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Working Paper

Net neutrality exceptionality: A look into the Pacific Alliance countries during the COVID-19 Pandemic and lessons for Asia Pacific economics

ARTNeT Working Paper Series, No. 233

Provided in Cooperation with:

Asia-Pacific Research and Training Network on Trade (ARTNeT), Bangkok

Suggested Citation: Cáceres Bustamante, Javiera; Sánchez González, Ignacio A.; Muñoz Navia, Felipe (2024) : Net neutrality exceptionality: A look into the Pacific Alliance countries during the COVID-19 Pandemic and lessons for Asia Pacific economics, ARTNeT Working Paper Series, No. 233, Asia-Pacific Research and Training Network on Trade (ARTNeT), Bangkok, <https://hdl.handle.net/20.500.12870/6768>

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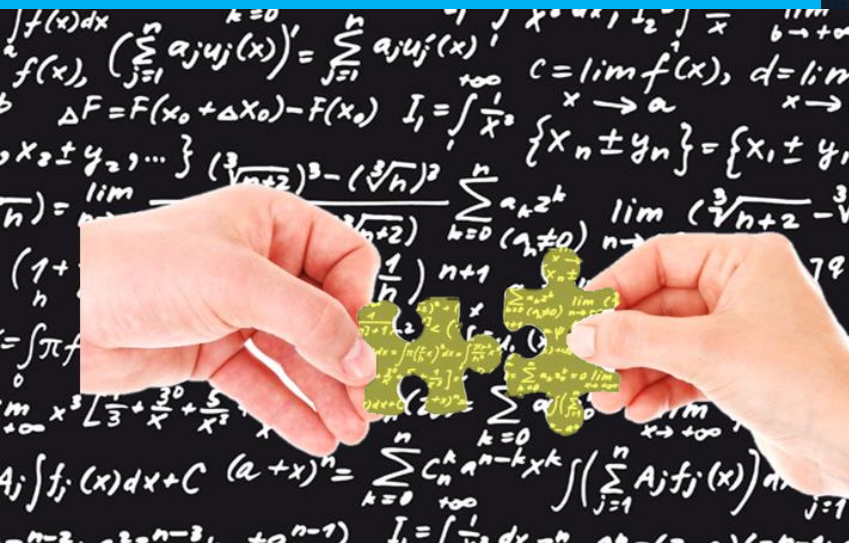
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Net Neutrality Exceptionality: A Look into the Pacific Alliance Countries during the COVID-19 Pandemic and Lessons for Asia Pacific Economics



Javiera Cáceres Bustamante
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ASIA-PACIFIC RESEARCH AND TRAINING NETWORK ON TRADE

Working Paper

No. 233 | 2024

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This paper is a policy research papers supported by the FEALAC funded project on “Support the strengthening of policies to monitor and promote the participation of MSMEs in cross-border goods and services e-commerce for inclusive and sustainable pandemic response and recovery in East Asia and Latin America”.

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ASIA-PACIFIC RESEARCH AND TRAINING NETWORK ON TRADE

WORKING PAPER

Net Neutrality Exceptionality: A Look into the Pacific Alliance Countries during the COVID-19 Pandemic and Lessons for Asia Pacific Economics

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Please cite this paper as:

Javiera Cáceres Bustamante, Ignacio Sánchez González, and Felipe Muñoz (2024). “Net Neutrality Exceptionality: A Look into the Pacific Alliance Countries during the COVID-19 Pandemic and Lessons for Asia Pacific Economics”, **ARTNeT Working Paper Series No. 233**, February 2024, Bangkok, ESCAP.

Available at <http://artnet.unescap.org>

Acknowledgement:

This paper is a submission for the 2023 ESCAP-UNCTAD-UNIDO-ARTNeT call for papers, under the theme “Unleashing Digital Trade and Investment for Sustainable Development.” The author is grateful for the valuable feedback and support from the peer reviewers at the ESCAP Secretariat, whose constructive input was pivotal in refining and finalizing this work. Additionally, this paper was benefited from the ESCAP implementation of the FEALAC-funded project on “Supporting the Strengthening of Policies to Monitor and Promote the Participation of MSMEs in Cross-Border Goods and Services E-Commerce for Inclusive and Sustainable Pandemic Response and Recovery in East Asia and Latin America.”

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Abstract

The growing relevance that the Internet has taken on the development of people, businesses, and the digital economy, as well as its influence in achieving the United Nations Sustainable Development Goals, has motivated States to generate different regulatory frameworks to ensure the proper functioning of the network. One of the most outstanding elements of these frameworks is ensuring access and use without discrimination for those on the net through the principle of net neutrality. This principle has been embodied in domestic and international regulations, including preferential and free trade agreements. Nevertheless, in the context of the COVID-19 crisis, some governments needed to deviate from this principle due to the increased Internet usage for education, health, and teleworking-related purposes. In that context, this paper analyses how the Pacific Alliance economies (Chile, Colombia, Peru, and Mexico) have regulated and managed the net neutrality principle in the COVID-19 context and draws some lessons for Asia Pacific economies. It features case studies, focusing on how the Pacific Alliance instruments and its members have addressed and incorporated the net neutrality principle. It also briefly addresses the state of progress in selected Asia Pacific economies, APEC and ASEAN. Comparative matrices of how the Member States of the Pacific Alliance have used their existing policy space or modified their regulations concerning the application of the net neutrality principle during the COVID-19 crisis are developed. The findings exposed the critical role of the Internet and net neutrality in development, prompting efforts to ensure equal access and combat technical discriminatory practices. In the Asia-Pacific region, discussions exist, but concrete regulations are scarce. The Pacific Alliance's binding agreements and work instruments on NN and Regional Digital Market offer valuable best practices for the region to overcome this challenge and promote equitable digital development.

Keywords: Net neutrality, Pacific Alliance, exceptionality, COVID-19, digital economy, Asia Pacific

JEL Codes: I18, L51, L96, O24, O53

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1. Introduction

The Internet has revolutionised how people communicate, access information, and conduct business. It has become an essential tool for individuals and businesses, enabling them to connect and collaborate with others across the globe. People's Internet uses vary from accessing news and information, entertainment, social media, e-commerce, online education or telehealth services (Hargittai, 2004; Pénard et al., 2013; Vromen, 2007). For enterprises, the Internet has become a critical component of their operations, facilitating communication, collaboration and enabling e-commerce transactions with customers and suppliers at the domestic and international levels (Yadav, 2014; Moini & Tesar, 2005; Lawrence, 2002). The digital economy, which encompasses all economic activities that involve digital technologies and data, has also become increasingly important, driven by the growth of the Internet and digital technologies (Carlsson, 2004; Brynjolfsson & Kahin, 2002). As such, the Internet has become an essential tool for promoting economic growth, creating jobs, and enhancing innovation and productivity. The COVID-19 pandemic has further highlighted the importance of the Internet as an essential tool for people, businesses, and the digital economy. It has become a lifeline for many during lockdowns and social distancing measures (Muñoz et al., 2020).

Given the importance of the Internet for people, businesses, and the digital economy, governments worldwide have implemented various regulatory frameworks to ensure the proper functioning of the network (Ono & Aoki, 1998; Feeley, 1999; Topornin et al., 2021). These regulatory frameworks aim to protect the interests of consumers, promote competition, and ensure that the Internet is accessible and available to everyone without discrimination. One of the most discussed regulatory frameworks related to the Internet is the concept of net neutrality. Net neutrality (NN) is the principle that all Internet traffic should be treated equally, without discrimination or restriction. This principle seeks to prevent Internet service providers (ISPs) from blocking or slowing down access to websites or applications or charging consumers extra fees for faster or prioritised access to specific sites or applications. Net neutrality can be defined as essential to ensure that the Internet remains an open and level playing field, where all users have equal access to information and services. In addition to net neutrality, governments have also implemented other regulatory frameworks related to the Internet, such as data protection laws, cybersecurity regulations, and intellectual property laws. These regulatory frameworks aim to protect users' privacy and personal data, prevent cyber threats and attacks, and promote innovation and creativity in the digital economy. Moreover, countries have resorted to preferential trade agreements to include e-commerce and digital economy provisions to build, promote, and integrate digital markets (Muñoz & Cáceres, 2022a, 2022b; Muñoz et al., 2021; López et al., 2020).

