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Regional Telecommunications Policy and ASEAN's response to Convergence and Over-the-top (OTT) services

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Abstract

This study focuses on the regulations and policy launched by the Association of Southeast Asian Nations (ASEAN) responding to the emerging media convergence and Over-the-top (OTT) services. These issues have become more of a concern due to their huge impact on the digital economy. Regarding the data derived from the three key ICT institutional mechanisms of ASEAN, the results indicate that ASEAN launched policies responding to the rise of convergence and OTT depending on the main agenda set at that period of time. The characteristic of the policy is superficial and intangible. Nevertheless, the market of media convergence and OTT are increasing, so they are recently considered as important issues in the telecommunications area. Nevertheless, it is still in the early stage, so the responding policy is researching and sharing the experiences between members and external dialogue partners.

Keywords: ASEAN, Media convergence, Over-the-top (OTT) services, regional telecommunications policy

Introduction

One of the highlighted issues in the telecommunications field of study nowadays is the combination of telecommunications and broadcasting sections, which were independently separated for several decades. This combination is known as convergence and its latest development, Over-the-top (OTT) services. These two phenomena have been widely studied among researchers due to their significant impacts on the digital economy, and resulted in a dramatic change in the telecommunications ecosystem. As a result, it is essential that governments and regulators revise their incumbent policies and regulations to cope with the changes. In this study, the Association of Southeast Asian Nations (ASEAN) will be examined in respect to its regional telecommunications policy and its response to convergence and OTT services.

Convergence and Over-the-top (OTT) Services

Convergence is not a new phenomenon, it has been discussed widely since nearly two decades ago. The term convergence is normally applied to the merging of formerly distinct functions, markets and fields of application (Wirtz, 2011: 52 cited in Diehl & Karmasin, 2013: 1). With the increase in broadband penetration, bandwidth and the proliferation of digital devices, convergence allows consumers to access a bundle of similar services and media on multiple platforms. To illustrate, customers can enjoy the news originally broadcast via the television on their mobile phone or their personal computers, wherever and whenever they like.

In fact, the aspects of convergence vary depending on its concern (Ibid., 2013). The first one is convergence of media. This aspect is the merging of formerly independent technologies and devices, as described above. The next aspect is the convergence of business. It allows firms to operate in different areas of the economy, resulting in new form of business, administration, targets of customers and advertising (Voorveld, Smit, and Neijens, 2013). The third one is the convergence of technologies. This kind of convergence is the integrating of different communication forms into one form, which can be used by a variety of devices, such as smartphones. The last aspect of convergence is the content. It means the same content can be accessed on different platforms and channels. Interestingly, convergence also enables competition across the section of

telecommunications. For example, broadcasting competes with other sources of media (Biggar, 2000).

Likewise, OTT services, the most recent development in convergence, this term generally refers to the delivery of content, services or applications on the Internet without any involvement from network operators. The character of the OTT business model is diverse, but basically its business model is defined as two-sided markets, between buyers and sellers or viewers and advertisers; it charges the one side and reduces the price from the other side (Krämer & Wohlfarth, 2015). OTT is considered as an opportunity. At the same time, it can be challenging, not only a threat to the digital economy, it is also a threat for the social and even political arenas.

The bright side of OTT is from its characteristics that can replace the other telecommunications services. For example, the customers can use VoIP and messaging via an application, such as Line, Whatsapp and Facebook, instead of traditional telephony. Moreover, the barrier to entry of OTT is quite low, and Internet penetration, with data transmitters of OTT services, has dramatically increased, resulting in the expansion of OTT users. Thus, OTT is considered as an opportunity for OTT players and additionally benefits the customers. On the other hand, OTT is a challenge for many sectors, including the traditional telecommunications services. To illustrate, customers can use the OTT services instead of the other telcos, telcos' revenue is going downward or the terrestrial broadcasting televisions may lose the income from the advertising agents when the audiences change their behavior to access the online media instead. This situation is called "cannibalization". Apart from this problem, the customers' protection might be beyond the government's control if the OTT companies are based in other countries. Because of this dilemma, the regulators are required to reconsider the incumbent telecommunications regulations and policy that they are neutrally functional for all kinds of telecommunications services.

