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Abstract: Over the top (OTT) media service is delivered/owned by telecommunication operators. The service provision includes voice, audio, video, telecommunication, conference, and networking services. The expansion of OTT into various sectors of life certainly creates its own advantages for companies in the national market that allows the government to collect fees to be included in the state treasury. The non-tax state revenue contribution shows a significant figure and the realisation always exceeds the state target. It is necessary to manage of optimisation the non-tax state revenue, especially with the technology development dynamic. This study uses a normative juridical method, namely analysing positive law provisions. The results show that the criteria for imposing non-tax state revenue in the telecommunications services sector are the basis for an ideal model for imposing the state revenue that does not only focus on the imposition of conventional telecommunications services.

Keywords: optimisation; over the top; OTT; revenues; telecommunication; non-tax.

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1 Introduction

Currently, various countries are making economic recovery efforts subsequent to the global COVID-19 pandemic.¹ The state, as the highest policy-making entity, also seeks various regulations to improve its economic system. This is because essentially the state requires revenue, i.e., an income received by the state and compiled into the state budget obtained from the people. Hence, the state budget, a form of state financial management as well as a form of people's sovereignty, is a crystallisation of trust and a form of people's support for government programs. The sources of the state budget include taxes, non-tax state revenues and grants.²

Discussions over digital taxation frequently result in multilateral agreements. At the 2022 G20 meeting, there was a discussion on fairer worldwide tax reform. The tax system reform is carried out with two pillars. Pillar One is carried out by allocating taxation rights to nations that become markets for digital goods and services (market countries). Pillar Two is to ensure that all multinational enterprises (MNEs) pay the bare minimum of tax wherever they conduct business.³ The Pillar Two will specifically place rules on the income tax of multinational companies through the imposition of a tax set at a minimum of 15% for the purpose of sustaining each country's tax base. The objectives of Pillar Two are to stabilise the international tax system and give international taxpayers more assurance.⁴

In fact, the ability of tax authorities to tax cross-border digital-based transactions and deal with concerns of tax evasion depends on this worldwide tax consensus. Thus, the non-tax state revenue (PNBP) industry, a partnership between telecommunications companies and OTT services, as well as the application of the worldwide consensus on digital taxes can all be used to raise state revenue.

In addition to the source of tax revenue, it is interesting to study sources of non-tax state revenue that are regulated in Law Number 9 of 2018 on Non-tax state revenue (Non-tax state revenue Law) that its value has promising dynamics and the graph always indicates an increase.⁵ This is showed by the non-tax state revenue achievement that has reached Rp.100 trillion since 2005, with an average percentage increase of 10.5% in the 2005–2019 period, meaning that non-tax state revenue always exceeds the target of the state budget.⁶

Meanwhile, non-tax state revenue is imposed on the subjects who are individuals and entities both at the domestic and abroad that utilise non-tax state revenue objects.⁷ Furthermore, objects of non-tax state revenue include all matters, activities, and/or objects outside of taxation as well as grants.⁸ The collection of non-tax state revenue is carried out by a government agency based on a Law, Government Regulation, an regulation of relevant Minister (Minister of Finance) based on a previously-made non-tax state revenue plan. The non-tax state revenue percentage that is increasing over time indicates its large share in the field of state revenue is clearly shown by 6 Ministries/Institutions with the largest non-tax state revenue contributions. Especially the

non-tax state revenue of the Ministry of Communication and Information Technology that fulfils more than half of state revenues in the non-tax state revenue sector compared to other ministries. The non-tax state revenue achievement of the Ministry of Communication and Information Technology of the Republic of Indonesia in 2020 reached Rp. 25.54 trillion, which is the highest of the six other largest Ministries/Institutions, namely the Indonesian National Police with achievement of Rp. 7.61 trillion, the Ministry of Transportation with achievement of Rp. 6.08 trillion, the Ministry of Law and Human Rights with achievement of Rp. 3.32 trillion, the Ministry of Agrarian Affairs and Spatial Planning with achievement of Rp. 3.31 trillion, and the Ministry of Education and Culture with achievement of Rp. 1.74 trillion.

The Government of Indonesia is committed to further imposing Income Tax on other OTT services based on policy regulations until determined by international consensus. On April 1, 2019, the Minister of Finance of the Republic of Indonesia issued Regulation of the Minister of Finance Number PMK-35/PMK.03/2019 concerning determination of permanent establishments (hereinafter referred to as PMK BUT), which regulates activities that can be categorised as BUT and BUT obligations in terms of taxation. This regulation is welcomed by various groups, including cellular operators, such as Telkomsel, Indosat, and others who expect the contribution of OTT service providers to operators as well as equality in terms of legal and tax regulations.⁹ In addition, the Draft Regulation of the Minister of Communication and Information of the Republic of Indonesia is currently being reviewed regarding the Provision of Application Services and/or Content Through the Internet which will address OTT services. In the Draft Regulation of the Minister of Communication and Information of the Republic of Indonesia, OTT services are divided into three forms, namely individual Indonesian citizens, Indonesian business entities that are legal or non-legal entities, and permanent business entities (BUT) specifically for foreign OTT service providers. Now a days, customer satisfaction levels are measured through the Likert scale, and the sign rank test is utilised for analyses. In order to rank the services, the Friedman test is utilised. In addition, the fuzzy C-mean algorithm is utilised to cluster the services and demographic features. The results indicate the e-services with which the customers are most and least satisfied. The clustering analysis results show that some specific groups of customers are less satisfied with some specific e-services.¹⁰

There is a rising trend of non-tax state revenue realisation from the Ministry of Communication and Information Technology calculated from the period 2018 to 2021, including¹¹

- 1 In 2018, the non-tax state revenue realisation reached Rp.21, 394 trillion, exceeding the target of Rp.18.675 trillion
- 2 In 2019, the non-tax state revenue realisation reached Rp.22.808 trillion, exceeding the target of Rp.19.175 trillion
- 3 In 2020, the non-tax state revenue realisation reached Rp25.548 trillion, exceeding the target of Rp20.843 trillion
- 4 In 2021, non-tax state revenue realisation is Rp.25,454 trillion from the target of Rp. 23.910 trillion. Whereas, initially the non-tax state revenue target for 2021 was Rp. 21.5 trillion and increased to Rp. 23.9 trillion and in line with the expectations of the Minister of Communication and Information, the realisation even exceeded the target by 106.46%.