The COVID-19 pandemic has further highlighted the importance of these regulatory frameworks, as the Internet has become even more critical for people, businesses, and the digital economy during the pandemic (James, 2021; Bhandari, 2020; Lai & Widmar, 2021). However, the pandemic has posed significant challenges to these regulatory frameworks. The increased demand for Internet usage put pressure on the network infrastructure and raised questions about the proper management and administration of the network. The COVID-19 pandemic created unprecedented challenges for governments, including a massive surge in Internet usage for education, health, and teleworking-related purposes. Consequently, higher demands in households' broadband access, shifts in usage and traffic patterns were recorded (Stocker et al., 2023; Baumgartner, 2020; Feldmann et al., 2021). As a result, some governments have had to deviate from the principle of net neutrality to ensure the stability and reliability of their internet networks (Triviño et al., 2021; Garrett et al., 2022). This situation may raise concerns about the potential impact on Internet freedom and access (El-Bawab, 2021; Pandey & Pal, 2020; Dixit, 2021; Belli et al., 2020). Moreover, the relevance of accessing the Internet during the pandemic opened questions about the impact this access and net neutrality may have on achieving the Sustainable Development Goals -SDGs- (Sambuli, 2016).

While amongst the SDGs there is no specific objective or reference to net neutrality, it has been recognised that due to the rising importance of the Internet, it may have an impact on the achievement of various SDGs, including SDG 9 (Industry, Innovation, and Infrastructure) and SDG 4 (Quality Education). For example, as SDG 9 focuses on building resilient infrastructure, promoting sustainable industrialization, and fostering innovation, Internet and digital infrastructure access is critical for businesses to operate, innovate and grow (Alexandrova & Poddubnaya, 2021; Ardolino et al., 2018.). In this respect, the net neutrality principle would ensure a level playing field for all businesses regardless of size, location, or type. It would promote fair competition, which is essential for sustainable industrialisation. The objective of SDG 4 is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. During the COVID-19 pandemic, schools and universities have shifted to online learning, increasing the demand for reliable and affordable internet access. Also, the amount of data dedicated to learning activities increased exponentially, questioning whether the principle of net neutrality would hold, as one may prioritise this kind of content over others (Crick, 2021; Bogdandy et al., 2020). Hence, the analysis of the application of the net neutrality principle in the context of a COVID-19 pandemic recuperation is essential to ensure the achievement of the SDGs, as it may contribute to the development of sustainable infrastructure, promote innovation, and ensure equitable access to the Internet, but also limit policy space in times of crisis (Layton & Jamison, 2023; George et al., 2022).

Against this backdrop, this paper aims to analyse how the Pacific Alliance economies (Chile, Colombia, Mexico, and Peru) have regulated and managed the principle of net neutrality during the COVID-19 pandemic. This analysis includes a diagnosis of how

the Pacific Alliance, its instruments, and member economies have addressed and incorporated the principle of net neutrality, as well as an assessment of how the pandemic has influenced its application in the Pacific Alliance countries, with reference to the achievement of SDG. A comparison is made here with India, Japan, and Singapore. These economies had been selected from the Asia Pacific region as they are amongst the most developed regarding their regulatory structure regarding NN and have been widely recognised for their technological and innovation capabilities. The paper aims to draw some lessons on using net neutrality principles during exceptional circumstances, such as the recent pandemic. The research will use a three-stage qualitative analysis approach to achieve these objectives. The first stage involves a literature review to identify the existing regulatory frameworks related to net neutrality in the Pacific Alliance countries. The second stage focuses on a case study that examines how the Pacific Alliance instruments and individual member countries have addressed and incorporated the principle of net neutrality. The third stage involves an assessment through comparative matrices of analysis to incorporate the COVID-19 factor and how member states of the Pacific Alliance have used their existing policy space or modified their regulations concerning the application of net neutrality. Moreover, a comparison with selected Asia Pacific economies and the region's two main regional integration processes (ASEAN and APEC) are discussed. Furthermore, the paper examines the current net neutrality debate, which is widely discussed in major international forums related to the digital economy, such as the United Nations Internet Governance Forum in 2022 and ICANN 76 in 2023.

Following this introduction, the paper explores the implications of this debate on managing the provision of digital goods and services during the COVID-19 pandemic, with particular attention to their impact on achieving the SDG. The first section reviews the relevant literature on net neutrality to establish the analysis framework. Then, the second section presents an analysis of the inclusion of the net neutrality principle in agreements in the Asia-Pacific region. It is expected that the principle of net neutrality has had a greater normative development and clarifying criteria since it is necessary to establish network management and administration measures that are authorised to maintain the stability of the network during emergencies. To conclude, some final remarks derived from the analysis are presented on the effectiveness of net neutrality policies in ensuring equitable access to the Internet, especially during times of crisis for the Asia Pacific region.

2. The Net Neutrality Principle: Literature Review

NN is a principle that calls for treating all internet traffic equally without giving preferential treatment to certain content or services. The concept is rooted in the idea that the Internet should be an open and accessible platform for communication, innovation, and expression. The principle was developed by Columbia University media law professor Tim Wu in his 2003 paper "Network Neutrality, Broadband

Discrimination” (Wu, 2003). In his seminal paper, Wu argued that Internet service providers should be required to treat all internet traffic equally, without discriminating or charging differently based on user, content, website, platform, application, type of attached equipment, or method of communication. He argued that such discrimination would threaten the open nature of the Internet, limit innovation and competition, and harm consumer choice and free speech. This principle implies that all content that circulates on the Internet must receive equal treatment, keeping the networks open to the free flow of information, which should not be discriminated against based on origin, use, or application, with ISPs guaranteeing access and connection between users and not establishing restrictions on the content that circulates (Gendler, 2015).

NN proponents argue that without net neutrality, ISPs could become Internet gatekeepers, controlling access to information and stifling competition and innovation. Therefore, NN is necessary to promote democratic participation in the digital age (Faulhaber, 2011). Opponents of NN argue that ISPs should be free to manage their networks as they see fit and that regulations mandating net neutrality could stifle investment and innovation in the broadband industry. Moreover, it is argued that market competition is sufficient to ensure that ISPs do not engage in anti-competitive behaviour, and whether the presence of competition in the ISP market can mitigate any problems associated with discrimination and make net neutrality regulation irrelevant (Pil Choi & Kim, 2010). Although confronting opinions may be found concerning the regulation of NN, as stated in a Special Issue of the International Journal of Communications, “[e]ven those who are inclined to be in favour of network neutrality regulation recognise danger in going too far. At the same time, most of those who are inclined against network neutrality regulation recognise the danger in a world with no regulatory protection for open access” (Peha et al., 2007, p. 710).

Wu initially identified problems such as blocking applications, the tendency towards ISP monopolisation at customers' expense, the prioritisation of certain services, providers, applications, or content based on agreements and contracts, and a lack of transparency (Wu, 2003; Ruiz, 2014; Sánchez, 2022). Currently, the net neutrality principle provides users with four freedoms, as stated in 2004 by the US Federal Commission on Communications (FCC): to connect devices, run applications, receive desired content packets, and obtain relevant information about the contracted service plan (Powell, 2004; Fernández, 2014; Castellet et al., 2014). Ultimately, NN prevents discrimination in electronic communications and ensures that the quality of a particular service is not affected by arbitrary measures taken by a service provider, whether by slowing down communication, conditioning access to the use of specific equipment, or obstructing access to certain services or content (Rivero et al., 2019).

