

## **The concept of internet rights policy in Indonesia: A comparison from United States, European Union and Malaysia**

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**Abstract:** The regulatory framework related to internet access is one of the criteria that influences a country's level of digital competitiveness. Valuable lessons need to be learned from countries that have a better level of digital competitiveness than Indonesia. This article proposes a concept for regulating internet access rights in Indonesia in the era of digital transformation to increase Indonesia's digital competitiveness. Research methods used are analytic normatiques with a normative-based approach that USES secondary data sources of legislation, legal theories, principles of law and opinions by scholars. Research shows that there is a correlation between the framework's regulatory levels as a sub-grading factor with a country's final digital competitiveness rating so that a legal certainty can determine a country's digital competitiveness level. Indonesia has, to date, almost no certainty of the law. In contrast with countries in the United States, the European Union, and Malaysia, which already have clear, unequivocal legislation and regulation that govern Internet privileges.

**Keywords:** *Comparisons of state, Internet, Policy concept.*

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### **1. Introduction**

In the era of the information society or post-globalization era [1], information and communication technology (ICT) plays a very important role in people's lives because various needs in terms of electronic transactions are met via the internet [2]. The internet was initially used as a means of communication in the military and research fields before becoming a tool that is now widely used in various other fields of life including electronic commerce [3]–[5], medicine and health services [6]–[9], education (Naukovì Zapiski, 2021; Cetin et al., 2023), transportation [12]–[16], agriculture (Huang, Zhuang and Xiao, 2022; Suroso, Fahmi and Tandra, 2022; Onyeneke et al., 2023; Weng, Liu and Huo, 2023; Yang et al., 2023, politics [17]–[20], and others.

Many countries have focused their regulations and policies on internet access issues because they have realized the importance of the right to internet access in fulfilling the basic rights of their citizens and the importance of internet access for a country's welfare. The regulatory and technological frameworks related to internet access rights are very influential in assessing a country's level of digital competitiveness. The International Institute for Management Development (IMD) categorizes both as "technology" factors and makes them sub-factors that are benchmarks for assessing a country's level of digital competitiveness. Based on the IMD's 2023 assessment, Indonesia is ranked only 45th in the world for its digital competitiveness; this is far behind the United States in top position, the Netherlands in 2nd position, and Singapore in 3rd position. Indonesia is also behind other Southeast Asian countries, namely Malaysia in 33rd position and Thailand in 35th position [21].



Figure 1. Digital Competitiveness in 2023

This lag in digital competitiveness also impacts global competitiveness which is not only assessed in terms of digitalization, but also economic performance, government efficiency, business efficiency, and infrastructure. Referring to the IMD World Competitiveness Index 2023 [22], which calculates competitiveness, Indonesia had successfully risen from 44th to 34th. Factors driving the higher ranking include how well the performance of the domestic economy has been maintained, for which it ranks 28 out of the 64 countries in the IMD survey, government efficiency in terms of tax policy, for which it ranks 9, business efficiency such as the labor market for which it ranks number 1, and infrastructure including basic infrastructure for which it ranks 26 [23]. Despite increasing, Indonesia's competitiveness is far behind its neighbors, such as Malaysia and Thailand. In the IMD World Competitiveness Index 2023, Malaysia was ranked 27th, up from its previous rank of 32nd. Meanwhile, Thailand is ranked 30th.



2023	Country	2022	Ranking Change	
01	Denmark	01	-	
02	Ireland	11	+9	↑
03	Switzerland	02	-1	↓
04	Singapore	03	-1	↓
05	Netherlands	06	+1	↑
27	Malaysia	32	+5	↑
28	Korea Rep.	27	-1	↓
29	United Kingdom	23	-6	↓
30	Thailand	33	+3	↑
31	New Zealand	31	-	
32	Lithuania	29	-3	↓
33	France	28	-5	↓
34	Indonesia	44	+10	↑

Figure 2. IMD Global Competitiveness Index in 2023

This situation means that Indonesia needs to improve itself immediately to increase global competitiveness and digital competitiveness, including by improving the regulatory and technological frameworks related to internet access rights. Thus, it is important to examine the concept of regulating internet access rights in Indonesia to increase both digital and global competitiveness.

## 2. Method

The type of research used is descriptive analysis, which entails carrying out critical analysis using various legal theories and principles that are directly or indirectly related to the issue of internet access rights in Indonesia. The absence or lack of legal regulations that specifically regulate the right to meaningful internet access in Indonesia will be analyzed based on legal principles and theories as well as comparisons with the regulations of several other countries.

This research also uses a normative juridical approach, namely a method that uses secondary data sources in the form of statutory regulations, legal theories, legal principles, and the opinions of scholars. In this case, several statutory regulations are used that are related to meaningful internet access rights; for example, the Telecommunications Law, the Broadcasting Law, and the ITE Law, as well as various related policies which are then analyzed based on legal theory and legal principles.

## 3. Discussion

### 3.1. Internet Access Rights in Indonesia

#### 3.1.1. Internet Access Conditions

In the last decade, Indonesia has experienced significant progress in terms of its digital transformation. However, the problems of uneven digital infrastructure, unstable connectivity, and the delay in the penetration of next-generation networks are still the main issues facing the nation's digital transformation. Those problems aside, as for the digital ecosystem, the lack of digital innovation and the dominance of global tech giants means that Indonesia is still at the level of being a technology consumer. The situation is made more difficult because the synchronization of infrastructure development and digital ecosystems from the center to the regions is less than effective [24].