ASEAN and ICT mechanism

The Association of Southeast Asian Nations or ASEAN is a regional intergovernmental organization, established in 1967 by five Southeast Asian founders: Indonesia, Malaysia, Philippines, Singapore and Thailand. After that, five more members: Brunei, Vietnam, Lao, Myanmar and Cambodia joined the organization, so ASEAN consists of 10 members nowadays. ASEAN has its mutual objective to protect peace, prosperity and maintain sustainable development among Southeast Asian countries, which are very diverse in various aspects. ASEAN has already reached the milestone that they are legally binding under the ASEAN charter, which was effective from 2008. Another important milestone of ASEAN is the establishment of three pillars of community: ASEAN Political-Security Community (ASC), ASEAN Economic Community (AEC) and ASEAN Socio-Cultural Community (ASCC). With respect to the ASEAN community, it enables the members intensively to cooperate and develop ASEAN in every dimension: political, economic and social.

The telecommunications sector is one of the important development plans in ASEAN. This section is dictated under the ASEAN Economic Community. There are three key ICT mechanisms coping with telecommunications and broadcasting: ASEAN Telecommunications and IT Ministers Meeting (TELMIN), the Telecommunications Senior Officials' Meeting (TELSOM) and ASEAN Telecommunications Regulators' Council (ATRC) (Salazar&Lardizabal-Vallarino, 2008). TELMIN was officially established in 2001, and it is responsible for dealing with ICT. TELMIN generally meets annually, discussing and generating policies and guidelines for emerging technologies. It also sometimes has sessions with "dialogue partners" or outside actors such as Japan, Korea, China, the European Commission (EC) and the International Telecommunications Union (ITU). TELSOM is considered as an arm of TELMIN. It is in charge of coordinating and implementing the program for TELMIN. The last mechanism is ATRC, which was established in 2005, aiming to be the adviser to TELMIN. ATRC is comprised of the regulators from member countries, and they meet annually to share experiences, identify and promote potential cooperation in telecommunications through meetings, workshops and seminars. These three ICT mechanisms are the area of interest and also the framework in this study.

Relevant Studies

Several previous studies have been conducted to explicate the changes mentioned above. For example, Lim (2009)'s study, which states that ASEAN always generated telecommunications policies and projects to reduce the developmental gap among members during 2007–2010. Hukill (1998), however, argued that ASEAN telecommunication relied upon the extent of development of each member state. Nonetheless, these studies are not sufficient to describe today's fast-growing trend of telecommunication as well as the development of the ASEAN Economic Community (AEC). This research aims to revise the adjustment of ASEAN for the latest telecommunication challenges, convergence and OTT. For the regulation of convergence and OTT issues, most of the literature focuses on other regions due to their technological development, such as the European Union (EU). According to the latest report of the Body of European Regulators for Electronic Communications (BEREC), it intends to regulate convergence and OTT by expanding their definition of OTT to put it under the same set of rules as traditional telecommunications. For this reason, ASEAN is the new area of interest in this research and is examined in the field of telecommunications and broadcasting.

Methodological Approach

The purpose of this research is to identify the recent trend of international telecommunications policy as well as to evaluate the response of ASEAN regulatory changes, particularly on convergence and OTT. The findings of this research will contribute to the field of telecommunications, so that policy makers and regulators have a more comprehensive understanding of today's regional telecommunications, allowing them to handle the emerging digital economy challenges effectively and turn them into opportunities. To sum up, this study will answer the research questions: What are ASEAN's telecommunications policy and response to emerging convergence and OTT?

This research draws mostly upon primary sources from the three key ICT institutional mechanisms of ASEAN, as they are the important agents determining the direction of ASEAN's ICT policy as mentioned above. In this research, a qualitative methodology was used. The primary data, including master plans, memoirs and agreements were collected to support the analysis of this research and were taken into account.

