality regulation to evaluate such zero-rating practices through an ex-post case-by-case assessment (Colangelo & Torti, 2021, p. 143). There is an economic assessment pronouncing that the CJEU's decision is harmful to society because the prohibition does not allow positive welfare effects and does not prevent any potential harm in return. The assessment instructs that ex-ante regulation is justified if: there is empirical evidence regarding the behavior in question showing that the practice has a high tendency to be harmful; the harm caused by the behavior is significant; and the ex-post handling of cases and resolving of problems would be too costly compared to ex-ante regulation, or the harm would be irreparable (Pápai & Nagy, 2020, p. 185).

7.3 A contextual analysis of network neutrality and zero-rating in Thailand

A noteworthy merger between True Corporation (True) and Total Access Communication (Dtac), Thailand's second and third largest mobile network operators, makes the combined entity the largest one ahead of the market leader Advanced Info Service (AIS) and reduces the mobile provider market from an oligopoly to a duopoly. (Rasmussen, 2022) After the True and Dtac merger, AIS received approval from the National Broadcasting and Telecommunications Commission (NBTC) to take over Triple T Broadband (3BB), a major broadband Internet service provider. After the acquisition with 3BB, AIS has become the largest player among the fixed broadband Internet providers. The two merger and acquisition cases among major players in Thailand's telecommunications markets obviously cause negative concerns to Thai society. According to a study, the True and Dtac merger significantly reduces market competition, leads to higher prices, lessens consumer choices, and lowers service quality. The merger incurs a severe tendency to increase the barrier to entry by Mobile Network Operators (MNOs) and Mobile Virtual Network Operators (MVNOs). Similarly, the acquisition 3BB by AIS tends to unavoidably affect product bundling packages and intensify the barrier to entry by small entrepreneurs who compete at the retail level in the fixed broadband Internet market (Benyaapikul & Manachotphong, 2023, p. 5, 21). An empirical post-merger survey[9] carried out by the Foundation for Consumers indicates that 81% of consumers face problems after six months of the True and Dtac merger. The most encountered problems appear to be slower internet connection, a higher price with no differences, limited choices of mobile bundled packages, or an insufficient Internet data cap (Foundation for Consumers, 2023). In addition, the National Economic and Social Development Council specifies in its report that the NBTC, as the telecommunications sector regulator, should implement a strict regulatory regime for the telecommunications market in order to protect consumers. Sectoral law reviews will help enhance the NBTC authority. (National Economic and Social Development Council, 2024) Despite the potential detrimental effects of the abovementioned mergers, the major Thai telecom service providers continue to relentlessly implement zero-rating schemes for their own applications, such as "AIS PLAY[10]", "TrueID[11]", or "dtac-music[12]", while barriers to entry are high-wall obstacles to relevant markets' new entrants and consumer rights are harmfully challenged.

[9] The survey was held during November 9–23, 2023, with 2,924 Thai respondents

[10] Further information on the "AIS PLAY" application is available at https://www.ais.th/play/faqs.html

[11] Further information on the "TrueID" application is available at https://help.trueid.net/th-th

[12] Further information on the "dtac-music" application is available at https://music.dtac.co.th/render/home/portal#/home

A Thai online media outlet highlights some intriguing aspects of network neutrality and zero-rating practices in the Thai telecommunications market. (NewsXtra, 2024) According to a recent media report, large Thai Mobile Network Operators (MNOs) offer mobile Internet packages that incorporate lifestyle marketing strategies, allowing for customization and personalization. Customers will be able to choose services or applications that best suit their behaviors to be included in their personal Internet packages, with some privileges such as a special parking lot zone in shopping centers or discounts for movie tickets. These personalized Internet packages are expected to stimulate competition among MNOs, as they aim to satisfy their clients by providing faster Internet connectivity or better quality of service for those customized packages. In this scenario, net neutrality regulation will be imperative to maintain an equal and fair environment for the market. Thailand has never considered adopting net neutrality principles; however, in the long run, lifestyle marketing schemes may cause discrimination or restriction to the mobile Internet market. Along with the idea that in the future, Internet access will be perceived as one of the public goods that are indispensable to citizens, the National Broadcasting and Telecommunications Commission (NBTC), as the regulator of Thailand's telecommunications sector, should start contemplating its position towards network neutrality regulation. Nevertheless, net neutrality principles have a sophisticated nature that needs multifaceted understanding. The principles entangle socio-political circumstances, related-market structural complexity, or stakeholders' relations that require both quantitative and qualitative research (Limudomporn, 2017, p. 10, 32-33). In case there are enough evidence-based or research-based indications to implement a legislative approach for network neutrality regulation, the NBTC already has the authority under Section 21 of the Telecommunications Business Act B.E. 2544 (2001)[13] to issue relevant ex-post or ex-ante regulations in order to combat anti-competitive behaviors in the telecommunications market.