At the beginning of 2023, the proportion of Indonesia's population that were internet users had reached 78.19%, an increase of 1.17% from the previous year. The number of mobile connections used had increased by 3.6% since the COVID-19 pandemic. There was also the number of active social media users which had increased to 12.6%. The trend of increasing the number of mobile connections is also seen in several other Southeast Asian countries such as Malaysia (2.9%), Thailand (4.1%), and the Philippines (4.6%) [24].



Figure 3. Comparison of internet users and mobile connections in Indonesia in 2023

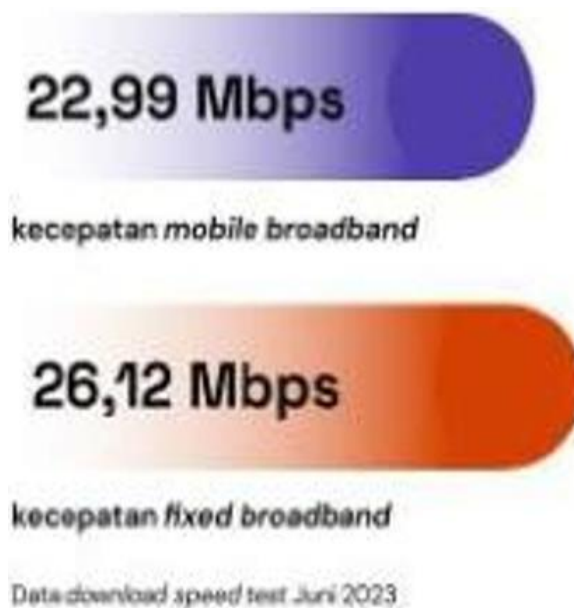
In providing internet which is increasing in quality, over the last three years, telecommunications service providers have also been active in spreading 4G coverage to more areas. By 2022, 89% of Indonesia's population had access to at least a 4G signal. The pandemic caused a surge in demand for broadband internet. This was in line with the trend of increasing investment in the national telecommunications sector which is a manifestation of operators' efforts to meet the needs of the wider community for internet data use [24].

Compared to mobile broadband, the level of fixed broadband penetration is still low; data from 2020 show that only around 15% of households are connected to fixed broadband. Two years later in for 2022, the data show that only 22.91% of household coverage is covered by fixed broadband.



**Figure 4.** The mobile broadband usage gap in 2020-2022

Internet speed is still relatively low while service costs are quite expensive. Internet speed around the nation is also still relatively slow compared to benchmark countries according to the Speedtest Global Index, with mobile broadband speed that is 22.99 Mbps and fixed broadband speed that is 26.12 Mbps, although speeds still tend to fluctuate according to a download speed test June 2023 [24]. This is still very far from the FCC standards that have been adopted by states in the USA, namely 100 Mbps for fixed and 35 Mmbps for mobile [25].



**Figure 5.** The difference in speed between mobile and fixed broadband.

When compared with the conditions found in other countries, Indonesia is only ranked 99th out of 140 countries for mobile broadband and 122nd out of 180 countries for fixed broadband. However, in several provinces in Indonesia, mobile broadband download speeds are more than 25 Mbps, while several other provinces still have download speeds below 20 Mbps.