Regarding the expected results illustrated above, there are three contributions in this research. First, it extends the knowledge of ASEAN's telecommunications policy responding to convergence and OTT, as the existing literature is limited. The next contribution is that this research explains the political issue as an important factor in generating telecommunications policy. This factor is not frequently mentioned in the field of telecommunications. With these contributions, the purpose of the study is accomplished.

Results

The results of the study are described in this section. They are demarcated based on the categories of documents. The first group of documents is the ASEAN ICT Master Plan and reference documents. This type is the plan used as the reference for other plans or actions in ASEAN over a long period of time. The second type is international agreements. These documents are legally effective, regarding the Vienna Convention on the Law of Treaties 1969, concerning the international law between states, such as the declaration, protocol and Memorandum of Understanding. The last group of documents is the joint media statements. In other words, they are the statements on progress noted in the annual meetings of IT ministers of each country.

1. ASEAN ICT Master Plan and Reference Documents

This section explains the results from the ASEAN ICT Master Plan, which are composed by the TELMIN and used as the main guideline in developing ICT in the region, and other reference documents. Regarding overall documents in this section, there are four documents mentioning and providing plans related to convergence and OTT. With respect to the ASEAN Master Plan, convergence and OTT are quite important, as they are literally included in the strategic approaches. In fact, ASEAN ICT Master Plans are recently generated documents. That means they are composed

for the purpose of responding to the new form of technology, including media convergence and OTT. ASEAN ICT Master Plan 2015 (aim) does not officially mention the concepts of those elements, but it gives the explanation related to the characters of convergence and OTT such as digital content and new innovations. The next master plan, ASEAN ICT Master Plan 2015 (completion), reports the results of the implementation of ASEAN ICT Master Plan 2015 (aim). In the plan, it presents a project about OTT, named Guideline of OTT: Management of Policy for AMS. It was created under the ASEAN ICT Master Plan 2015 (aim) and Vietnam is accountable for this project. This project interestingly provides the definition of OTT: Over-the-Top means the delivery of services or content such as messaging services and audio or video content that is not under the administrative control of the content or service providers (p. 41). Regarding the workshop on this project, it confirms that the OTT trend is going upward, and the ministers reached the conclusion that they should let OTT providers and telecom operators work together because OTT service itself represents both opportunities and challenges. Finally, they recommend that ASEAN should encourage incentives to develop the content. The latest ICT Master Plan, 2020, which was published in 2015, expresses an interest in these issues by including convergence and OTT as new media developments in one of eight thrusts, which are the important strategic plans in developing ICT in ASEAN.

For the other documents, convergence and OTT are not specifically covered, but some concepts and definitions are similar to convergence and OTT. For example, the e-ASEAN Framework 2001 provides the definition of e-Commerce: those that involve the direct, online transfer of information and digital goods and services (e.g., software, music-on-demand, video-on-demand) (p. 1). Moreover, this document defines the principles of e-Commerce laws based on the United Nations Commission in International Trade Laws (UNCITRAL). According to e-ASEAN, convergence and OTT had already appeared in the field of ICT in ASEAN and were considered as important issues at that time.