The principle of NN has become a widely discussed topic in policy and regulatory circles, with many countries adopting some form of net neutrality rules (Krämer et al., 2013; Cheng et al., 2011; Greenstein et al., 2016; Nguyen et al., 2020). Moreover, this principle has become part of the negotiating mandates of various economies in their free trade agreements (FTAs) negotiations, as some countries have sought to include

provisions related to net neutrality in these agreements (Burri, 2016, 2017; Gao, 2022; Scasserra, 2022; Sánchez, 2022). Amongst the arguments for including net neutrality provisions in FTAs are that such provisions would ensure that ISPs do not discriminate against certain types of content or services, thus promoting competition and innovation.

Broadly, the multi-sectoral community related to global Internet governance considers NN an essential element in maintaining the free and open architecture of the Internet (Internet Society, 2016). Considering the importance of the Internet for implementing operational and unobstructed trade, having shared principles and legal interoperability between various systems ensures a reduction in transaction costs and barriers to cross-border trade. It generates significant benefits, such as enabling a better digital space for exercising and guaranteeing human rights and a better environment for developing free competition (Belli & De Filippi, 2016; Wohlers et al., 2014). Thus, this principle safeguards the architecture of open access to the Internet and ensures equitable and non-discriminatory treatment of traffic on the network and data packets. In particular, a regulation that enshrines this principle would have implications for daily commercial traffic, as it usually requires internet service providers to inform their users about various aspects of the service provided, such as the obligation not to interfere, hinder, discriminate against, or arbitrarily block a user's right to use the service.

Most opposition to including net neutrality provisions in FTAs argue that such provisions would infringe on countries' sovereignty and limit their ability to regulate their telecommunications markets. For example, it is argued that countries need to be able to manage their networks to ensure security or to prioritise certain types of traffic, such as emergency services. Additionally, it has been stated that including net neutrality provisions in FTAs may limit the ability of ISPs to invest in network infrastructure, as they may not be able to charge higher fees for providing faster access to certain types of content.

3. Net Neutrality and the COVID-19 Pandemic

Due to the rise of the COVID-19 pandemic and the emergence of sanitary restrictions, including restrictions on the movement of people and the closure of activities, internet usage skyrocketed (Muñoz et al, 2021). On the one hand, the population used the Internet for communication and leisure purposes, including video calls and streaming services. On the other hand, various activities moved into virtual environments. Education services were supplied through different electronic platforms, including live sessions through Zoom, Skype, Microsoft Teams or Google Meet, and digital information repositories (Tadesse & Muluye, 2020; Mouratidis & Papagiannakis, 2021). Teleworking became an indispensable tool to keep productive structures functioning, and all those activities that could be provided through electronic means benefited from the Internet (Mouratidis & Papagiannakis, 2021; Haider & Anwar, 2023). Nevertheless, this unprecedented increase in usage of the networks limited the capabilities to provide the required broadband width for all activities, particularly in

developing economies and rural areas (Lai & Widmar, 2021; Whitacre, 2021). Hence, questions regarding the principle of NN emerged, as it was debated whether access to education resources or teleworking should have privileged access to the network over leisure or communication activities, such as YouTube or other streaming services (Finlay, 2020; Triviño et al., 2021).

To tackle the problems that emerge from this exceptional situation, countries-imposed policies to ensure citizens' access to the Internet, particularly those digital and digitally enabled services considered critical. Access to education applications, personal communication, telemedicine, and government services were included. This was achieved by the imposition of zero ratings and prioritisation, both of which could be understood as inconsistent with NN principles. Zero-ratings are price discrimination between digital packages, in which companies may discriminate regarding the price they will charge for specific content. During the pandemic, this practice was introduced to allow the population to access certain public interest services free of charge (Burri, 2016, 2017; Gao, 2022; Scasserra, 2022; Sánchez, 2022). This practice opens the debate on whether promoting access to certain content, for instance, educational or enabling teleworking, may hinder NN policies.

It must be stated that NN may have exceptions during the pandemic. For instance, Latin American economies such as Argentina, Brazil, and Colombia have NN provisions. However, they allow discrimination in an exceptional emergency context to favour the consumption of critical data for socially relevant activities such as health or education (Bizberge & Segura, 2020). A dialogue with service providers was established in the European Union not to enact restrictions. For example, one of the service providers was the European Video Games Industry, to establish network mitigation actions, committed to enacting all-new release downloads only during off-peak hours, i.e., late at night until dawn (Triviño et al., 2021; Sorensen, 2020). Similarly, to ensure equitable access to the network, streaming services limited the streaming quality of their products during the most demanded traffic hours. Countries such as Australia, India, Spain, South Africa, and the United Kingdom enacted different policies towards ensuring access to essential services as an exception to NN (Parsheera, 2020; Triviño et al., 2021).

4. Net Neutrality and the Sustainable Development Goals

While there is no explicit reference to the NN principle within the SDGs, the literature shows that equitable access to the Internet and digital technologies is a crucial component of sustainable development (EIMassah & Mohieldin, 2020; Sparviero & Ragnedda, 2021). Hence, since NN may promote more equitable access to the Internet by not allowing discrimination concerning access to various contents distributed in a digital environment, promoting NN can contribute significantly to achieving the SDGs (Upadhyay, 2019; Bauer & Obar, 2014). The importance of net neutrality is ensuring that the Internet remains an open and level playing field, where

people may have equal access to information and opportunities, regardless of their wealth, status, or location.

The SDGs set 17 global goals adopted by the United Nations members in 2015 to promote sustainable development and enhance cooperation between countries. The SDGs follow the Millennium Development Goals calling for universal action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The SDGs are interconnected and address the global challenges the international system faces, including poverty, hunger, inequalities between and within countries, climate change, environmental degradation, peace, and justice (Gutiérrez & Muñoz, 2022; Moore, 2015). The pandemic has revealed the importance of the Internet and digitalisation in achieving various SDGs, emphasising the need to integrate them into action plans and projects to establish sustainable and cohesive societies as the increasing adoption of digital technologies has become apparent.

In this context, the relationship between net neutrality and the SDGs becomes significant as the Internet has proven to be an essential tool for achieving the SDGs (Roblek et al., 2020; Mondejar et al., 2021). The Internet provides a platform for disseminating information, education, communication, and collaboration, which are critical for achieving the SDGs. It also enables innovation, entrepreneurship, and economic growth, essential for creating jobs and reducing poverty.

The promotion of NN can contribute to the achievement of several SDGs. For example, NN can contribute to SDG 4 (Quality Education) by ensuring students can access educational resources and online learning platforms without being restricted or limited by ISPs (Yamagata-Lynch et al., 2017; Adams & Harris, 2018). According to the World Wide Web Foundation, limiting net neutrality would enable ISPs to provide "specialised services", i.e. fast lanes that will make it harder for anyone who cannot pay extra fees to access online content, with particular negative repercussions on educational material access (World Wide Web Foundation, 2015). The previously stated relationship between NN and entrepreneurship may contribute to SDG 8 (Decent Work and Economic Growth) by promoting job creation in the digital environment (Matinmikko-Blue et al., 2020; MacFeely, 2019).

NN may also become essential for achieving SDG 10 (Reduced Inequalities) (Noll, 2017; Noll et al., 2018). Without net neutrality, there is a risk that the digital divide will widen. Some people have greater access to online resources and opportunities than others due to their power purchase capabilities, as ISPs may restrict specific access. This situation could exacerbate existing inequalities within and between countries and hinder SDG progress. By promoting NN, governments and civil society can help ensure that the Internet's benefits are available to all, regardless of their wealth, status, or location.