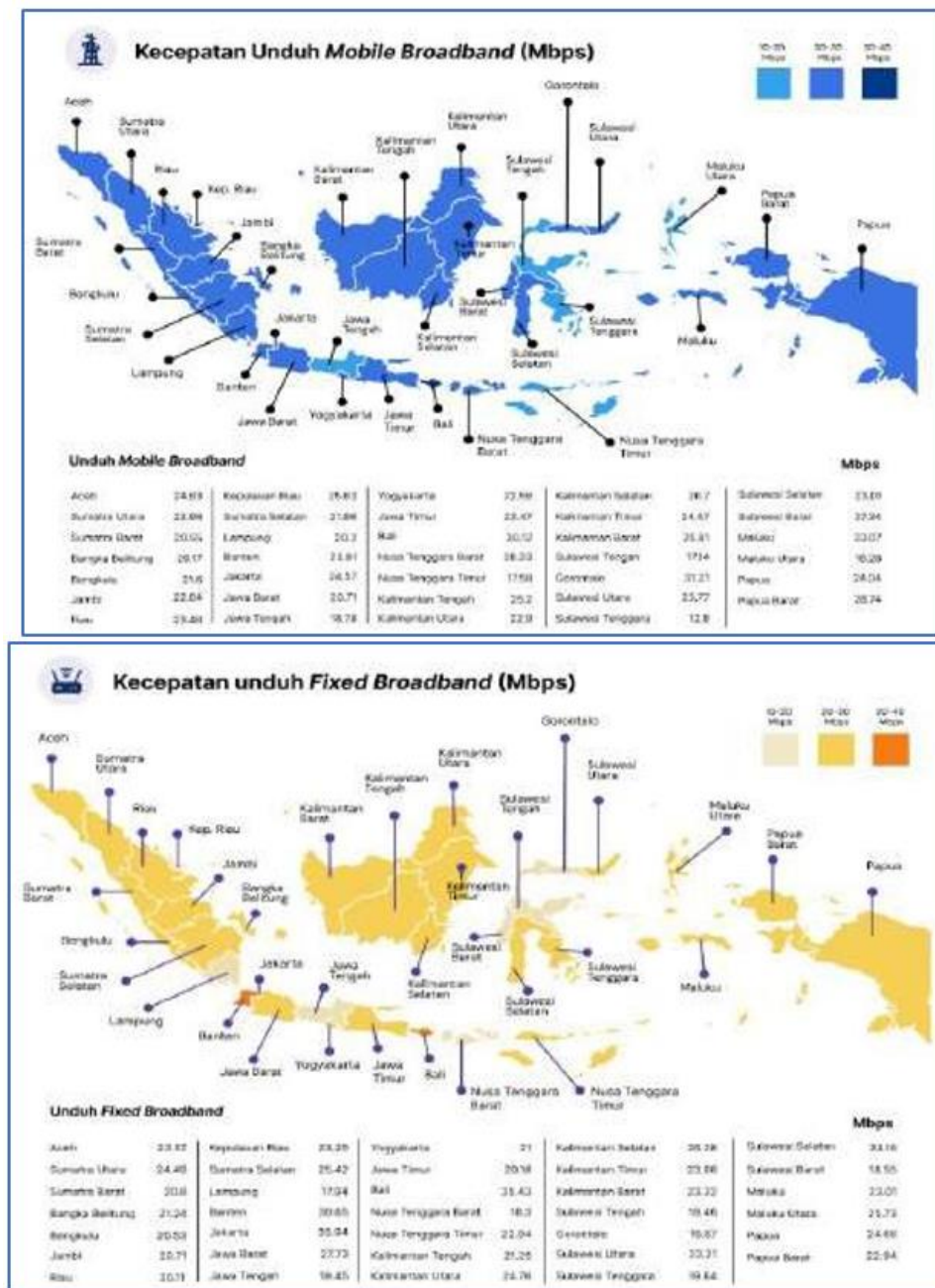


Figure 6. The Difference in download speed between mobile and fixed broadband.

In the effort to make quality and affordable internet access more evenly distributed, the telecommunications industry also plays an important role. Therefore, it is important to maintain the health

of the telecommunications industry; one means of doing this is through policy management of the value of User Rights Fees (BHP) compared to operator revenues. However, in the last 10 years, the trend of Radio Frequency Spectrum BHP for Radio Frequency Band Permits (IPFR BHP) has tended to increase along with operator income, on the contrary (stagnant and decreasing),

this has resulted in the IFR BHP, as a percentage of operator income, to trend upwards beyond 10% excluding the costs of other permits: this value can threaten the continuity of the operator [24].

There are 48 cities that now have 5G services; as of 2022, the 5G network had coverage of 0.10% measured according to area or 2.49% measured according to residential area [24].



Figure 7. The number of cities based on 5G services

As for the growth of data centers in Indonesia, the ratio of data centers to population is still low, namely 0.73% (Megawatts per population), which is very low compared to developed countries such as Japan (23.72%) and Australia (47.83%). In the Global Cloud Ecosystem Index ranking which presents the availability of cloud services starting from infrastructure, ecosystem implementation, security, and talent, Indonesia was still ranked only 56th out of 76 countries in 2022 [24].

To reach a higher level than simply being a heavy consumer, Indonesia must focus on several strategic areas that are prioritized in development planning for the future. According to data from the Ministry of Communications and Informatics, digital maturity in most industrial sectors in Indonesia is still at the emerging level. The use of digital technology will maximize the potential of each industrial sector and encourage it to move towards an advanced level. In the future, this will increase the sector's contribution to the country's total Gross Domestic Product (GDP) [24].

### 3.1.2. Regulations and Policies Related to Internet Access Rights

It is an important thing for every individual to be able to obtain information. Therefore, being able

to do so is a basic human right guaranteed in the Indonesian constitution in 28F, Article 28H, Paragraph (2), and Article 28 C of the 1945 Constitution, Fourth Amendment. Article 28 F states that: "Everyone has the right to communicate and obtain information to develop their personal and social environment, and has the right to seek, obtain, own, store, process, and convey information using all types of available channels." Article 28 H Paragraph (2) states that: "Everyone has the right to receive special facilities and treatment to obtain the same opportunities and benefits in order to achieve equality and justice." Meanwhile, the right to use the Internet has its constitutional basis in Article 28C (1) of the 1945 Constitution, which states that: "Everyone has the right to develop themselves through fulfilling their basic needs, has the right to receive education and benefit from science and technology, arts and culture, in order to improve the quality of their lives and for the welfare of mankind." These basic rights need to be implemented in real terms based on statutory regulations as a basis for creating and implementing government policies and programs.

Currently, there are no statutory regulations and government policies that clearly and firmly regulate the right to meaningful internet access. With Law No.36 of 1999 concerning Telecommunications, delegation to the private sector is not optimal. A legal approach of opening up licensing as widely as possible to an industry that is already saturated would be contrary to the basic principles of economic law, according to which efficiency in the operation of telecommunications as an institution that provides internet access should be encouraged. With a policy of providing open permits, there will not be the economic consolidation that is needed in order for investment in telecommunications networks to be achieved properly. To achieve this economic consolidation, several countries are pursuing consolidation policies [26]. However, in the 1999 Telecommunications Law, several regulatory principles in Article 2 can be used as a basis for regulation regarding the right to meaningful internet access, including the principle of fairness and equity, the principle of legal certainty, and the principle of partnership. The explanatory section of Article 2 states the principle of fairness and equitably which is that telecommunications operations provide equal opportunities and treatment to all parties who meet the requirements and the results are enjoyed by the community fairly and equitably. The principle of legal certainty means that telecommunications development, especially telecommunications operations, must be based on statutory regulations that guarantee legal certainty and provide legal protection for both investors, telecommunications operators, and telecommunications users. The principle of partnership means that telecommunications operations must be able to develop a climate of harmony, reciprocity, and synergy.

Article 2 of Law No.32 of 2002 on Broadcasting determines that broadcasting is carried out based on Pancasila, Indonesia's founding philosophy, and the 1945 Constitution of the Republic of Indonesia with the principles of benefit, fairness and equitably, legal certainty, security, diversity, partnership, ethics, independence, freedom, and responsibility. Several of the principles referred to can be considered for use as principles in regulating the right to meaningful internet access, namely the principle of benefit, the principle of fairness and equitably, and the principle of legal certainty.