Table 1: Summary of results from ASEAN ICT Master Plan and Reference Documents

Name of Document	Main Agenda	Related Policy/Regulations		
		a	b	Details
e-ASEAN Reference Framework 2001	Providing guidelines for e-commerce in ASEAN, based on the e-commerce law of member countries.		Δ	It provides the basic definitions of e-commerce, and the rules of each party in business, including sender, receiver and a third party such as service providers. The concepts and definitions are similar to the OTT.
ASEAN ICT Master Plan (aim 2015)	Masterplan aiming to develop the ICT sector in ASEAN. It consists of six strategies: economic transformation, people empowerment and engagement, innovation, infrastructure development, human capital development and bridging the digital divide.	Δ	Δ	The masterplan gives an explanation related to convergence and OTT in terms of digital content in the innovation target. ASEAN was planning to develop and support them by developing the platforms for the content exchange.
ASEAN ICT Master Plan 2015 (Completion)	The evaluation of ASEAN ICT Master Plan 2015 (aim).	Δ	O	Guideline of OTT was explained as the case study under the ICT Master Plan 2015 (aim).
ASEAN ICT Master Plan 2020	This master plan continues the plan 2015 but added more targets: ICT in the ASEAN Single Market, New Media and Content, Information Security and Assurance. However, the goal of bridging the digital divide was removed in this plan.	Δ	O	OTT is supposed to be considered as new media and content, which are promoted significantly as one of the thrusts in this plan.

*a = Media convergence

b = Over-the-top (OTT) Services

O = direct involvement

Δ = indirect involvement

II. International Agreements

The second section describes the response of ASEAN to convergence and OTT displayed in the declarations and agreement of ASEAN members during the TELMIN meetings held annually. The characteristics of these types of documents are that they follow the rules of international

agreement or treaties defined in the Vienna Convention on the Law of Treaties 1969. Among declaration and international agreements signed by ASEAN member countries related to ICT, there are nine agreements responding to convergence and OTT. Those agreements are explained in the following.

Manila Declaration 2002 is the first declaration of TELMIN and it is the first declaration mentioning the emerging of convergence. In the declaration, it states that “we are mindful that the rapid technological advancement and convergence of the broadcasting, information technology and telecommunications sectors, require sharing of information and experiences in approaches to policies and regulations for the creation of a framework responsive to investment, infrastructure, and technology development amongst economies” (p.2). While the first declaration just mentions the emergence of convergence, the Vientiane Action program is planning to design guidelines and an action plan to develop it.

However, convergence is defined in a different role from the agreements mentioned above. In Hanoi Agenda 2005, convergence was explicitly mentioned as a factor driving online services and applications development. Because the main agenda at that time was to improve the basic infrastructure, including high-speed Internet, convergence is one of the tools used to escalate the demand for broadband Internet. Nevertheless, due to the limitation in different levels of ICT development in ASEAN members, they could just plan to share the experience, enable policy and eliminate barriers to the delivery of online applications and services. Interestingly, they have a list of actions for enabling policy and regulatory environment for online services and applications at the end of the document, but the convergence issue is not on the list. In addition, this document encourages cross-border electronic transactions within ASEAN.

In the Brunei action plan, convergence and Voice over Internet Protocol (VoIP), a function of OTT nowadays, is counted in the second strategic plan of action: deepening policy and regulatory cooperation in 2006 to deal with the opportunities and challenges in the area of Next Generation Networks, including convergence and VoIP. Furthermore, it also states that it will promote broad online service to achieve broader economic and social benefits. Regarding this plan, there are some areas that are prioritized in the projects named ASEAN ICT Priority Projects, but none of them are convergence or related areas as well as the previous declaration.

The Bali Declaration 2008 and Vientiane Declaration 2009 responses to convergence and OTT are similar to the Hanoi 2005. They aim to support the online content by ensuring reliable information networks, information security, privacy safeguards and intellectual property. The reason is that they consider the digital online services as the catalysts to enhance demand for broadband services, the main objective of the declarations.

Moving forward to the next declaration relevant to convergence and OTT, the Singapore Declaration 2013. It is the first declaration in which the term OTT is used officially. According to the declaration, the project of OTT is adopted. After that, in 2015, the Da Nang Declaration announced adoption of the ASEAN ICT Master Plan 2015, in which convergence and OTT are included in the plan of development as the new media and innovation. These elements also play an important role in the latest declaration of TELMIN, Brunei Darussalam Declaration 2016. They are the significant factors driving the growth of the economy in ASEAN. However, they require intensive harmonized regulations and policy, so the member countries state in the declaration that they will study them through sharing the experiments within ASEAN and with dialogue partners.