Moreover, NN can contribute to SDG 16 (Peace, Justice and Strong Institutions) by promoting freedom of expression, access to information, and public participation. NN

can also help to protect human rights online, such as the right to privacy, freedom of speech, and freedom of association (Vargas & Lee, 2018; Yoo & Song, 2021; Belli et al, 2020). Without NN, there is a risk that these rights could be undermined, as ISPs could use their power to discriminate against certain users or content. Therefore, it can be stated that even though there is no explicit reference to NN within the SDGs, these two concepts are interconnected, and the promotion of NN can contribute significantly to achieving these global goals.

5. Net Neutrality in Regional Perspective

While NN has been widely debated by the doctrine, in international forums and specialised organisations such as the International Telecommunication Union (ITU), the United Nations Internet Governance Forum (IGF) or the Internet Engineering Task Force (IETF), its regulatory application has been lesser and has been characterised by a more recent appearance since the first half of the 2000s.

In this regard, some States have promoted regulatory developments and have advocated incorporating the principle into their legislation. As previously mentioned, this paper focuses on the Asia Pacific region, and it is precisely within the geographical limits of this area that the world's first regulation on net neutrality was born in Chile. Then, its subsequent regulatory developments and complements continue in other Pacific Alliance members and extend to Asia. This section will review the normative, legislative, and regulatory developments around NN in relevant integration forums in the Asia Pacific region. The situation in the Pacific Alliance is reviewed in greater detail. A first approximation to the state of the art in the Asia-Pacific Economic Cooperation (APEC) and the Association of Southeast Asian Nations (ASEAN) is provided, and for India, Japan and Singapore, as the economies with the most advanced NN regulation in the Asia Pacific region.⁴

5.1 Net Neutrality in the Pacific Alliance

In the Latin American region, the Pacific Alliance (comprising Chile, Colombia, Mexico, and Peru) emerged as an integration forum with the stated objective of promoting overall economic relations among its members with the Asia-Pacific region (López & Muñoz, 2012; Ochoa & Rodríguez, 2016). Compared to other regional integration initiatives in the Latin American region, it has aroused great global interest, totalling 63 observer states as of May 2023, 21% of which are Asian and Oceania states.⁵

In recent years, initiatives have been developed within the Pacific Alliance that take advantage of the use of technologies and the Internet to increase trade rates and export processes, such as the “Presidential Declaration of the Pacific Alliance on the

⁴ See Tables 1 to 3 for a systematised layout of this information.

⁵ As of August 2023, the following Asian countries were observers of the Pacific Alliance: China, India, Indonesia, Israel, Kazakhstan, Korea, Pakistan, Philippines, Saudi Arabia, Singapore, Thailand, United Arab Emirates. Also, Australia and New Zealand are observer members.

Development of the Regional Digital Market and the drive towards digital transformation” (Alianza del Pacífico, 2020), the “Roadmap for the Regional Digital Market of the Pacific Alliance” (Alianza del Pacífico, 2021b) and the “Roadmap of the Digital Agenda Subgroup for the Regional Digital Market” (Alianza del Pacífico, 2016). The instruments emanating from the bloc express that cooperation on NN is necessary to “create an enabling environment to promote the exchange of digital goods and services” (Alianza del Pacífico, 2021a).

Likewise, at the regulatory level, the NN principle has also been considered a necessary element to promote trade within and from the Alliance. The 2011 Commercial Protocol of the Alliance contains chapters on e-commerce and telecommunications, and with the “purpose of adopting and improving the regulatory standards of the Parties” (Novak & Nahmias, 2015), the four members (Chile, Colombia, Mexico, and Peru) signed the First Amending Protocol to the Additional Protocol of the Pacific Alliance, incorporating net neutrality in Art. 14.6 *quarter* of the Commercial Protocol (Telecommunications Chapter). The amended article now provides that “each party shall adopt or maintain measures to ensure compliance with net neutrality”. So far, this regulatory reform on positive law is the first experience of NN in a binding international law instrument.⁶

Therefore, considering the aforementioned regulatory advances and subsequent instruments, the Pacific Alliance focused on cooperation in NN to “create an enabling environment to promote the exchange of digital goods and services” (Alianza del Pacífico, 2021b). It is necessary to analyse how the members have regulated enabling elements of NN to establish a Digital Ecosystem “with a view to strengthening the digital economy in the PA countries” (Alianza del Pacífico, 2016).

In addition to this provision in the Alliance’s Trade Protocol, all Pacific Alliance member states have legal and infra-legal regulations on NN.

5.1.1 Chile

In chronological terms, it is worth highlighting the case of Chile, which made the first legislative effort in the world to provide positive consecration to the principle (Correa, 2018; Lara et al., 2014) through Law No. 20,453, which enshrines the principle of NN for consumers and internet users, amending Law No. 18,168 General Telecommunications Law of 1982.

The new law regulates the main issues of NN, such as the specific prohibitions to which ISPs are subject, traffic management and administration, and user consent to request blocking and transparency duties. It also entrusts an administrative decree to establish the “restrictive practices to the freedom of use of contents, applications or

⁶ This was followed by the effort made by the European Union with its Regulation (EU) 2015/2120, which also incorporates net neutrality in its recommendations.

services provided through the Internet” and the ways to sanction infringements (Bustillo, 2013).

According to the Chilean parliamentary discussion, this legislative innovation originated to address “new threats” at international and national levels to free access, free traffic and, in general, Internet freedom (Biblioteca del Congreso Nacional, 2018). There was a general consensus in the parliamentary discussion about the need to regulate the NN since it would allow the introduction of a positive norm in the legal system that would enshrine the non-discrimination of data packages on the Internet, strengthening the statutes of consumer rights, transparency and access to information, and promoting electronic and international trade through platforms. It was also established that the technical aspects of the NN should be regulated together with other relevant aspects, such as network security and user privacy (Biblioteca del Congreso Nacional, 2018).

This pioneering law addresses the NN by establishing mandates aimed primarily at ISPs since it regulates a series of prohibitions on blocking, restricting, hindering, or discriminating against the right of a user “to use, send, receive or offer any legal content, application or service through the Internet, as well as any other type of legal activity or use carried out through the network” (art. 24 H of the Law). In turn, it determines that ISPs may establish traffic management and network administration actions but conditions that such actions may not be arbitrary or discriminatory.

5.1.2 Colombia

A year after Chile, Colombia also debated regulating NN protection at the legislative level. Thus, Senate Bill 246 of 2011 sought to establish the NN, reforming its National Development Plan Law. The Explanatory Statement of the Bill recognised Chile as the first country to regulate the NN and transcribed, by way of exposition, the general prohibition of blocking, interfering, discriminating, hindering, or restricting contents, services or applications contained in the Chilean LGT.

Colombian law has essential similarities with Chilean law regarding the elements addressed, particularly the prohibitions for ISPs concerning the prohibition of blocking, restriction, hindering or discrimination; traffic management and network administration measures; transparency; and user privacy and user privacy and network security. Paragraph 1 of Article 56 of the reformed Law establishes that the Communications Regulation Commission (CRC) shall regulate the terms and conditions for applying the abovementioned elements. Thus, this Commission regulates the status of network management and administration measures, network security and user privacy. It also refers to ITU instruments that will apply on a supplementary basis.

In the case of Colombia, traffic management measures were not contemplated in the law until April 2020, when Decree 555 of 2020 was enacted, “whereby measures are

adopted in order to address the economic, social and ecological emergency situation”, which, among other matters, incorporated Paragraph 2° to Article 56 of the LPND. Considering that such a Decree was issued in the context and on the occurrence of the Covid-19 pandemic, the new paragraph of Article 56 of the LPND mandates the CRC to define the circumstances under which ISPs may prioritise access to “content or applications related to health services, government and public sector websites, the development of work activities, education and the exercise of fundamental rights, only during the occurrence of pandemics declared by the World Health Organization”.