Law No.23 of 2014 on the Regional Government does not divide authority among regions, provides absolute infrastructure, and there is no initiative from the regions. The provisions in this law do not provide delegation to regional governments to facilitate the provision of telecommunications infrastructure as internet access infrastructure efficiently and effectively. In reality, regional governments apply regional levies for the use of regional government infrastructure for the purposes of the provision of internet access by telecommunications providers.

According to Article 147 Paragraph (1) of Law No.1 of 2022 on Financial Relations Between the Central Government and Regional Governments: "Regions are obliged to allocate public service infrastructure spending at a minimum of 40% (forty percent) of the total APBD expenditure excluding expenditure profit sharing and/or transfers to regions and/or villages".

Government Regulation No.46 of 2021 on Post, Telecommunications, and Broadcasting regulates the obligation to build (Article 13), and facilitates the provision of telecommunications infrastructure (Article 21). In Ministerial Regulation No.5 of 2021 on Telecommunications Operations, Article 4 regulates the development obligations of telecommunications operators. In Ministerial Regulation No.17 of 2016 on the



Implementation of Universal Telecommunications and Information Technology Service Obligations, Article 3 regulates the form of universal obligations.

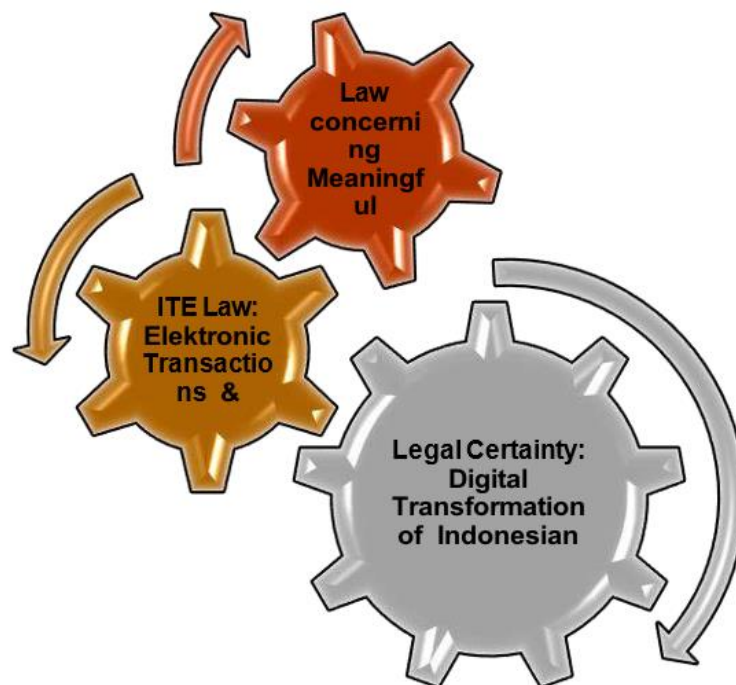
Ministerial Regulation No.17 of 2016 on the Implementation of Universal Telecommunications and Information Technology Service Obligations does not yet regulate the contribution of telecommunications operators in the form of developing internet access. The opening up of the private sector's role in providing universal services should be encouraged through the establishment of a new model of universal service in the regulation of universal service obligations. This model for the role of the private sector can be effective in achieving the target of providing internet access in frontier, outermost, disadvantaged (Indonesian abbreviation: 3T) areas, considering that state institutions (Public Service Agencies) do not have the competence and experience to develop internet access. The development and provision of internet access by government agencies has become a legal case.

On the other hand, the law that supports the existence of internet services is a product of the state which normatively cannot be a tool of power but can be used as a means for state intervention in creating fairness alongside the existence of order in society. This means that when justice cannot be realized, then it is not wrong if fairness is directed at a phenomenon of criticizing institutional reform on the basis of law enforcement on the implementation of the constitution and laws [27]. Such a phenomenon will create "uncontrolled justice" which can damage community relations and technological progress (Ramli and Ramli, 2022); an example of this is the implementation of internet service access.

Several legal policies that can be used as a basis for regulating internet access rights include policies related to Electronic-Based Government Systems (SPBE) or e- government, such as Presidential Regulation No.96 of 2014 on the Indonesian Broadband Plan, Presidential Regulation No.95 of 2018 on Systems Electronic Based Government (SPBE), and Presidential Regulation No.39 of 2019 on One Data Indonesia.

The absence of regulations in Indonesia that regulate meaningful internet access rights shows that there is no legal certainty regarding this matter. In other words, the Indonesian people are not guaranteed legal certainty in obtaining the right to meaningful internet access even though the right to freedom of information is guaranteed by the constitution (UUD 1945 Fourth Amendment). This legal uncertainty is proven to be in accordance with the theory of legal certainty as stated by Gustav Radbruch, namely that legal certainty is created if, first, there is positive law, namely a written law in the form of statutory regulations. The absence of regulations that specifically provide meaningful internet access rights proves that there is no legal certainty regarding such rights. On the other hand, the absence of such legislative regulations negates the state's obligation to provide meaningful internet access rights. Indonesia's legal vacuum related to regulations that regulate meaningful internet access rights is a very different situation than countries such as the United States (US), countries in the European Union (EU), Malaysia, and the Philippines which actually have clear and firm legal regulations that regulate this matter strictly. The clarity of legislative regulations in these countries not only includes norms or rules for protecting meaningful internet access rights but also includes institutions and processes that realize the enactment of meaningful internet access rights rules as a reality in society.