Table 2: Summary of results from International Agreements

Name of Document	Main Agenda	Related Policy/Regulations		
		a	b	Details
Manila Declaration 2002	Establishing the TELSOM and ATRC to encourage competitiveness and development of the ICT sector.	O		This declaration mentions that ASEAN are mindful of the rapid growth of technological convergence, and they need to create the framework for regulations and policy for it.
Vientiane Action Program on Telecommunications and IT Sector 2004	Plan of action aiming to finish by 2010. The plan includes the development of infrastructure, human resources, cyber security, and enhancing ASEAN community.	O		It was planning to reach the milestone of developing convergence guidelines and best practices by 2005.

Hanoi Agenda on Promoting Online Services and Application to Realize e-ASEAN 2005	Establishment of an e-ASEAN framework.	O	Δ	Convergence of telecommunications and broadcasting is an important issue as a factor driving the development of online services and applications, and they also assert that regulations and policy are necessary.
Brunei action plan 2006	Plan aiming to enhance ICT competitiveness and capacity building/Next generation network.	O	Δ	It was planning to create the regulations and policies dealing with convergence and VoIP.
Bali Declaration 2008	Plan to encourage the development of infrastructure, mainly high-speed Internet to bridge the digital divide.		Δ	TELMIN intends to encourage digital content, as it is an important catalyst to enhance demand for broadband services.
Vientiane Declaration 2009	Plan to promote the realization of broadband across ASEAN, and implements the universal service obligation (USO).		Δ	The content is similar to the Bali Declaration 2008. They plan to encourage digital content to enhance the broadband connection.
Singapore Declaration 2013	Establishing the ASEAN ICT Master Plan 2015, to regional spectrum harmonization, bridging the digital divide.		O	Adoption of OTT project.
Da Nang Declaration 2015	Enhancing further integrated ICT connectivity in ASEAN, including physical connectivity strategy under the Master Plan on ASEAN Connectivity. Establish the ASEAN ICT Masterplan aim 2020.	O	O	This declaration states to adopt the ASEAN ICT Master Plan, which includes the new media and content development in one of eight thrusts.
Brunei Darussalam Declaration 2016	Ensure the adoption of ASEAN ICT Master plan aim 2020, as the implementation of a strategy to reach the digitally enabled economy.	O	O	Strengthen the harmonization of ICT standards and regulatory approaches, especially the new emerging service and technologies toward deepening regional integration.

*a = Media convergence

b = Over-the-top (OTT) Services

O = direct involvement

Δ = indirect involvement

III. Joint Media Statement

In this section, the last group of the documents, statements and joint media statements, is explained. The documents in this group do not engage with the legal obligation, rather they are the memoirs of the meeting held by the TELMIN, TELSOM, ATRC and with their external dialogue partners. The first meeting was held in 2001, but the first meeting that mentions digital content or related areas to convergence and OTT is the fifth meeting of TELMIN in 2005. Actually, they do not explain any concept of these elements, but they just approved the Hanoi Agenda on Promoting Online Services and Application to Realize e-ASEAN, which provides the basic concepts and definitions of convergence and OTT as already elucidated in the first section. The next meeting in 2006 expressed the importance of digital content, and the ministers agreed that it should be improved.

In 2008 and 2011, online media was referred to in the meeting as the catalyst driving the expansion of high-speed Internet, as well as mentioned in the declarations above.

The other meetings do not significantly respond to convergence and OTT, but they show that ASEAN cooperates with external dialogue partners on these issues, such as Korea, the EC and the ITU. For example, in 2015, they mention cooperation with ITU on many topics, including new technology and services, and study on policy and regulatory issues of social media utilization in ASEAN. ITU assisted ASEAN in a study on OTT, its trends and regulations.