Therefore, in 2022 the Ministry of Communication and Information Technology Budget Ceiling is raised to Rp24.7 trillion. This fantastic figure can be an alternative to state revenue that has been focusing on taxation both conventionally and digitally. To take a case in point, the imposition of income tax on foreign business entities engaged in OTT services in response to the development of the digital economy. However, there is still an open discussion on its implementation because it depends on the policies of other countries or multilateral agreements.¹² Meanwhile, if Indonesia takes a unilateral policy such as the Electronic Transaction Tax policy regulated in Law Number 2 of 2020 on the Stipulation of the Government Regulation in lieu of Law Number 1 of 2020 on State Financial Policy and Financial System Stability for Handling the 2019 Corona Disease Pandemic (COVID-19) and/or In Facing Threats that Endanger the National Economy and/or Financial System Stability (or hereinafter referred to as Law No. 2/2020),¹³ such steps are not in line with multilateral policies. Therefore, the non-tax state revenue opportunity in the telecommunications sector that is closely related to digital services (OTT) can see the gap, to be able to optimise and rely on non-tax state revenue in the telecommunications industry.

Meanwhile, the telecommunications industry in its development has gone through many phases, from initially only a connection on metal cables, then moving to the use of radio frequencies and the idea of cellular telephones emerged. The use of GSM or CDMA developed in 2G mobile phones showed an increasing demand for data that was immediately responded to by 3G and was commercialised in 2001. However, organisation attitude to quality in operations and communications not predict demand.¹⁴ Subsequently, VoIP technology was developed and gave rise to Skype in 2003. In this era, the need for data and internet utilisation are increasingly supported by the existence of 4G and the latest is 5G by relying on VoIP software application services and instant messaging such as Viber, Whatsapp, and Facebook Messenger. All audio, video and other media delivery services over IP networks pass through the telecommunications operator's network, but in most cases, use an application service called over the top (OTT).¹⁵

OTT's popularity arose due to a large number of smartphone users. As a result, telecommunication services began to lose revenue from their flagship services such as SMS and voice calls. Therefore, the use of VoIP in 2020 will make the telecommunications service industry worldwide suffer revenue loss of \$479 billion or 6.9% of total voice call revenue.¹⁶ This is of course a warning for the telecommunications service industry considering the increasingly high escalation of smartphone users.

As reported by Hotsuite data we are social for world internet user data as of February 2022 is 4.95 billion which indicates of 4% increase from 2021 with total social media users reaching 4.62 billion or a rise of 10.1% from 2021. The following data is presented in the image: ¹⁷

Meanwhile, specifically in Indonesia, the number of internet users as of February 2022 was 204.7 million. This indicates a rise of 1% from 2021 or equivalent to 73.7% of the total population. In addition, in terms of active social media users, there are 191.4 million, showing an increase of 12.6% from 2021 which was 68.9% of the total population. The following data is presented in the image: ¹⁸

From the data presented above, the number of internet and social media users is related to the use of OTT services that have been mentioned previously. OTT terminology can be defined as media services that are offered directly to users via the

internet network, the companies that house OTT services carry out control and content distribution activities.¹⁹

Figure 1 Data of global internet users in 2022 (see online version for colours)



Figure 2 Data of Indonesian internet users in 2022 (see online version for colours)



A digital platform is part of ICT industry utilisation that facilitates various parties to interact and conduct a transaction using telecommunications infrastructure.²⁰ Therefore, the use of ICT activities needs to be balanced with policies. Policies related to ICT are defined as an explanation of the code that divides the portion of stakeholders ‘duties as well as rights and obligations in the field of technology in determining the use of technology so that it is used effectively and efficiently.²¹

The emergence of OTT services has recently invaded the telecommunications service sector²² resulting in income inequality between the two. OTT service disruption occurred in voice, messaging, multimedia, and cloud services. However, the emergence of OTT services cannot be ignored because telecommunication services also require OTT services. To take a case in point, with regards to data access, if telecommunications services do not take advantage of OTT service opportunities, the telecommunication industry will deteriorate. The shift in people's consumption patterns from voice to data services necessitates the telecommunications service industry to adapt.

On the one hand, the OTT services disruption causes losses for telecommunications service operators, but on the other hand, it needs to be addressed with collaboration. The international telecommunication union (ITU) held the 2018 ITU Plenipotentiary Conference in Dubai. It resulted in the recommendation of a 'Collaborative Framework for OTT' for mutual business benefits. The recommendation focuses on investment in network infrastructure that supports OTT services as the demand for OTT services has become a major stimulus for telecommunication network infrastructure connectivity.²³ Hence, the cooperation of telecommunication service operators with OTT service companies can lead to greater state revenues in non-tax sector. Therefore, based on this background, the following problems are identified:

- 1 What are the criteria for imposing non-tax state revenue on the telecommunications service sector based on the laws and regulations?
- 2 How is the collaboration model of the telecommunications service industry with Over-The-Top Services as a step to optimise state revenues in Indonesia?