Article 7 of Colombia’s Resolution 3502 reiterates the primary purpose of the NN on non-discrimination by contemplating traffic management measures, establishing that ISPs may adopt those “that are reasonable and non-discriminatory with respect to a specific provider, service, content or protocol”. This instrument also refers to derived international standards, stating that “in any case, [ISPs] should only apply network management practices that comply with the provisions of ITU-T X.700 and those that complement, modify or replace it”.

Finally, it should be noted that in 2022, the new “National Development Plan 2022-2024” has been presented (República de Colombia, 2023). This plan does not modify Law 1341 -as far as it relates to the NN- and even declares the Internet as an “essential public service” (art. 193).

5.1.3 Peru

In July 2012, Peru published Law 29.904 on the Promotion of Broadband and Construction of the National Backbone Fiber Optic Network, whose text resulted from the mixture of six different Bills, N° 999/2011-CR, the one that, in particular, proposed the incorporation of the NN principle (Morachimo, 2017).

Law 29.904 regulates a series of topics, such as developing and massifying broadband, infrastructure and digital skills, fibre optic networks, internet access and digital government. Along with the variety of topics covered by the law, Article 6, entitled “Freedom of use of broadband applications or protocols”, regulates the NN, a rule addressed to ISPs that they may not “arbitrarily block, interfere, discriminate or restrict the right of any user to use an application or protocol, regardless of its origin, destination, nature or ownership”.

Article 6 of the Peruvian law, which deals with NN, addresses in a general manner the meaning of the prohibition of discrimination, so it is the administrative decrees that provide details on issues that are included in the Chilean and Colombian laws, such as transparency obligations, sanctions, and qualification of practices considered arbitrary. In particular, the new Net Neutrality Regulation sets out the principles and the measures permitted, adopted in situations of, implemented by court order and prohibited. It also establishes a statute of infractions and sanctions.

It should also be noted that in December 2021, Bill 878/2021-CR was introduced, which proposes the General Internet Law in Peru. Article VI again regulates net neutrality in terms that “[t]he State guarantees net neutrality at all levels and compels all agents involved in the telecommunications market to respect the same, in accordance with the provisions of this law”. Subsequently, Chapter VI of the proposed regulation entitled “On the provision of service by Internet access providers (ISPs) and net neutrality” regulates the NN more systematically, addressing the already known prohibition of discrimination, and proposes a list of rights derived from applying the principle.

The bill, when justifying NN, mentions that countries such as Mexico, Chile, and members of the European Union have incorporated it into their legislation and further indicates that the NN addresses “concerns related to freedom of expression, service competition and user choice; its impact on innovation, non-discriminatory traffic management practices, pricing and business models” (Internet Society, 2016; Congreso de Perú, 2021).

5.1.4 Mexico

Mexico made an important legislative change in Telecommunications in 2014 when it enacted the Federal Law of Telecommunications and Broadcasting, abrogating the former Federal Law of Radio and Television of 1960. This reform came to close a process of reforms initiated in Mexico, even reaching the Constitution, whose Article 6 provides that “the State shall guarantee the right of access to information and communication technologies, as well as to broadcasting and telecommunications services, including broadband and Internet (...) [and] shall establish conditions of effective competition in the provision of such services”. Therefore, the NN became relevant because it affects access and conditions of effective competition.

As in the other countries of the Pacific Alliance, the NN is incorporated as an integral part of general laws and is not regulated in separate special laws. In the Mexican case, Article 145 of the Federal Telecommunications Law refers to “network neutrality”, mandating ISPs to abide by the guidelines issued by the Federal Telecommunications Institute (IFT) in the exercise of its powers but always subject to the principles of free choice, non-discrimination, privacy, transparency and information, traffic management, quality, and sustained infrastructure development.

The IFT’s “Guidelines for traffic management and network administration to be followed by concessionaires and licensees that provide Internet access services” were published in 2021. Unlike the other three Alliance countries, they are not comparable to decrees issued after the laws since they do not have a regulatory structure but rather an expository structure, providing definitions of multiple concepts and reporting the international state-of-the-art regulatory vision of the IFT.

From the review of the regulatory frameworks of the Alliance countries, there was a significant interest that began -at least in positive law- with the reform of the Trade Protocol of the structure and then permeated sectoral laws of the members, in a staggered space of time and with clear connections and regulatory referrals.

Subsequently, it has been found in the literature that other actors of international relevance have begun to regulate NN after the Pacific Alliance, as is the case of the United States and the European Union (Sánchez, 2022). However, this paper seeks to provide some lessons and recommendations for the Asia-Pacific economies building on the Pacific Alliance's countries experience. Hence, the subsequent section reviews how the NN principle has begun to be debated and regulated in the main regional integration processes of the Asia-Pacific region, as well as the cases of India, Japan, and Singapore.

5.2 Net Neutrality in the Asia-Pacific region

The economies belonging to integration spaces such as APEC and ASEAN have discussed and studied net neutrality in official working papers and inputs distributed multilaterally more recently, for example, within the same organisations and in other global organisations, such as the ITU (APEC; 2018a; APEC 2018b; Internet Society, 2015; ITU, 2015).

5.2.1 The Association of Southeast Asian Nations (ASEAN)

Therefore, experiences in local regulation are scarce and have focused more on the declarative sphere or inputs emanating from organisations or forums. Likewise, regional organisations (ROs) of the technical community, such as APTLD (Asia Pacific Top-Level Domain Association), have monitored Internet governance processes in the region. In particular, in 2016, the Association forwarded to its 52 members a communication reporting India's "victory" in achieving NN regulation and requiring ISPs not to discriminate against data packets (APTLD, 2016). The press release that reported this milestone described the event as a lesson for developing countries. It should be noted that the other ROs -that is, those associations that are APTLD's peers in the world- such as LACTLD (Latin American and Caribbean Top-Level Domains) and CENTR (Council of European National Top-Level Domain Registries), without taking a position on the matter -as actors in the technical community- have also highlighted NN as an enabler of the digital economy (LACTD, 2019; CENTR, 2015).

Returning to the political or regulatory space, unlike the Pacific Alliance, relevant regional integration spaces such as ASEAN or APEC do not have effective declarations on NN. However, it is possible to identify some nuances that can serve as a basis for progress in implementing the principle at the regulatory level.

On the ASEAN side, members have endorsed the Leaders' Statement on Cybersecurity Cooperation, which refers to "cyber norms" and the importance of international cooperation and coherent work to achieve efficient ICT management (ASEAN, 2018). However, while some ASEAN member states have occasionally shown support and participated in multi-sectoral governance spaces to establish norms for behaviour in cyberspace, it has become evident that more than a policy statement is needed, as members' regulatory frameworks remain varied (Tan & Ang, 2022).

5.2.2 The Asia-Pacific Economic Cooperation (APEC)

Some authors and experts have argued that expanding the legal and regulatory systems would create opportunities for trade and investment in digital services in APEC, considering that this forum is a crucial platform for developing policy coordination and agreement within and between governments to aid this effort (Bondietti, 2018). It is well-placed to promote a supportive framework for cross-border e-commerce policies that foster an open and competitive atmosphere for digital services. This involves encouraging the implementation of trade agreement standards and aligning them with broader international frameworks, such as normative principles like NN and the OECD Principles for Internet Policy Making, as well as the realities of the digital economy (Bondietti, 2018; Mitchell & Hepburn, 2017). In this regard, including principles like NN in the provisions of new trade agreements promotes standards that facilitate the free flow of information and services. These standards can be used as models for constructing regulatory and policy frameworks that foster more open digital trade.