In line with this, Lon Fuller, in his book entitled "The Morality of Law" [28], states that there are eight principles that must be fulfilled by law, and that, if they are not fulfilled, then the law will fail to be called law. The eight principles referred to will mean that the law has legal certainty; one of these is that a legal system consists of regulations that are not based on momentary decisions with regard to certain matters. Thus, according to Fuller's perspective, the absence of regulations regarding the right to meaningful internet access in Indonesia demonstrates that there is no legal certainty. There is a need for statutory provisions related to meaningful internet access rights to provide a basis for moral ties, especially for the government in implementing or providing meaningful internet access rights for the Indonesian people, and also as a basis morality for the people to demand the right to meaningful internet access in Indonesia.



**Figure 8.** The legal morality conditions regarding meaningful Internet access

According to Fuller, the law must comply with six principles or standards [29], namely:

1. Principle of Clarity: The law must be clear and understandable to everyone;
2. Principle of Legal Certainty: The law must be able to provide certainty for individuals regarding their rights and obligations;
3. Principle of Equality Before the Law: All individuals must be treated equally before the law;
4. Principle of Respect for Human Rights: The law must respect the basic rights of every individual;
5. Principle of Effectiveness: The Law must be implemented effectively; and
6. Principle of Openness: The legal process must be transparent and open to the public. (Principle 7 and 8<sup>2</sup>)

According to these principles, there is no legal morality regarding meaningful internet access in Indonesia because there are no legal regulations that are clear and can be understood by everyone regarding access. Likewise, there are no legal regulations that provide certainty for individuals regarding the right to meaningful internet access, as well as the obligations of the government and business entities to provide such access. The absence of regulations regarding the right to meaningful internet access results in inequality and the absence of legal guarantees regarding equality in obtaining access. The right to meaningful internet access should be understood as a human right in terms of the right to develop oneself through fulfilling basic needs, and the right to receive education and benefit from science and technology, arts and culture, in order to improve the quality of life and for the welfare of humanity, as regulated in Article 28 C of the 1945 Constitution, (UUD 1945 Fourth Amendment). Legal morality is also weak regarding the right to meaningful internet access because there is not a single legal provision that is effectively able to guarantee the standard of such access in Indonesia that would mean that the country would be able to compete and prevail in terms of its digital competition with other countries. Likewise, the weakness or absence of legal morality in this case is due to the lack of openness and transparency in government policies regarding meaningful internet access.

In his famous book "The Concept of Law", H. L. A. Hart posits the view that law does not only take the

form of orders accompanied by threats of sanctions for violators (imperatives); the law can also take the form of regulations that give someone the power to do or not to do something; or in other words, it can also be facultative [30]. The concept of two aspects (imperative and facultative) of legal rules was then further developed by Hart into the theory of primary regulations and secondary regulations. Primary regulations are a type of regulation that imposes obligations (imperative) while secondary regulations are a type of regulation that confers power (facultative) [30]. As for the right to meaningful internet access, the absence of these regulations in Indonesia has given rise to legal uncertainty because it is unclear whether the government is obligated to fulfill the right to meaningful internet access for society, and whether society actually does have the right to such access.



**Figure 9.** Contradictory rights of the community with the rules

Based on Hart's understanding of primary and secondary rules, it can be said that the provisions of Article 28 F of the 1945 Constitution (Fourth Amendment) can be positioned as primary regulations. Meanwhile, there are no secondary regulations regarding meaningful internet access rights in Indonesia, thus causing uncertainty regarding the regulation of such access rights in Indonesia.

In the absence of regulations that clearly and unequivocally regulate meaningful internet access rights, it is also evident that there is legal uncertainty regarding this matter that corresponds to Gustav's second postulate, namely, that there is no positive law that regulates the fact of the need for meaningful internet access rights for the Indonesian people. This condition seems to contradict the fact that the right to meaningful internet access already exists in the world's information society and is very important as a digital right and as a basic right in today's digital society [31].

The fact that the internet has become a basic need or right was also confirmed by the UN General Assembly on 27 June 2016. The UN Human Rights Commission adopted it on 5 July 2018 (Resolution No.38/7) which issued a statement which, among other things, emphasized that, "Recognizing the global and open nature of the Internet as a driving force in accelerating progress towards development in its various forms, including in achieving the Sustainable Development Goals [32]. Thus, the absence of regulations that clearly and firmly regulate the right to meaningful internet access in Indonesia flies in the face of the fact that, at the international level, digital rights have been recognized in the form of equitable internet access for other nations in the world. At the national level, the absence of regulations that clearly and firmly regulate the right to meaningful internet access in Indonesia has negated the provisions of Article 4 Section (e) of the Electronic Information and Transactions Law (ITE) regarding the purpose of using information technology and electronic transactions, namely to provide a sense of security, fairness, and legal certainty for users and providers of information technology (IT).

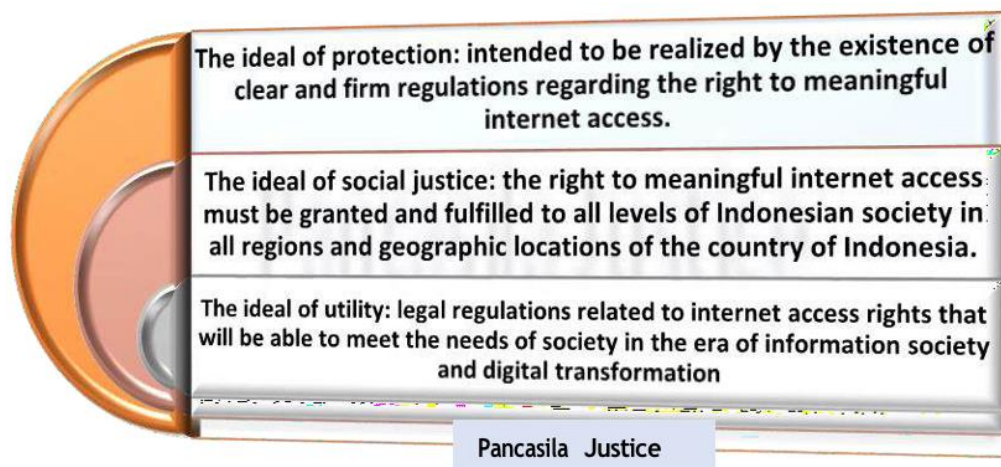


Figure 10. Legal protection ideals

According to the third postulate of Gustav's theory of legal certainty, the condition of uncertainty regarding meaningful internet access rights in Indonesia occurs because the absence of regulations means that equality of internet access and meaningful internet access rights cannot be implemented clearly and with certainty.