2 Discussion

2.1 Criteria for the imposition of non-tax state revenue on the telecommunication service sector based on the laws and regulations

As mentioned earlier, non-tax state revenue is part of the State Budget and Expenditure that is managed with the technical state budget. This is related to budget theory. Burkhead and Winer define budget theory as a plan of state income or expenditure in the coming year that is useful for financing government programs. In addition, based on Welsch's view, the state budget is the basis for using state finances to finance state administration in all fields for the coming year. The State Budget is closely related to non-tax state revenue.²⁴

Referring to Article 1 of the Law on Non-Tax State Revenue, it is explained that non-tax state revenue is a government levy to individuals or entities who will benefit directly or indirectly. Article 4 of the Law explained the objects that become non-tax state revenue comprise the use of natural resources, public services, management of separated state assets, management of state property, management of funds, and other state rights.

Thus, non-tax state revenue becomes a promising source of revenue aimed at the interests of development and state administration. Therefore, regulations on non-tax state revenue should be able to develop a new direction to accommodate digital transformation phenomena such as in the telecommunications services sector. This opportunity is wide

open for the relevant Ministries/Institutions to participate to collect non-tax state revenue from the profits obtained by telecommunication providers and digital service companies.

The tax system based on the current international consensus and using the international tax planning scheme cannot tax OTT companies. The organisation for economic cooperation and development (hereinafter referred to as OECD) has so far formulated base erosion and profit shifting (BEPS),²⁵ which refers to a strategy to avoid tax revenue by transferring profits in the digital economy era. Until now, the OECD is still formulating an international consensus to specifically regulate the OTT income tax which is planned to be issued in 2020.

The non-tax state revenue in the telecommunications service sector has been regulated through Government Regulation Number 80 of 2015 on Types and Tariffs of Non-Tax State Revenues Applicable to the Ministry of Communication and Information Technology. In Article 1 of the Government Regulation a quo, the types and tariffs of non-tax state revenue applicable to the Ministry of Communication and Information Technology are as follows:

- 1 Types of Non-tax state revenues that apply to the Ministry of Communications and Information Technology include revenues originating from:
 - a radio operator certification;
 - b organising of amateur radio and radio communication between residents;
 - c certification of telecommunication tools and equipment
 - d calibration of measuring instruments
 - e certification of the stipulation of centre for telecommunication tools and equipment test
 - f postal administration
 - g telecommunications operations
 - h broadcasting operation license
 - Indonesian domain name management
 - j provision education and training
 - k implementation of multi-media high school education
 - l use of facilities and infrastructure
 - m use of the radio frequency spectrum.

In Article 1 of the government regulation on non-tax state revenue in the ministry of communication and information technology letter g and letter m, there are types of non-tax state revenue for telecommunications operations and the use of ISR (radio spectrum Permit). Based on Article 1, there are 11 other scopes of non-tax state revenue regulated related to the implementation of which is covered by the Ministry of Communication and Information Technology or all matters relating to the telecommunications service sector, both in the certification of telecommunications facilities and infrastructure, radio and even broadcasting as well as postal aspects. In addition, the implementation of education and schools included in all activities related to the scope of work of the ministry of communication and information technology such as multi-media high schools are also included in non-tax state revenue.

Further, letters a to letter i Article 1 Paragraph (2) of the Government Regulation *a quo* divides the types and tariffs of non-tax state revenue. It is also regulated and stipulated in Appendix I of the Government Regulation, as follows:

- 2 Types and Tariffs of Non-tax state revenues as referred to in paragraph (1) letter a to letter i are stipulated in Appendix I to this Government Regulation.

In addition, Article 1 paragraph (3) of the Government Regulation *a quo* explains that the arrangements that are not included in Appendix I on the use of the radio spectrum are regulated and stipulated by the following formula, namely:

- 3 Types and Tariffs of Non-tax state revenues as referred to in paragraph (1) letter m shall be determined by a selection formula or mechanism.

With special arrangements in the telecommunications services sector on types and tariffs of non-tax state revenue to realise justice and legal certainty for the related parties. Further regulation through the Government Regulation on Non-Tax State Revenue in the Ministry of Communication and Information Technology can realise justice and legal certainty for business actors in the telecommunications sector. The said Government Regulation has comprehensively regulated the arrangement of types and tariffs for the types of non-tax state revenue that has been further explained in the attachment to the Government Regulation, the types and rates are determined by a selection formula or mechanism.

The telecommunications sector that is subject to non-tax state revenue is essentially divided into two groups. The first group is non-tax state revenue related to the use of radio frequency spectrum (ISR). The non-tax state revenue is imposed, firstly, at the time of the frequency auction and, secondly, on annual non-tax state revenue collection. Considering that frequency is a limited resource, the tariffs of the imposed non-tax state revenue are relatively high. However, the users, the telecommunication operators, are on average included in the industry with high revenue, hence, it has not been a significant problem for them. The second group is the non-tax state revenue imposed based on telecommunications and broadcasting operations. Telecommunications operations impose non-tax state revenue of 0.50% of gross revenue for telecommunications operators and 1.25% of gross revenue for Universal Service Obligation (USO) funds managed by BAKTI Ministry of Communication and Information Technology, as stipulated in the Regulation of the Minister of Communication and Information Technology Number 17 of 2016 on Instructions for Implementing Tariffs on Non-tax state revenues From Charges for Telecommunication Operation Rights and USO Contributions in Article 3 Paragraph (1) and Paragraph (2). Furthermore, Article 1 Paragraph (4) explains that the USO is an obligation that must be paid by telecommunications operators and becomes non-tax state revenue.