In its 2018 Economic Policy Report on Structural Reform and Infrastructure ('AEPR') (APEC, 2018a), APEC referenced technological and network neutrality in its public policy recommendations to member economies. In this regard, in the case of Canada, it pointed out that technological neutrality ensures that programs allow the use of various possible technologies, contributing to access to digital infrastructure. On the other hand, in the case of Mexico, the recommendation pointed out that the telecommunications regulatory body should "analyse network neutrality and monitor potential breaches as well as the evolution of differential pricing (zero-rating) and specialised services" (APEC, 2018a) to promote competition.

In the same year, the Companion Report to the 2018 AEPR (APEC, 2018b) included a section on NN regarding measures to achieve the objectives and overcome structural reforms and digital infrastructure obstacles. While cautioning that it is a complex and politically important concept, it emphasised that the principle "must be understood to mean equal treatment for equal access" (APEC, 2018a). Subsequently, the report adds what for the APEC Secretariat are "red flags" in traffic management, thus providing a better understanding of this element of the NN and directing where the regulations of the principle should aim.

More recently, the APEC Competition Policy and Law Group Report on 'Competition Law and Regulation in Digital Markets' (APEC, 2022) recognises NN as one of the measures to address competition and regulatory issues in economies' digital markets. However, the literature has criticised the emergence of reference instruments or regulatory recommendations by non-binding or non-governmental bodies. These instruments tend to focus on all scenarios, making their adoption difficult because they have greatly expanded the pool of existing recommendations, collapsing the area of soft law (Tan & Ang, 2022).

5.2.3 India, Japan, and Singapore

The use of net NN has been widely discussed for countries in the Asia Pacific region (Jirakasem & Smerchuar, 2021; Thampi & Kirshnan, 2022; Azis, 2021). Despite its importance, most economies in this region have not yet implemented formal regulations regarding NN. While there may be various reasons for this lack of regulation, one common acknowledgement is that the stakes are high for both consumers and industry stakeholders, and States do not want to lose the possibility of controlling traffic on the Internet. In the absence of formal rules, there is a concern that ISPs could prioritise their services or those of partners, disadvantaging competitors and limiting consumer choice. Such practices could stifle innovation and create a market skewed towards larger corporations with the resources to negotiate better terms with service providers. The cases of India, Japan and Singapore can be highlighted among the region's most developed net neutrality regulations. This selection has been made on the basis that the economies mentioned are technology hubs and have high innovation rates (WIPO, 2023), which are directly related to the provision of digital products and services over the Internet (McKinsey Global Institute, 2023; European Commission's Joint Research Centre, 2023). They also have laws in place that address net neutrality, which in turn have considerable developments on network management measures, allowing for comparative study with the Pacific Alliance economies.

India has been proactive in affirming NN principles, aiming to ensure that the Internet remains an open and equitable platform for all users. In the context of India, various actions have been taken to address NN and related issues by regulatory bodies like TRAI and the Department of Telecommunications (DoT). In January 2015, DoT set up a committee to provide NN recommendations, submitted later that May. TRAI issued a consultation paper in March 2015 on the regulatory framework for Over-The-Top (OTT) services, focusing on net neutrality principles, traffic management practices, and service discrimination. In December 2015, another consultation paper on 'Differential Pricing of Data Services' was released by TRAI. Following extensive consultations, regulations prohibiting discriminatory tariffs for data services were issued in February 2016. On request from DoT, TRAI also conducted a detailed consultation on net neutrality, culminating in a recommendation report sent to DoT in

November 2017. The government has affirmed its commitment to NN principles, focusing on non-discriminatory content treatment. To institutionalise these principles, amendments will be made to various license agreements governing internet services in India. The specific amendments are outlined in Annex-1, and DoT will formulate future Traffic Management Practices based on TRAI recommendations.

India's approach to NN is anchored in the previously described framework that seeks to balance consumer interests and the technical needs of ISPs. This policy's core is the "Prohibition of Discrimination" principle, which forbids ISPs from selectively blocking, throttling, or prioritising different types of content or services. This principle ensures that all internet traffic is treated equally, thereby preserving the open nature of the web. However, recognising that some specialised services may need priority for functional reasons, exceptions are allowed for "critical IoT services." These exceptions are delineated and subject to regulatory oversight to prevent misuse. Regulatory control lies primarily with the TRAI, which can enforce these guidelines and impose penalties on ISPs for violations. To keep consumers informed, TRAI mandates transparency from ISPs about their data management practices, emphasising the role of consumer awareness in maintaining a fair and neutral internet. This multi-pronged approach makes India's NN policy one of the most robust frameworks globally, tailored to the country's unique digital landscape.

Still, some criticisms of Indian regulation have arisen. For instance, Seth (2022) highlights some inadequacies of ex-ante NN regulations in India (Seth, 2022). The author critically assesses India's net neutrality regulations, questioning their effectiveness and adaptability in a rapidly evolving digital landscape. The outright ban on paid prioritisation compromises market efficiency by treating all data equally, causing unnecessary delays. Additionally, strict net neutrality rules harm investment and innovation within the telecom sector, particularly criticising the ban on zero-rating services. According to Seth, the existing regulations fall short of governing vertically integrated platforms and can be bypassed through alternative technologies like Content Delivery Networks.

Japan's take on NN stands in contrast to more heavily regulated frameworks, as rather than implementing detailed net neutrality laws, Japan primarily leans on market forces and minimal government oversight to keep ISPs in check. Rooted in its Telecommunications Business Act, Japan's approach is more of an implicit understanding than an explicit rule, urging ISPs to remain transparent and avoid unfair discrimination. This market-driven strategy presupposes customer migration will naturally penalise ISPs violating neutrality principles. While public discourse on the subject is not as robust in Japan as in other countries, pockets of advocacy and political dialogue push for stronger regulations. Additionally, Japan's lighter-touch regulation may have international implications, particularly in regional economic alliances like APEC, where it might be at odds with countries enforcing stricter net neutrality laws. Japan's approach to NN emphasises self-regulation through market

competition, but this could evolve as global perspectives shift and consumer awareness increases. Japanese telecommunications law focuses on operators rather than services. The long-standing 'Fairness in Use' provision fully applies to what NN is intended to achieve, at least at the broadband level (Jitsuzumi, 2020). However, given that mobile lines are gaining prominence today and shortly, specific regulation will probably be required to achieve a balanced integration of Japan's two main concerns: network decongestion and protection of free competition.

In the case of Singapore, its policy on NN shares the fundamental principles that emanate from other standards and legislation, such as those reviewed in the Pacific Alliance. In a policy paper released on June 16, 2011, Singapore's Infocomm Media Development Authority (IMDA) articulated a nuanced framework for NN that lays out five core principles to which both ISPs and telecom network operators must adhere. These principles mandate that ISPs neither block legitimate content nor engage in discriminatory practices that make such content inaccessible. They must also abide by competition and interconnection rules, uphold a minimum quality of broadband service, and provide transparent information about their network management policies. In recognising the evolving needs of online services and changing customer demands, the IMDA framework allows ISPs some flexibility to manage their networks and offer differentiated services. However, this flexibility comes with the caveat that it must not result in discriminatory practices that make legitimate content inaccessible. The IMDA also deals with violations on a case-by-case basis and requires ISPs to disclose their network management policies on their websites publicly. Although there are no explicit rules against practices like zero-rating or bandwidth throttling, these actions would still have to align with the overarching principles established by the IMDA. In this regard, consumer and end-user protection and transparency are particularly important. However, perhaps the legal asset that is most highlighted and protected is that of competition between ISPs and network operators. In this way, it points out that private competition has proven benefits for end users and the environment, so the flexibility to manage the network and "differentiate from others" is critical, as long as the consumer is protected.