Table 3: Summary of results from Joint Media Statements

Year	Main Agenda	Related Policy/Regulations		
		a	b	Details
2005	Promoting online services and e-ASEAN establishment.	O	Δ	Adoption of the Hanoi Agenda on Promoting Online Services and Applications to Realize e-ASEAN.
2006	Enhancing ICT competitiveness and building capacity.	Δ		Discussion of developing digital content as a key area in the Hanoi ICT Agenda.
2008	Development of broadband to bridge digital divides.		Δ	Emphasize the importance of local digital content in driving the demand for a broadband connection.

2009	Agreement to adopt the Vientiane Declaration on Promoting the Realization of Broadband across ASEAN, and ASEAN ICT Master Plan 2015.	Δ		The ASEAN ministers discussed with the EC the new information and media services, the priorities of ICT cooperation between ASEAN and EC, to enhance ICT cooperation among them.
2011	Ensure cooperation on broadband, information security and ICT adoption by SMEs.	Δ	Δ	Leverage on the progress of broadband infrastructure in ASEAN by promoting collaboration in digital content development and multimedia services.
2013	Spectrum management, broadband improvement and cooperation with dialogue partners.	Δ	Δ	There is cooperation with Korea on various issues, including the new technology and services.
2015	Transforming ASEAN, moving toward smart communities.	Δ	O	There is cooperation with ITU about the new technology, services and OTT.
2016	Economy aims and cyber security.		O	They still have discussions with dialogue partners.

*a = Media convergence

b = Over-the-top (OTT) Services

O = direct involvement

Δ = indirect involvement

Implications and Discussion

To summarize the response of ASEAN to convergence and OTT, the response depends on the time period and what was a priority at that time. The first period is around five years from the establishment of key ICT organizations. At the early stage, ASEAN focused on the economy and expansion of the market, the focus point of ASEAN at that time. ASEAN was established in 1967 by reason of ideology against the spread of communism in Southeast Asia. When the cold war ended in around 1990, ASEAN changed its objective to promoting and encouraging economic growth, instead of any political reasons. Afterward, when Asian countries suffered from the 1997 Asian financial crisis, the economy and financial issues became more of a concern. Thus, the policy of telecommunication during that time focused on the economy and commerce as seen in the 2001 e-ASEAN Framework, and convergence and digital media were considered as a part of e-Commerce, and the Manila Declaration 2002 and Vientiane Plan of Action focusing on competitiveness and infrastructure to improve the whole economy.

Proceeding to the next period, the next plan of ASEAN ICT organizations was to bridge the digital divide because member countries are extremely different in terms of development, and eradicate poverty in rural areas. To accomplish these goals, the development of fundamental infrastructure, especially broadband Internet, is needed. Thus, the plan of ICT around 2005–2010 mainly focused on reducing the digital divide and developing infrastructure. As the main target was to improve the high-speed Internet, convergence and OTT, in terms of digital media such as video-on-demand, played a supporting role as the catalysts driving the demand for high-speed Internet. The evidence is in the Bali Declaration 2008 and Vientiane Declaration 2009, and the joint media statement during that period.

The next turning point is around 2013, when attention on convergence and OTT itself increased. It is undeniable that the innovations in ICT have led to dramatic improvements in the latest decade, such as the emerging Internet of Things, and mobile technology. These trends led to a significant change in society and economy in the region. ASEAN countries also noted these trends and took them into account. The issue of convergence and OTT first appeared in 2013, as one of the main agenda items in the ICT Master Plan, recent declaration, Singapore Declaration 2013, Da Nang 2015 and Brunei Darussalam 2016, the meetings of TELMIN and the workshop of ATRC. Furthermore, these issues are the main agenda in cooperation with external dialogue partners such as the EC and ITU. However, the response to these phenomena is superficial, as these are in the early stages. Therefore, ASEAN now is just sharing the experience, discussing and designing guidelines for these issues and learning the experience and knowledge from the outside partners.

In conclusion of the response of ASEAN since 2000, the response to convergence and OTT is just using them for other purposes depending on the main agenda during that time. However, ASEAN has lifted the importance of convergence and OTT recently, but the response to them at this moment is just in the early stage, mainly discussing and sharing the experiences.