This era of digital transformation brings positive impacts in several aspects, including the digital economy. Digital Economy is said the most actual business and tends to bring huge profits, hence, it disrupts many industries. Thus, to compete, businesses need to adapt to digital transformation patterns. highlighting the telecommunications sector as a leading business that plays a role in economic growth in the digital era, President Joko Widodo said that by 2025 Indonesia's digital economy transactions will reach \$124 billion. On the other hand, the President Director of Telkomsel states that his company achieve revenue of Rp. 50.5 trillion in the digital economy, which indicates an increase of 77.5%. In addition, the General Chairperson of the Telematics Society (MASTEL)

explains that the presence of the digital economy is an opportunity to improve the nation's economy. Telecommunication operators must find new directions to reap the benefits of OTT as well as develop other digital economy potentials, namely the internet of things (IoT), big data, blockchain, robotics, and their derivatives.²⁶ Corporate image and self-service technology (SST) on customer satisfaction is delved into, as well as the association between customer satisfaction and customer revisit intention.²⁷

From the aforementioned facts and data, telecommunications sectors have a big impact especially in this digital transformation era as well as if there are innovations by utilising existing digitisation by telecommunications operators. This will open up the positive potential that will also be related to non-tax state revenue in the telecommunications sector. In the future, this can be responded positively by telecommunication operators to continue to innovate in their business models so as not to be disrupted by the increasingly rapid digitalisation in this Industry 5.0 era. The digitisation by utilising OTT, IoT, big data, blockchain, robotics will provide potentials for cellular operators to gain more benefits that will be parallel to the optimisation of non-tax state revenue in the telecommunications sector.

The rapid digitisation is also related to the telecommunications sector and digital services in which the presence of OTT, IoT, big data, blockchain, robotics, and other digital services have an impact on the consumption of digital services that also have a direct effect on non-tax state revenue. This is because the public's consumption of bandwidth usage and digital services will affect the operators' revenue. The more the service usage, the higher the revenue earned by the operator, which in this case will have implications for non-tax state revenue, especially in the telecommunications sector.

2.2 Telecommunication service industry collaboration model with over the top services

Telecommunications services exist as an effort to fulfil the need for telecommunications by utilising the network organised by the telecommunications sector whose regulations/policies are within the scope of the Ministry of Communication and Information Technology. To implement the Law on Non-Tax State Revenue within the scope of Ministries/Institutions, especially at the Ministry of Communication and Information Technology, a Government Regulation on Non-Tax State Revenue in the Ministry of Communication and Information Technology was issued.

Furthermore, with regards to OTT services, the state has regulated it to contribute to state revenue that is regulated to pay a number of taxes based on positive legal provisions. One of the regulations is Law Number 2/2020 stipulating the income tax of OTT service companies. In fact, the government's regulation on OTT tax sector is still in open discussion even at the international level.²⁸ Thus, it is promising that the non-tax state revenue as state revenue to be imposed on the telecommunications service industry that opens access to OTT services as opposed to waiting for OTT service tax certainty without taking alternative actions. As a workaround for the issue of imposing income tax on electronic commerce transactions, the law places limits on Electronic Transaction Tax on OTT businesses.

In addition, there is an issuance of a Minister of Finance Regulation Number 48/PMK.03/2020 of 2020 on Procedures for Appointing Collectors, Collecting, and Depositing, as well as Reporting Value Added Tax on the Utilisation of Intangible Taxable Goods and/or Taxable Services from Outside the Customs Area in the Customs

Area through Trading through Electronic Systems that focuses on the imposition of Value Added Tax and Value Added Tax on Luxury Goods for electronic trade transactions of foreign business actors. The Regulation has been revoked by Ministry of Finance Regulation Number 60/PMK.03/2022 of 2022 on procedures for appointment of collectors, collection, deposit, and reporting of value added tax on the utilisation of intangible taxable goods and/or taxable services from outside the customs area within the customs area through trading via electronic systems.

Cooperation between telecommunication services and OTT services is required and should be based on an industrial organisation theory initiated by Tirole in 1988 that discusses the major influence of market conditions and structure on a company's decision-making strategy.²⁹ With regards to the telecommunications service industry, there must be strict action on OTT services as it has caused inequality in revenue with the telecommunications service industry, even though the OTT services depend on telecommunications networks. Therefore, the telecommunications service industry needs to issue strategic decisions to respond to the conditions and structure of the national market.

OTT services that continue to develop in addition to causing problems for telecommunications companies in Indonesia because in general these services do not have a form of cooperation with telecommunication providers so that the network infrastructure built by the operator benefits more from OTT services, but problems in terms of taxes, there is no regulation especially regarding OTT service income tax. As is known, taxes are an important component in state revenue. Taxes account for about 75% of all state revenues. The development of OTT services also has great potential for state revenues from the income tax sector.³⁰

With regards to the cooperation between companies that specialise in the field of networking and the provision of content, there has actually been a normative response by the issuance of Government Regulation Number 46 of 2022 on Postal, Telecommunications, and Broadcasting. This is the government's step in regulating OTT cooperation and telecommunications operators in Indonesia. The Government Regulation *a quo* is a *beleid* that categorised Indonesia as having a leading regulation in cooperation in telecommunication sector with OTT services. Article 15 of the Government Regulation *a quo* simply regulates the cooperation between telecommunication services and OTT services based on a valid written or unwritten agreement. In a sense, at the time telecommunication operators allow access to OTT, it can be interpreted that there has been cooperation between telecommunications operators and OTT services. This is because telecommunications services may not open network access to OTT services.