[13] Section 21 of the Telecommunications Business Act B.E. 2544 (2001) manipulates that "In the telecommunications business operation, other than being subject to the law on trade competition, the Commission shall prescribe specific measure according to the characteristics of the telecommunications business operation to prevent the licensee from carrying out any act that is monopolistic, or that reduces or limits the competition in the provision of telecommunications service in the following matters:
(1) subsidization of services;
(2) holding in businesses of the same category of service;
(3) abuse of market power;
(4) anti-competition behavior;
(5) protection of small entrepreneurs.

8. Conclusion

The issue of zero-rating poses a dilemma that questions the core principles of network neutrality in contrast to the value of adhering to a free market. In one aspect, a zero-rating activity is anti-competitive behaviour and may contravene the network neutrality principles. In another aspect, it can be perceived as pro-competitive behavior potentially benefiting Internet users under the free market mechanism. The CJEU's first judgment assigns priority to neutral Internet traffic for end users and content providers, whereby the European Union's Open Internet Regulation imposes responsibility on ISPs to not deploy Internet traffic discrimination without objective technical quality of service requirements. In contrast, zero-rating packages are not per se illegal, but they rely logically on sophisticated case-by-case analysis by each country's national regulatory authority. Although Thailand has never taken earnest consideration towards a legislative network neutrality regime, the telecommunications sector is significantly affected by notable mergers among influential market players, causing disadvantages to both consumers and market competitors. It is time to conduct an in-depth analysis on existing laws or regulations such as the Regulation (EU) 2015/2120 of the European Parliament and of the Council of November 25, 2015 and all its related subordinate legislation since Thailand may confront the same predicament involving net neutrality and zero-rating controversy. The author is of the opinion that market analysis and empirical research are indispensable to evaluating real situations to contribute to the multifaceted information needed for the telecommunications regulator and policymakers.

9. Recommendations

9.1 Recommendation for future studies

How and to what extent zero-rating practices can be implemented in the telecoms market will depend on a national policy on network neutrality principles, the regulation approach of which differs country by country under multitudinous socio-political background, related-market structural complications, and all stakeholders' relations. Thailand should begin conducting in-depth research on both network neutrality principles and zero-rating practices since there has been an accumulation of concerns towards small competitors, new entrants, and consumers' welfare after the merger and acquisition in the telecommunications market. The terminology "network neutrality" is firstly mentioned in the United States, where the principle and historical

background have been developed and related policies have fluctuated depending on its political government. Some countries have enacted apparent national network neutrality laws that strictly prohibit zero-rating practices. Some countries have attempted to cooperate with all stakeholders by adopting a co-regulation approach. There are still many countries, including Thailand, that have largely observed the international discussions and still follow free market mechanisms. Now, it is imperative for Thai academic circles to learn from international experiences in all their diversity to develop a comprehensive understanding of the issues at stake.

9.2 Policy recommendation for digital communications

Because the issues embroil multidisciplinary fields of study, the National Broadcasting and Telecommunications Commission (NBTC) should encourage Thai academia to investigate all correlated areas so that the NBTC will gain enough wisdom to implement necessary policy, as well as raise awareness on these brand-new principles. Both laws and economics are indispensable areas that need to be explored. A scrutinization of existing laws and regulations, such as the European Union's Open Internet Regulation and all its subordinate legislation, including the Body of European Regulators for Electronic Communication's (BEREC) Guidelines on the Implementation by National Regulators of European Net Neutrality Rules, will be a valid reference to Thai jurisdiction. Not only does the European Union publish the Open Internet Regulation, but other jurisdictions such as the Republic of Korea or India also promulgate their own network neutrality laws, some of which have already been enforced. Studies from experienced jurisdictions will compile a variety of references for Thailand. Meanwhile, each country has its own market structure and condition, so Thailand needs to conduct a market assessment together with an analysis of the impact of zero-rating practices on consumers before the NBTC adopts any ex-ante or strict regulatory approach towards net neutrality or zero-rating acts. In this context, the theory of harm examination and consumer survey will offer additional insights into the market situation and consumer protection.

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