For the future of the policy and regulations of convergence and OTT, it is expected that ASEAN intends to support them with the compromise of network operators, rather than regionally regulate. Even though ASEAN aims to regulate them under a strict rule, it must be a difficult task. The first reason is that ASEAN is a very diverse region, and the countries vary in level of development. It is quite hard to implement a mutual rule or policy concretely, not even in the

telecommunications field, in all the areas in ASEAN. The second reason is the ASEAN Way principle. The ASEAN Way is the principle of noninterference: members will not intervene in other members' internal affairs. According to this principle, a policy that is capable of interference in internal affairs might not be accepted. As a result, strictly obligated policy or regulations are not desirable, especially policy affecting political and security issues. Net neutrality¹, for example, is the issue concerning the freedom of information flow, but it may be concerned as a threats-enabled issue in national security. There is no doubt that this issue has not been mentioned in the telecommunications area of ASEAN. However, this issue may be an agenda in ASEAN in the near future, but the issue will be limited only to the economy or business purposes.

Many works have compared ASEAN with the EU, but they found that the EU and ASEAN are very different. The reasons are the differences in various aspects such as regime, regional history, religion and economic development. The telecommunications and policy generated by ASEAN are different from the EU too. Although ASEAN is learning from the EU, because the EU is at a higher level of development, ASEAN will adjust the policy and regulations and make it suitable for all members.

Conclusion

Convergence and OTT services have been highly regarded among researchers due to their significantly increased impacts on digital and dramatic changes in the telecommunications ecosystem. This study examined the regional policy and regulations generated by a regional organization named the Association of Southeast Asian Nations (ASEAN), to investigate the response and reaction of Southeast Asian countries to these phenomena and identify the recent trend of international telecommunications policy in regard to Southeast Asian countries. The research question is what are ASEAN's telecommunications policies and responses to emerging convergence and OTT. To answer these questions, a qualitative methodology investigating the primary sources from three key ICT institutional mechanisms of ASEAN was conducted. The key ICT mechanisms of ASEAN are Telecommunications and IT Ministers' Meeting (TELMIN), Telecommunications Senior Officials' Meeting (TELSOM) and ASEAN Telecommunications Regulators' Council (ATRC). The primary data, including master plans, memoirs and agreements were collected to support the analysis of this research.

Regarding the result, ASEAN has a response to convergence and OTT from the establishment of these ICT institutions. The response to convergence and OTT varies depending on the main agenda at the time that those policies were launched. The first period is around five years from the establishment of the ICT institutions. The main agenda then was the expansion of the economy and commerce, so convergence and OTT, or digital media, were considered as products in e-Commerce. The next period is around 2005–2009. At that time, the digital divide and infrastructure improvement were highlighted because ASEAN realized the development gap between members. The policy toward convergence and OTT is supporting them as the catalyst driving the expansion of demand for broadband Internet, one of the infrastructures on which ASEAN focused. The last period is the past decade. The importance of convergence and OTT has increased tremendously due to the improvement of technology. Thus, convergence and OTT in this period are two of the important telecommunications issues in ASEAN. However, the response or policy in this period is in the early stage, so they just plan to exchange experiences and opinions among members and external dialogue partners.

Nevertheless, this research shows a lack of the intensive factors explaining the underlying reasons and policymaking process. It is expected to study further to expand the knowledge and understanding in the telecommunications policy in the Southeast Asian region.

¹ Net neutrality is one of the main principles determining the direction of regulation nowadays. This term means "there has been no discrimination between the price of transmitting packets based on the identity of either the transmitter or the identity of the receiver, based on the application, or the type of content the packet contains" (Economides, 2009, p. 1). Net neutrality is a well-known issue debated among researchers, not only in the field of telecommunications or media studies. It is widely debated in the field of politics due to the concept of freedom of expression. Moreover, even other fields such as human rights are also taking it into account.

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