Furthermore, Article 15 paragraph (1) of the Government Regulation *a quo* regulates the telecommunication cooperation principles, that local OTT players as well as foreign OTT players who conduct business activities via the internet are carried out with fair, reasonable and non-discriminatory principles as well as maintain quality service where the OTT service activity is elucidated by the Explanation of Article 15 paragraph (1) of the Government Regulation *a quo* related to the service determined by the Minister.

The elaboration of each principle of cooperation includes, firstly, the principle of fairness, it is needed to respond to injustice at the time OTT services reap greater benefits from telecommunications service operators who bear higher costs than OTT services. Thus, cooperation is the answer to the occurring problems to ensure fair rights and obligations of both parties in obtaining benefits rather than experiencing losses. Both principles: fairness and non-discriminatory seek to minimise differences in treatment to

create a good cooperation climate. The third principle, maintaining service quality, is to pay more attention to the quality of services served to the public.³¹

Therefore, it is necessary for the telecommunications service industry to build partnerships with OTT providers. This allows both parties to benefit from the coverage provided by each platform. This strategy helps telecommunication operators maintain traffic and get a share of OTT revenue. However, this does not make telecommunications services take control OTT services.

Breakthrough in collaboration between telecommunication service operators and OTT services is essential compared to allowing the telecommunications sector to be disrupted. OTT services can be value-added for the telecommunications service industry in Indonesia. So far, the cooperation of telecommunication operators with OTT services can be conducted by seeking profit from AdSense owned by the OTT platform. Furthermore, cooperation with telecommunication operators can also be carried out by inviting local and foreign platforms, for example, Telkom IndiHome via Iflix, XL with Tribe, and Telkomsel cooperation with Disney+ (Plus) Hotstar.³²

In addition, telecommunication service operators need to adapt by preparing innovations related to OTT services as a step to optimise state revenues in the non-tax sector, including the following:

- 1 Building Advanced Technology: The pinnacle of telecommunication service providers is from their network services. Efforts to build sophisticated networks and state-of-the-art technology such as 5G become a high bargaining power for telecommunications service operators as they offer greater bandwidth and enable competitive tariffs for data demand that continues to increase due to OTT services. 5G technology can also support digital transformation and the era of society 5.0. 5G technology is a compilation of previous technologies starting with 2G, 3G, and 4G; Wi-Fi with the realisation of data transmission speeds that move up to 10-100 times faster than the 4G generation.³³
- 2 Providing their own OTT service: Telecommunication service providers are allowed to build their own services and have the opportunity to have full control over those services. In addition, the OTT service development supports the growth of the creative and local industries in the use of technology and information activities.³⁴ Telecommunications service providers can build a world of OTT services to engage more customers.
- 3 Generating more revenue: Telecommunication service providers can check their revenue decline by having their own OTT service. The telecommunication operators already have a large customer base in the market³⁵ and it is easy to generate more revenue with their OTT services.
- 4 Achieving consumer credibility: Telecommunication service providers can gain more trust from the customers.³⁶ Hence, an OTT application emergence as one of its products is possible to immediately get the same trust as telecommunications services. Customer satisfaction can be enhanced as there is a complete communication package and the relationship between customer and service provider can reach new dimensions.

- 5 Offering added-value service on demand: operators already have a large customer base³⁷ and have the access to large volumes of data. Data mining activities allow operators to easily identify customer needs and build new services-on-demand. Services such as healthcare, electronic commerce, and e-learning will enable operators to meet various customer needs.
- 6 Attracting consumers from other networks: By providing OTT applications, telecommunication service providers can easily attract customers from other networks.³⁸ A quality OTT service will definitely attract customers regardless of their network and this process can help telecommunication operators build strong relationships with other network's customer bases to generate revenue and become a platform for brand promotion of the telecommunication services OTT applications.

Currently, the collaboration between the telecommunications service industry and OTT services requires a legal umbrella for personal data protection. The protection of right to privacy in Indonesia has received constitutional protection since the amendment in 2000, with the addition of ten points on human rights. Articles 28G and 28H of the 1945 Constitution specifically regulate the right to privacy. In 2022, Law Number 27 of 2022 on personal data protection (PDP Law) was issued with the aim of guaranteeing citizens' rights to personal protection and fostering public awareness as well as ensuring recognition and respect for the importance of personal data protection.

Prior to now, the protection of personal data was governed by several laws and regulations, including Law Number 11 of 2008 in conjunction to Law Number 19 of 2016 on Electronic Information and Transactions, Law Number 39 of 1999 on Human Rights, Law Number 14 of 2008 on Public Information Disclosure, and Law Number 23 of 2006 in conjunction with Law Number 24 of 2013 on Public Administration.

Apart from the law, the right to privacy is also contained and regulated in the Ministerial Regulation. Article 17 paragraph (3) of Minister of Communication and Information Regulation No. 12 of 2016 on Telecommunication Service Customer Registration clearly states that Telecommunication Service Providers are obliged to keep customer data and/or identity confidential. In addition, there is also another Regulation of the Minister of Communication and Information No. 20 of 2016 on Personal Data Protection in Electronic Systems which protects personal data in electronic systems including protection against the acquisition, collection, processing, analysing, storage, display, announcement, transmission, dissemination, and destruction of personal data.

Legal protection of data privacy in Indonesia has been stipulated in two Minister of Communication and Information Regulations, namely No. 12 of 2016 and No. 20/2016. Based on the two aforementioned regulations, arbitrary and irresponsible use of private data will be subject to administrative sanctions in the form of verbal warnings, administrative fines, temporary suspension and/or revocation of telecommunications service industry licenses. Revocation of the license is not provided in the Minister of Communication and Information Regulations No. 20/2016, instead, the sanction is only announced on an online website.