6. Lessons for Asia-Pacific economies

This paper has investigated the state of the art of NN in the Pacific Alliance as a benchmark for analysing the Asia Pacific region, including ASEAN and APEC and the cases of India, Japan, and Singapore. For illustrative purposes, three matrices are presented below that systematise the main issues concerning the NN and how it is evolving in the region.

The laws and regulations studied reflect a legislative trend in the members of the Pacific Alliance that began with the incorporation of the NN in the Trade Protocol of this forum. In turn, the adoption of the principle by the four countries is not only close

in time but also their connection points have been highlighted in key issues to promote the digital economy and intra-regional trade, as they intersect in subjects such as traffic management measures (TMM), transparency, compliance mechanisms and reference to international technical standards (Sánchez, 2022). On the other hand, as Table 1 shows, local regulations are generally associated with competition policy and consumer protection, essential elements of international digital trade, linking it to telecommunications infrastructure as the main regulated sector that embraces NN.

In addition, regulations detail the TMM in a way that would allow the adoption of measures to prioritise traffic and data for essential services in times of emergency, such as a pandemic. In this regard, the four regulations stand out for their level of detail and for the instructions to which ISPs must adhere, being able to manage data traffic to ensure the continuity of critical services. However, the case of Colombia, which amends its law in response to the pandemic to delimit the permitted and necessary TMM, is noteworthy.

Regarding the comparative study of the three integration spaces, the results show that, in general, NN has been part of the agendas in the Asia Pacific. The evolution and approach that the principle has had in the Pacific Alliance should be highlighted, reaching its binding normative structure in its main treaty under the Framework Agreement. On the APEC and ASEAN side, the experience has been diverse, and NN is not found in instruments of general application (Table 2). On the other hand, as regards the “other instruments” or other means developed in the forums -i.e., working documents, specific research, or sectoral review mechanisms of the members- it is noteworthy that the NN has been addressed. For its part, the Pacific Alliance has elevated it substantially to achieve the Regional Digital Market, promoting a more significant digital ecosystem and creating an enabling environment to encourage the exchange of digital goods and services.

Meanwhile, APEC has considered it for economic policy effects on digital infrastructure and competition policy. ASEAN has not directly dealt with the principle. However, only one statement has been found referring to the role of ICT in cybersecurity and the “cyber norm”, which would serve as a basis for the study or interpretations favourable to NN. However, this mere mention of cybersecurity does not allow us to assert that an acquis is under construction on NN in ASEAN.

The regulation of NN within Asia Pacific economies has been a matter of divergence, as some countries have built regulations and frameworks to address this issue. In contrast, others have not worked on this topic. While the topic has been covered in some preferential trade agreements, such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), it has also not been covered in others, such as RCEP. Moreover, while NN has been highlighted as a significant issue within the digital economy context of the CPTPP, the rules set forth are non-binding and come with various exceptions based on the domestic laws of the participating

countries. The agreement also allows for deviations in 'reasonable network management' or special service offerings. Given that the CPTPP does not offer specific remedies for net neutrality violations, such as content blocking, throttling, or discrimination, it is unlikely to bring a standardised approach to net neutrality among its member nations (Burri, 2022). Hence, the analysis is left to individual economies. As shown in the cases of India, Japan, and Singapore, some of these economies have included legislation to address NN domestically.

In the case of the Pacific Alliance, there are clear regulatory indicators that show the success of this recent practice. In this regard, all members of the Alliance made progress in joint discussions that led to the reform of all telecommunications legislation and subsequently set the first multilateral precedent for the incorporation of NN in an international treaty. The Alliance's practice aligns with the members' digital trade policy. For instance, modern trade agreements have been signed which, although they do not expressly mention the net neutrality principle, incorporate the "Principles of Internet Access and Use" in the intellectual property chapters. From an interpretative point of view, these provisions are directly related to the issues addressed by NN, since the mandates on internet access and use refer specifically to the freedoms that the principle intends to guarantee.

Finally, it is estimated that the Pacific Alliance's practice in this area has been one of marked progress to date, as it seeks to continue to build avenues for cooperation and joint action towards a better digital trade environment. In this regard, the "Public-Private Dialogue on Net Neutrality: Implementing the Regional Digital Market Roadmap" was held recently (November 2023), where a multi-stakeholder community, representing the public, private and academic sectors, addressed the importance of the principle of promoting a secure and optimal digital trade environment for economies.

Table 1: Regulation of net neutrality in the Pacific Alliance members

Country	Where it is regulated	Main discipline /regulatory area covered by the norm	Traffic management measures (TMM)	How COVID-19 is addressed / reference to exception situations
Chile	General Law of Telecommunications No. 18.168 (1982, as amended 2010 by Law	The telecommunications sector, with effects on free competition and consumer law.	ISPs may take the necessary measures to carry out traffic management and	The regulations studied were established before the COVID-19

	<p>20.453 on net neutrality).</p> <p>Decree No. 368 (2011) of the Ministry of Transport and Telecommunications.</p>		<p>network administration, provided that this does not have the purpose of carrying out actions that affect or may affect free competition and making it transparent to the user and the authority.</p>	<p>pandemic. However, it appears that the regulation of TTM allowed prioritisation of traffic and access to essential or critical online services - health and education, for example.</p>
<p>Colombia</p>	<p>Law No. 1450 (2011) of the National Development Plan 2011-2014.</p> <p>Resolution No. 3502 (2011)</p>	<p>Multiple areas are regulated in the Chapter on Information and Communications Technologies.</p>	<p>ISPs may implement TMMs that are reasonable and non-discriminatory concerning any specific provider, service, content, or protocol. Reasonableness is given by:</p> <ul style="list-style-type: none"> - Reduce or mitigate the effects of congestion on the network. - Ensure the security and integrity of the networks. - Ensure the quality of service to users. <p>Resolution 3502 states that ITU</p>	<p>Following the reform carried out during the COVID-19 pandemic, it entrusts the Communications Regulation Commission to define the rules and events in which ISPs may prioritise content only in the event of pandemics declared by the World Health Organization.</p>

			Recommendation X.700 (1992) and those that complement, modify, or replace it must be complied with “in any case”.	
Peru	<p>Law No. 29.904 (2012, modified 2020) on Broadband Promotion and Construction of the National Fiber Optic Backbone Network.</p> <p>Supreme Decree 014-2013-MTC (2013).</p> <p>Resolution of the Board of Directors No. 165-2016-CD/OSIPTEL (2016), Network Neutrality Regulations.</p>	The Telecommunications Sector is particularly related to the Fiber Optic and Broadband Backbone Networks.	<p>ISPs must be authorised by the regulator if they intend to implement TMM, device configurations or terminal equipment that may involve discrimination.</p> <p>Resolution 165 establishes the measures permitted (articles 12-21), adopted in emergency situations (articles 22-30), implemented by (Articles 12-21), adopted in emergency situations (Articles 22-30), implemented by court order (Article 31) and prohibited (Articles 32-35).</p>	As in the case of Chile, although the regulations were published before the COVID-19 pandemic, by establishing TMM for emergencies, Resolution 165 allows ISPs to take a split course of action to prioritise traffic and access to essential or essential or critical online services -health and education, for example.
Mexico	Federal Law on Telecommunications and Broadcasting (2014, modified 2021).	Telecommunications Sector, with effects on free competition and consumer law.	It is established that ISPs may take the necessary measures or actions for traffic	Like Chile and Colombia, Mexican regulations predate the

	<p>Federal Institute of Telecommunication Technologies Guidelines (2021).</p>		<p>management and network administration in accordance with the policies authorised by the Federal Telecommunications Institute, to guarantee the quality or speed of service contracted by the user, provided that this does not constitute a practice contrary to healthy competition and free concurrence.</p> <p>The Institute's Guidelines establish that network TMM must comply with:</p> <p>Technical criteria and be aimed at assuring quality, capacity, and speed of service, and preserving the integrity and security of the network.</p> <p>Ensure non-discriminatory treatment between end users and traffic.</p> <p>Ensure the inviolability of private</p>	<p>Covid-19 pandemic. However, the TMM regulation and the Institute's Guidelines prevent ISPs from being able to act in emergency situations.</p> <p>In particular, it is expressed that, for reasons of force majeure, it is possible that the traffic management limits, degrades, restricts, discriminates, obstructs, interferes, filters or blocks access to content, applications or services, and such effects can only take place when:</p> <ul style="list-style-type: none"> - Risk to the integrity and security of the network or private communications of users.
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			communications and the privacy of end users.	<ul style="list-style-type: none"> - Exceptional and temporary congestion. - Emergency and disaster situations.
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Source: Elaborated by authors.