On the other hand, the existence of regulations regarding meaningful internet access rights in Indonesia will be in line with the meaning of legal certainty according to Gustav Radbruch, who states that legal certainty in law is achieved in the form of the laws. Provisions related to the right to meaningful internet access in Indonesia increasingly emphasize that the country's political and legal attitude towards the existence of the internet is the same as its recognition of the development and needs of the global digital society.

In line with Kelsen's statement that the law is a system of norms which are statements that emphasize the "should" or *das sollen* aspect, by including several regulations about what must be done, Indonesia should have regulations that specifically relate to meaningful internet access rights. so that it can be a guide for all stakeholders, that is to say the government, private sector, and society. The existence of these regulations and their implementation give rise to legal certainty. Thus, Indonesia should have provisions regarding meaningful internet access rights so that in practice it can actually be implemented.

### 3.2. Framework For Regulating Internet Access Rights in Indonesia to Increase Competitiveness

Development that increases the nation's competitiveness must be supported by regulations that aim at the core of its realization, namely the existence of infrastructure that is evenly distributed throughout Indonesia very individual can enjoy access to internet services. Therefore, it is necessary to develop a new policy model for equal distribution of internet infrastructure which will directly impact equal distribution of internet access. The new policy model is intended to be a state policy that ensures equal distribution of internet access which will be used as a basis for formulating legislation and regulations. The legislation and regulations in question will be based on legal principles and legal theories that are relevant to achieving the goal of increasing the nation's competitiveness. The legislation and regulations are complex considering that infrastructure development involves many parties, including local governments. On the other hand, the state positions itself to intervene in infrastructure development as a way to increase the nation's competitiveness, considering that infrastructure is the key to accelerating digital transformation; it is essential that this is developed to create benefits for society. In other words, when infrastructure does not exist or is not optimal, basically, the key to accelerating digital transformation has been removed and its usefulness will also be lost, considering that the main key to it does not exist.

The Unitary State of the Republic of Indonesia, as mandated in the Fourth Paragraph of the

Preamble to the 1945 Constitution (hereinafter, simply the 1945 Constitution) is designed as a welfare state. This is contained in the provisions of the preamble to the 1945 Constitution which states that: "The government shall protect all the people of Indonesia and all the independence and the land that has been struggled for, and to improve public welfare, to educate the life of the people." Based on the formulation of the Fourth Paragraph of the Preamble to the 1945 Constitution, Sunaryati Hartono concluded that: "The founders of our nation dreamed of the Republic of Indonesia becoming a democratic state of law (*rechtstaat*), whose laws oblige it to strive for the general welfare and education of the nation to increase as its goal to create a welfare state (*welvaartsstaat*)." In relation to this, the establishment of legal regulations that protect the right to meaningful internet access in Indonesia, apart from guaranteeing legal certainty and protection regarding that right, will also be able to improve people's welfare through the existence of meaningful internet access. This prosperity is realized by the ability of the Indonesian people to have meaningful access to the internet.

The Preamble to the 1945 Constitution of the Republic of Indonesia, which is the basic law for the formation of positive law, contains four main ideas, which experts agree are the ideals of all Indonesian law; namely, first, the ideal of protection is contained in the phrase: "The state protects the entire Indonesian nation, and all of Indonesia's blood is based on unity." Second, the ideal of social justice is contained in the phrase: "The state has the right to realize social justice for all Indonesian people". Third, the ideal of utility is contained in the phrase: "A state where the people are sovereign, and which is based on the people and representative deliberation". Fourth, the ideal of general justice is contained in the phrase: "A state based on belief in one almighty God". The ideal of protection contains the meaning of a legal ideal that guarantees the protection of the entire Indonesian nation, in accordance with the principle of cumulative justice put forward by Thomas Aquinas in Franz L Neumann [33], namely that the law provides protection to all citizens regardless of their status whether it be social, ethnic, cultural, political, religious, or economic. This is in accordance with Jeremy Bentham's statement that the main function of law is to provide livelihoods, promote equality, and maintain security for everyone.

In relation to making legal regulations regarding internet access rights, the intended ideal of protection is realized by having clear and firm regulations regarding meaningful internet access rights. The ideal of social justice reflects laws that guarantee fairness in social life, namely realizing social justice for the entire community, which prioritizes fair treatment for all Indonesian people regardless of race, class, and religion. This kind of justice was described by Aristotle and Thomas Aquinas as distributive justice, namely the distribution of goods and honor to each member of society according to their position in society [34]. In relation to this topic, the right to meaningful internet access must be fulfilled and granted to all levels of Indonesian society in all regions and geographic locations of the country. The ideal of utility is the goal regarding the usefulness of a law in a state. There are four basic principles of the ideal of utility; namely, laws that side with the needs of the people, laws must guarantee the welfare of the people, laws that must be created by the people through representatives in parliament, and laws that function to control state power on the basis of the supremacy of law. These principles are based on the people; Socrates said that the determination of good and bad, entitled and not entitled, should not be left to the authorities alone, but objective measures should also be sought from the people [35]. In relation to this research, the formation of legal regulations related to meaningful internet access rights will be able to meet the needs of society in the era of information society and digital transformation so that, with meaningful internet access rights, the Indonesian people will be provided with an equitable distribution of digital rights compared to people from other countries who have previously benefited from technological developments and advances.