The collaboration between the telecommunications service industry and OTT services can be an initial for solving the occurring problems. In addition, the most important aspect is the increase in state revenue that is not only relied on from taxes but also from non-tax state revenue. If the telecommunications service industry can collaborate with OTT services, it will affect positively on tariffs. Further, with the adaptation of the telecommunications service industry, there will be more OTT services that require access

to telecommunication networks, both foreign OTT and OTT created by the telecommunications service industry themselves. Thus, non-tax state revenue from the telecommunications service industry will raise parallel to the increase in OTT and collaboration between the two parties.

OTT regulation in other countries focuses on regulating OTT as a service that distributes digital content for user security with regulatory protection and economic acceleration. Singapore has an agency called Infocomm Media Development Authority (IMDA) that drives Singapore's digital transformation by building a vibrant digital economy and an inclusive digital society. The IMDA requires service providers to obtain a license and the OTT services to have a content code that ensures classification and rating as well as a detailed list of prohibited contents. If the norms are violated, the agency can remove the content and impose penalties.

3 Conclusions

- 1 Along with the development of ICT technology infrastructure, there are new challenges for operators, especially for telecommunications operators. The increasingly rapid digitisation in the era of Industry 5.0 provides new potentials and challenges. This must be balanced with innovations by the telecommunications operators. The telecommunication operators should respond positively to digitisation so as not to be disrupted. In fact, the advent of digitalisation can have a positive impact as well as good potential for the future in the telecommunications sector and digital services. As previously stated that the OTT service income tax arrangement has an impact on the imposition of double taxation from two or more countries and is considered to require a special form of arrangement outside of the existing income tax arrangement, it is necessary to examine specifically the form of the arrangement in order to provide legal certainty to OTT service providers because after all OTT services have a positive impact on economic growth in the world.
- 2 The telecommunications service industry is present in fulfilling the telecommunications needs in Indonesia. The role of the telecommunications service industry has a large share in state revenues, namely non-tax state revenue. However, it requires a new era of non-tax state revenue management that does not only focus on the imposition of conventional telecommunications services. In the digital sector, there is a gap for non-tax state revenue in the fields under the scope of the Ministry of Communication and Information Technology of the Republic of Indonesia. It is necessary to create a collaboration model between the telecommunications service industry and OTT services in order to increase data access traffic that has an impact on state revenues. In addition, the telecommunications services industry needs to adapt to respond to the digital era in order to optimise state revenue by developing advanced technology, creating its own OTT services, generating more revenue, achieving customer credibility, offering value-added services on demand, and attracting customers from other networks.

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References

- Aziz, A. 'Mobile telecom operator competition strategy of mobile telecommunication operators', *Buletin Pos dan Telekomunikasi*, Vol. 13, No. 1, 2015.
- Cahyadi, A. et al. (2021) 'Direct tax for digital platform during the COVID-19 pandemic: study in Indonesia', *Journal of Southwest Jiaotong University*, Vol. 56, No. 2, p.2021.
- Direktorat Penyusunan APBN (2016) *Direktorat Jenderal Anggaran, Informasi APBN 2016* [online] <https://www.kemenkeu.go.id/sites/default/files/bibfinal.pdf> (accessed 10 July 2022).
- DPR RI (2022) *Puskajian Anggaran* [online] <https://berkas.dpr.go.id/puskajianggaran/kamus/file/kamus-1.pdf> diakses (accessed 20 Juni 2022).
- Endah Sitarasmi dan Firdaus Baderi (2019) *Mengejar Pajak Over The Top (OTT)* [online] <https://www.neraca.co.id/article/116450/mengejar-pajak-over-the-top-ott>.
- Gunawan, H. (2022) *Digital Economy, Prima donna of Telecommunications Operators* [online] <https://m.tribunnews.com/tribunners/2022/01/30/ekonomi-digital-primadona-operator-telekomunikasi?page=all> diakses (accessed 12 Juli 2022).
- ITU News (2022) *New ITU Recommendation Provides Parameters for a Collaborative Framework for OTTs*, Diakses Dari [online] <https://news.itu.int/new-itu-recommendation-provides-parameters-for-a-collaborative-framework-for-otts/> diakses pada (accessed 2 Juni 2022).
- Jackson, J.K. et al. (2021) 'Summary: global economic effects of COVID-19', *Congressional Research Service*, November, Vol. 10, p.2021 [online] <https://sgp.fas.org/crs/row/R46270.pdf>.
- Jarvey, N. (2017) *Can CBS Change the Streaming Game With 'Star Trek: Discovery'?*, The Hollywood Reporter.
- Jouzdati, J., Shirouyehzad, H., Maaroufi, N. and Javaheri, A. (2020) 'Identification, ranking and clustering of electronic banking services based on customer satisfaction: case study in bank industry', *International Journal of Services, Economics and Management*, Vol. 11, No. 2, pp.10–12.
- Kompas, H. (2017) *OECD Bahas Pajak Digital* [online] <https://www.ortax.org/ortax/?mod=berita&page=show&id=15736&q=&hlm> (accessed 3 July 2022).
- Liinasuo, M. and Norros, L. (2013) 'Collaboration among telecommunication professionals as a means to meet work demands', *VTT Technical Research Centre of Finland, Conference Paper*.
- Maudy, A.L., Ramli, A.M. and Ramli, T.S. (2022) 'Telaah Yuridis Penyelenggaraan Teknologi 5G di Indonesia: Langkah Transformasi menuju Era Society 5.0', *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, Vol. 2, No. 1, p.2022.
- Muttaqin, Z. et al. (2021) 'Digital services tax under law number 2 of 2020: a new tax type in Indonesia?', *Journal of Southwest Jiaotong University*, Vol. 56, No. 5, p.2021.
- OECD News (2022) *OECD Releases Pillar Two Model Rules for Domestic Implementation of 15% Global Minimum Tax*, Diakses Dari [online] <https://www.oecd.org/newsroom/oecd-releases-pillar-two-model-rules-for-domestic-implementation-of-15-percent-global-minimum-tax.htm> pada (accessed 14 December 2022).