Table 2: Regulation of net neutrality (or similar) in selected Asia Pacific economies

Country	Where it is regulated	Main discipline /regulatory area covered by the norm	Traffic management measures (TMM)	Reference to exception situations
India	Prohibition of discriminatory tariffs for data services, Regulations (2016)	Data services	<p>Internet Access Services, therefore, need to be governed by a principle that restricts any form of discrimination, restriction or interference in the treatment of content, including practices like blocking, degrading, slowing down or granting preferential speeds or treatment to any content.</p> <p>DoT shall formulate necessary Traffic</p>	<ul style="list-style-type: none"> - Provision of emergency services or any services provided during times of grave public emergency, as per the process laid down by the Licensor/ TRAI; - Implementation of any order of a court or direction issued by the Government, in accordance with law; - Measures taken in pursuance of preserving the

			Management Practices (TMPs) after recommendations of TRAI in this regard.	integrity and security of the network and equipment; and - Measures taken in pursuance of an international treaty, as may be specified by the Government.
Japan	Telecommunications Business Act (TBA) (1984)	Telecommunications Sector	Absence of specific TMM in the law.	There is no specific reference to exceptional situations. Also, the law predates COVID-19. However, TMM may be implemented, but to maintain fairness in use (Article 6, TBA), TMM must be non-discriminatory and adequate, unless there are valid reasons.
Singapore	Decision issued by the Info-Communications Development Authority of Singapore (IDA): Net Neutrality (2011)	Fixed, wireless and mobile Internet services	Flexibility for ISPs and network operators to implement TMM or differentiate their service offerings, but must abide by	There is no specific reference to exceptional situations. Also, the policy precedes COVID-19.

			<p>IDA's fair competition rules, information transparency and minimum QoS requirements, as well as the prohibition of blocking of legitimate Internet content. Fixed-line ISPs must provide disclosure on their network management practices.</p>	<p>However, the flexibility referred to in the policy would allow Internet traffic to be tailored to facilitate the transmission of priority data packets.</p>
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Source: Elaborated by authors.

Table 3: Addressing net neutrality in integration fora: Pacific Alliance, ASEAN and APEC

Forum/Organization	Incorporation of NN in its principal instruments	NN discussion in other means	Remarks
Pacific Alliance	Article 14.6 <i>quater</i> of the Commercial Protocol	<ul style="list-style-type: none"> - Roadmap for the Regional Digital Market (Alianza del Pacífico, 2021a): It seeks to “cooperate on NN”, to achieve the objective/pillar “Create an enabling environment to promote the exchange of digital goods and services”. - Roadmap of the Digital Agenda Subgroup (Alianza del Pacífico, 2016): Within the “Digital Ecosystem” programmatic axis framework, a commitment was 	A significant development at the level of binding instruments and working documents with a focus on the Regional Digital Market, all of them addressing NN.

		<p>made to hold workshops to share experiences on the benefits of adopting the NN principle and to promote its adoption in the Pacific Alliance countries.</p> <p>- Roadmap of the Digital Economy Subcommittee (Alianza del Pacífico, 2021b): Under the pillar “Creating an enabling environment to promote the exchange of digital goods and services”, the aim is to expand efforts to share best practices on regulation around the NN.</p>	
APEC	No incorporation in Leaders’ Statements, Ministers’ Statements or agenda adoptions.	<p>- Economic Policy Report on Structural Reform and Infrastructure (‘AEPR’) (APEC, 2018a): It is recommended that member economies incorporate NN and technological neutrality as elements of public policy that contribute to access to digital infrastructure and free competition.</p> <p>- Companion Report to the 2018 AEPR (APEC, 2018b): It recognises NN as a facilitator of equal treatment and access to the Internet. Also, it contributes to delimiting TMM.</p>	It can be seen that NN has been highlighted in recent years in relevant working documents, which may eventually lead to a Leaders’ Declaration.
ASEAN	No incorporation.	Leaders’ Statement on Cybersecurity Cooperation (ASEAN, 2018): refers to “cyber norms” and international cooperation to achieve efficient ICT management.	There is no relevant acquis to establish that NN is part of the ASEAN agenda.

Source: Elaborated by authors.

7. Final Remarks

The COVID-19 pandemic has underscored the importance of Internet access for promoting social welfare, economic growth, and sustainable development. In response, many nations have sought ways to ensure that their digital infrastructure can support increased internet traffic and that there is no discriminatory access to online content. Unequal access to the Internet due to a lack of equipment, connectivity, or digital literacy can create disparities and impede development within and between countries. For this purpose, the net neutrality principle has been used at a domestic and international level to ensure that ISP providers may not discriminate against the contents users access on the Internet. To address this, the principle of NN has been implemented at both domestic and international levels, prohibiting ISPs from discriminating against certain types of content.

Furthermore, it is worth noting that although NN is not explicitly linked to a specific SDG, it indirectly contributes to the achievement of several of them. Particularly when the digital economy is an increasingly relevant component of economic growth and sustainable development, ensuring access to digital content enhances people's teleworking or distance learning capability. However, the excessive traffic from other services, such as streaming or telecommunications, may impede broadband access for these critical activities. To address this issue, regulations and priorities should be given to ensure access to critical activities when required, for instance, during emergencies, such as the COVID-19 pandemic. Nonetheless, this discrimination shall be considered the exception rather than the rule, as if not regulated, it may restrict access to essential content that other more lucrative activities may be willing to pay more for.

The Asia Pacific region, particularly ASEAN and APEC, has discussed the concept of NN at a multilateral level. However, experiences in local regulation are still scarce, and many organisations or forums have focused more on the declarative sphere. While there is no effective declaration on NN in ASEAN, some nuances can serve as a basis for progress in implementing the principle at the regulatory level. On the other hand, APEC has made specific recommendations on net neutrality and recognised it as one of the measures to address competition and regulatory issues and access in digital markets. However, the emergence of reference instruments or regulatory recommendations by non-binding or non-governmental bodies has been criticised for focusing on all scenarios, making their adoption difficult, and expanding the pool of existing recommendations, collapsing the area of soft law.

Hence, it can be stated that the Pacific Alliance has offered an unusual normative and political experience in the multilateral arena. It has significantly developed its binding discussion and work instruments on net neutrality. Similar experiences of development have not been found in the other forums studied, hence, this systematisation of information can help to build best practices in the Asia Pacific region in

multidimensional areas such as digital infrastructure, telecommunications, competition policy and the expansion of consumer law.

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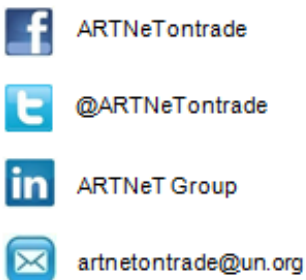
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