According to development law theory, laws related to the development of meaningful internet access rights will create order or regularity in Indonesian society when accessing and using the internet, contentment when engaging in creativity using the internet, and prevent a digital divide from occurring between Indonesians and people in other countries which leads to disquiet for Indonesians because they "lose out" in terms of speed and ability to use the internet to meet their needs. Regulation of meaningful internet access rights accommodates legal certainty that is fair for Indonesians compared to the people

of other countries, for urban communities compared to rural communities, and for communities in densely populated areas compared to communities in remote areas; these kinds of equability are an absolute prerequisite for achieving development where society has no feelings of disquiet or injustice. On the other hand, with the existence of legal provisions governing the right to meaningful internet access which definitely and fairly protects all levels of Indonesian society, it will be possible to minimize or even eliminate obstacles in the form of difficulty in obtaining internet access and low or poor internet quality, which will lead to instability in development.

In this case, the establishment of a law that regulates the right to meaningful internet access must be carried out by the authorized institution, namely the President together with the House of Representatives (DPR), and by paying attention to the good and correct process as regulated in Law No.12 of 2011 on the Formation of Legislative Regulations in conjunction with Law No.15 of 2019 on Amendments to Law No.12 of 2011 on the Formation of Legislative Regulations.

According to development law theory, reforming or developing laws that regulate meaningful internet access rights will be able to guide the Indonesian people toward continuing to be creative and productive by utilizing the internet. Such legal conditions will ultimately be able to support national development through increasing internet access coverage, increasing internet use, increasing creativity via the internet, so that it will significantly increase the nation's competitiveness. In reality, people's income will also increase, which will then also have an impact in terms of increased tax income (both VAT and PPh) meaning that state revenues will increase which can then be used as capital for national development.

In line with Mochtar Kusumaatmadja's views on the function and role of law in national development—which later became known as the Theory of Development Law—the following can be stated. First, based on the premise that "...all developing societies are always characterized by change", the desire and need to apply legal regulations regarding the right to meaningful internet access must be understood as a condition of Indonesian digital society and law that also continues to develop and adapt to developments and community needs.

Second, related to the premise which states that "...law functions to ensure that change occurs in an orderly manner", then the orderly change referred to is realized in the form of legislation in the form of the formation of laws that regulate meaningful internet access rights. access, based on the Law on the Establishment of Legislative Regulations.

Third, the premise which states that "...both change and order (or regularity) are the initial goals of a developing society, so the law becomes a means (not a tool) that cannot be ignored in the development process", then the formation of laws that regulate the right to meaningful internet access is the initial goal of Indonesian society which is building or developing in line with the development and needs of society which is undergoing digital transformation. The establishment of laws that regulate meaningful internet access rights is a means of preparing systems and mechanisms to protect the right to meaningful internet access.

Fourth, the premise states that "...the function of laws in society is to maintain order through legal certainty and also the laws (as societal standards) must be able to regulate (help) the process of change in society." The establishment of a law that regulates the right to meaningful internet access continues to support and maintain order in the use of the internet by the Indonesian people, while also guaranteeing legal certainty regarding the aforementioned right to meaningful internet access.

Fifth, related to the premise which states that "Implementation of the legal function mentioned above can only be realized if the law is implemented by a power, but the power itself must operate within the limits of the guidelines specified in the law", then in this case, the formation of a law that regulates the right to meaningful internet access must be carried out by the President together with the DPR in accordance with the process and stages of forming the law as regulated in Law No.12 of 2011 on the Formation of Legislative Regulations in conjunction with Law No.15 of 2019 on Amendments to Law No.12 of 2011 on the Formation of Legislative Regulations. One of the most important things in the formation of a law that regulates the right to meaningful internet access is that there needs to be academic studies and texts. In this case, it is not an exaggeration if this dissertation were to be given consideration when conducting studies and preparing academic papers in the future related to protecting meaningful internet access rights.

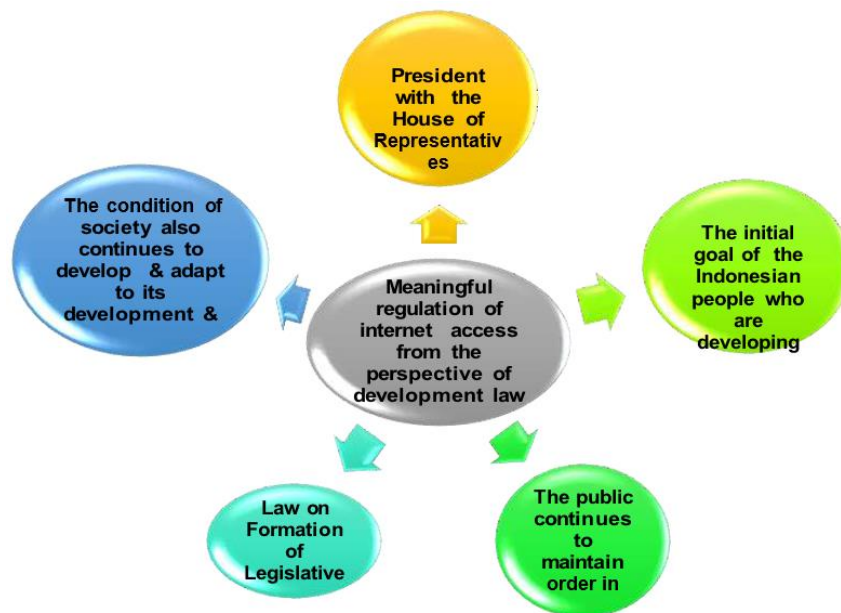


Figure 11. The function and role of law in national development

Based on Article 10 Paragraph (1) letter e of the Law on the Establishment of Laws, the content of the law is to fulfill the needs of society; so, if seen in terms of its practice in society, the public needs legal certainty regarding the right to meaningful access the internet.