- Purwowidhu, C.S. (2022) *G20 Dukung Implementasi Solusi Dua Pilar Untuk Keadilan Perpajakan Global*, Diakses Dari [online] <https://mediakeuangan.kemenkeu.go.id/article/show/g20-dukung-implementasi-solusi-dua-pilar> pada 14 Desember 2022.
- Puslitbang, S.D.P.P.I. (2018) *Analysis of the Indonesian Telecommunications Industry to Support Efficiency*, Puslitbang SDPPI Human Resources Research and Development Agency of the Ministry of Communication and Information Technology of the Republic of Indonesia, Jakarta.
- Ramadayanti, E. (2022) *Penerimaan Negara pada Layanan Over The Top berdasarkan Hukum Positif Indonesia*, Universitas Padjadjaran, Skripsi.
- Ramadayanti, E., Ramli, T.S. and Muttaqin, Z. (2022) ‘Menelaah Aspek Yuridis Pajak E-Commerce sebagai Langkah Efektif Optimalisasi Penerimaan Negara’, *Citizen*, Vol. 2, No. 1, p.112.
- Ramli, A.M., Ramli, T.S.A et.al. (2022) ‘Collaboration principles between telecommunication operators and over-the-top (OTT) platform providers in the context of the Indonesian job creation regulation’, *TELSOC: Telecommunications and the Digital Economy*, Vol. 10, No. 1, p.2022.
- Ramli, T.S. et al. (2021) ‘The role of over the top (OTT) service on utilization of telecommunication infrastructure based on Indonesia tax and non-tax policy’, *Journal of Southwest Jiaotong University*, Vol. 56, No. 5, p.2021.
- Riyanto, A.D. (2022) *Hootsuite (We are Social): Indonesian Digital Report 2022*, Diakses Dari [online] <https://andi.link/hootsuite-we-are-social-indonesian-digital-report-2022/> pada (accessed 2 Juni 2022).
- Safiul, S. (2022) *Why Telecom Operators Need an OTT APP?*, Diakses Dari [online] https://ducomm-io.translate.goog/blog/2019/05/05/why-telecom-operators-need-an-ott-app/?_x_tr_sl=en&_x_tr_tl=id&_x_tr_hl=id&_x_tr_pto=op,sc pada (accessed 2 Juni 2022).
- Setiawan, A.B. (2018) ‘Policy development on the provision of application and content services in the digital ecosystem through over the top’, *Jurnal Penelitian Pos dan Informatika*, Vol. 8, No. 2, p.10.
- Sujata, Y. et al. (2015) ‘Impact of over the top (OTT) services on telecom service providers’, *Indian Journal of Science and Technology*, Vol. 8, No. S4, p.146.
- Wibowo, P. et al. (2021) ‘Effect of central government spending on non-tax state revenues in state ministries/institutions for the 2012–2017 period’, *Indonesian Treasury Review: Jurnal Perbendaharaan, Keuangan Negara, dan Kebijakan Publik*, Vol. 6, No. 3, p.2021.
- Yulitasari, H. et al. (2018) ‘The effect of credibility of customer service communication on the image of PT’, *Cellular Telecommunications, TBK, Sosfilkom*, Vol. 12, No. 1, p.2018.

Notes

- 1 Jackson J.K. et.al. (2021) ‘Summary: global economic effects of COVID-19’, *Congressional Research Service*, p.5.
- 2 See Article 11 paragraph (3) of Law on State Finance.
- 3 Purwowidhu, CS. (2022) *G20 Dukung Implementasi Solusi Dua Pilar Untuk Keadilan Perpajakan Global* [online] <https://mediakeuangan.kemenkeu.go.id/article/show/g20-dukung-implementasi-solusi-dua-pilar> (accessed 14 December 2022).
- 4 OECD News (2022) *OECD Releases Pillar Two Model Rules for Domestic Implementation of 15% Global Minimum Tax*, Diakses Dari [online] <https://www.oecd.org/newsroom/oecd-releases-pillar-two-model-rules-for-domestic-implementation-of-15-percent-global-minimum-tax.htm> pada (accessed 14 December 2022).
- 5 Wibowo, P. et al. (2021) ‘Pengaruh Belanja Pemerintah Pusat terhadap Penerimaan Negara Bukan Pajak...’, *Indonesian Treasury Review*, Vol. 6, No. 3, p.228.
- 6 Ibid.

- 7 See Article 5 of the Law on Non-Tax State Revenue.
- 8 See Article 3 paragraph (1) of the Law on Non-Tax State Revenue.
- 9 Endah Sitarasmi dan Firdaus Baderi *Mengejar Pajak Over The Top* (OTT), <https://www.neraca.co.id/article/116450/mengejar-pajak-over-the-top-ott> (accessed 10 July 2022).
- 10 Jouzdani, J., Shirouyehzad, H., Maaroufi, N. and Javaheri, A. (2020) 'Identification, ranking and clustering of electronic banking services based on customer satisfaction: case study in bank industry', *International Journal of Services, Economics and Management*, Vol. 11, No. 2, p.10.
- 11 Irama, A.B. (2022) *Geliat PNBPN di tengah Pandemi COVID-19 dan Industri 4.0* [online] <https://djpb.kemenkeu.go.id/portal/id/berita/lainnya/opini/3724-geliat-pnbp-di-tengah-pandemi-COVID-19-dan-industri-4-0.html> (accessed 16 July 2022).
- 12 Cahyadini, A. et al. (2021) 'Direct tax for digital platform during the COVID-19 Pandemic...a', *JSJU*, Vol. 56, No. 2, p.276.
- 13 Muttaqin, Z. et al. (2021) 'Digital services tax under law number 2 of 2020...', *JSJU*, Vol. 56, No. 5, p.471.
- 14 Tiamiyu, M.A. and Eigbe, O.E. (2018) 'Demand for courier services : determinants for customer organisations in a developing country', *International Journal of Services, Economics and Management*, Vol. 9, Nos. 3–4, pp.177–207.
- 15 Safiul, S. (2022) *Why Telecom Operators Need an OTT APP?* [online] <https://ducomm-io.translate.google.com/blog/2019/05/05/why-telecom-operators-need-an-ott-> on (accessed 2 June 2022).
- 16 Sujata, Y. et al. (2015) 'Impact of over the top (OTT) services on telecom service providers', *Indian Journal of Science and Technology*, Vol. 8, No. S4, p.146.
- 17 Riyanto, A.D. (2022) *Indonesian Digital Report 2022*, Diakses Dari [online] <https://andi.link/hootsuite-we-are-social-indonesian-digital-report-2022/> (accessed 2 June 2022).
- 18 Ibid.
- 19 Jarvey, N. (2017) *Can CBS Change the Streaming Game With 'Star Trek: Discovery'?*, The Hollywood Reporter.
- 20 Ramadayanti, E. (2022) *Penerimaan Negara pada Layanan OTT berdasarkan Hukum Positif Indonesia*, Universitas Padjadjaran, Skripsi, p.42.
- 21 Setiawan, A.B. (2018) 'Pengembangan Kebijakan terhadap Penyediaan Layanan Aplikasi dan Konten ...', *Jurnal Penelitian Pos dan Informatika*, Vol. 8, No. 2, p.174.
- 22 Liinasuo, M. and Norros, L. (2013) 'Collaboration among telecommunication professionals as a means to meet work demands', *VTT Technical Research Centre of Finland, Conference Paper*, p.1.
- 23 ITU News (2022) *New ITU Recommendation...*, Diakses Dari [online] <https://news.itu.int/new-itu-recommendation-provides-parameters-for-a-collaborative-framework-for-otts/> diakses pada (accessed 2 Juni 2022).
- 24 DPR RI (2022) *Puskajian Anggaran...* [online] <https://berkas.dpr.go.id/puskajianggaran/kamus/file/kamus-1.pdf> diakses (accessed 20 Juni 2022).
- 25 Kompas, H. (2017) *OECD Bahas Pajak Digital* [online] <https://www.ortax.org/ortax/?mod=berita&page=show&id=15736&q=&hlm> (accessed 3 July 2022).
- 26 Gunawan, H. (2022) *Ekonomi Digital, Primadona Operator Telekomunikasi* [online] <https://m.tribunnews.com/tribunners/2022/01/30/ekonomi-digital-primadona-operator-telekomunikasi?page=all> accessed on 12 July 2022.
- 27 Li, S. (2020) 'The impact of service quality, self-service technology, and the corporate image on customer satisfaction and customer revisit intention among luxury hotels in Kuala Lumpur, Malaysia', *International Journal of Services, Economics and Management*, Vol. 11, No. 1, pp.48–70.

- 28 Ramadayanti, E., Ramli, T.S. and Muttaqin, Z. (2022) 'Menelaah Aspek Yuridis Pajak E-Commerce sebagai Langkah Efektif Optimalisasi Penerimaan Negara', *Citizen*, Vol. 2, No. 1, p.112.
- 29 Tim Peneliti Puslitbang SDPPI (2018) *Analisis Industri Telekomunikasi Indonesia ...*, Puslitbang SDPPI Badan Litbang SDM Kemenkominfo RI, Jakarta, p.16.
- 30 Direktorat Penyusunan APBN (2016) *Direktorat Jenderal Anggaran, Informasi APBN 2016* [online] <https://www.kemenkeu.go.id/sites/default/files/bibfinal.pdf>.
- 31 Ramli, A.M. et al. (2022) 'Collaboration principles between telecommunication operators and over-the-top (OTT) ...', *Telsoc: JTDE*, Vol. 10, No. 1, p.7–10.
- 32 Ramli, T.S. et al. (2021) 'The role of OTT service on utilization of telecommunication infrastructure based on Indonesia tax and non-tax policy', *JSJU*, Vol. 56, No. 5, p.11–12.
- 33 Maudy, A.L., Ramli, A.M. and Ramli, T.S. (2022) 'Telaah Yuridis Penyelenggaraan Teknologi 5G di Indonesia: Langkah Transformasi menuju Era Society 5.0', *Citizen*, Vol. 2, No. 1, p.130.
- 34 Ahmad Budi Setiawan, Op.Cit., pp.182–183.
- 35 Aziz, A. (2015) 'Strategi Persaingan Operator Telekomunikasi ...', *Buletin Pos dan Telekomunikasi*, Vol. 13, No. 1, p.24.
- 36 Yulitasari, H. et al. (2018) 'Pengaruh kredibilitas komunikasi customer service terhadap citra PT. Telekomunikasi Seluler, TBK', *Sosfilkom*, Vol. 12, No. 1, p.38.
- 37 Ibid.
- 38 Azwar Aziz, Op.Cit.