According to the theory of justice according to John Rawls, first, every Indonesian person or community has the same right to meaningful internet access. Thus, the right to meaningful internet access must be felt by anyone, anywhere, and however, by all Indonesian people. Second, the digital divide must be regulated by the state so that it cannot create conditions where there are Indonesian people who cannot get internet access in remote, outlying, and frontier areas.

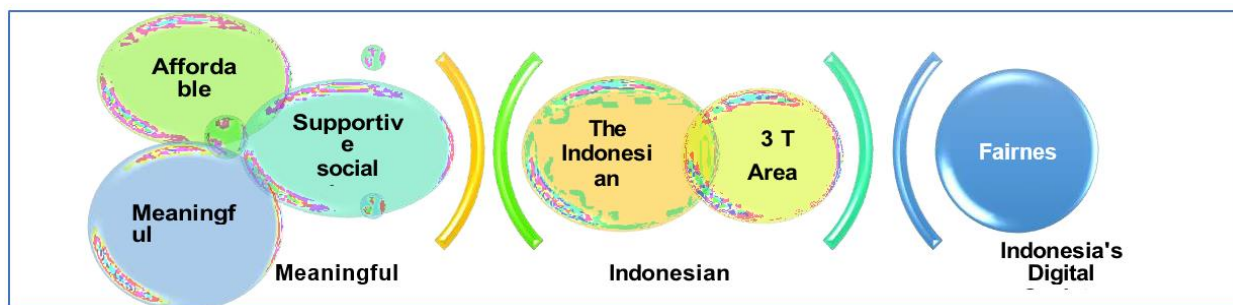


Figure 12. Application of the Theory of Justice according to John Rawls

In line with the theory of legal transformation which places law as the infrastructure for transformation in facing global transformation, the legal provisions governing the right to meaningful internet access will be the infrastructure for Indonesian society to become part of the world information society that is undergoing transformation. The legal provisions governing the right to meaningful internet access will facilitate the Indonesian people to be able to utilize digital technology and take an active role in utilizing it for digital economic activities.



Figure 13. Transformation law theory

Electronic transactions, as regulated in the ITE Law, require legal and technological infrastructure if they are to occur effectively and efficiently. The legal infrastructure in question is the existence of other legal provisions apart from the ITE Law which will form Indonesia's digital legal system. This is a reminder that the existence and role of the ITE Law is as an umbrella provision that has a dominating effect on other fields of law so that the laws in those other fields can accord and be in harmony with the developments and needs of Indonesian society and the world. The technological infrastructure in question comprises various forms of information and communication technology that continue to develop along with the development of society itself, one of which is technology for internet access with standards that are in line with those used by people in various other countries.

In order to assess the level of alignment or harmonization between legal provisions and digital development/transformation, the principles and objectives in the ITE Law can be used as a tool for analysis [36]. Likewise, the level of transformation is measured based on digital facilities and infrastructure such as the reliability and security of electronic systems using Electronic Certificates and Reliability Certificates [36]. Likewise, regarding the law that regulates the right to meaningful internet access, whether it is in line with the ITE Law or not needs to be studied.

Based on the perspective of the principle of legal certainty as regulated in Article 3 of the ITE Law which states that "...the use of information technology and electronic transactions is carried out based on the principles of legal certainty, benefit, prudence, good faith, and freedom to choose technology or to be technology-neutral." The explanation of this article states that "...the principle of legal certainty means the legal basis for the use of information technology and electronic transactions, as well as everything that supports its implementation that has legal recognition inside and outside the court." Based on these provisions, it can be said that the principle of legal certainty has not been implemented in relation to protecting the right to meaningful internet access, considering that there are no legal provisions that regulate it as a basis for meaningful use of the internet for Indonesian society.

The absence of legal regulations that protect the right to meaningful internet access in Indonesia seems to deny the existence of the practice of using meaningful internet access in some communities and also seems to deny the fact that there are still many Indonesians who have not obtained the right to meaningful Internet access, especially in communities in 3T areas (i.e., those that are frontier, outermost, and disadvantaged). The phrase "out-of-court recognition" is very important in the context of recognizing practices that have taken place in the information society regarding the use of ICT which is subject to an ever-evolving technological regime. In this case, the existence of meaningful internet access for some Indonesian people needs to be given legal protection in the form of legislation.

The many regulations and policies that have been made by the Indonesian Government which are related to the internet, as stated in the previous chapter, can be said to be in fact not yet sufficient to provide legal certainty regarding the right to meaningful internet access. This is because neither the regulations nor the policies in question clearly and unequivocally state that internet access is a legal right the fulfillment of which is the government's obligation. Likewise, legal uncertainty can be seen from the fact that standards of network quality and internet speed have not yet been definitively established in various existing regulations and



policies. Clear and definite funding and programs related to the development and provision of internet access have not yet been definitively determined, giving rise to uncertainty regarding the fulfillment of internet access needs for the community.

Legal protection in the form of statutory regulations for the right to meaningful internet access is absolutely necessary as a legal basis for the use of that access to engage in various e-commerce and e-government activities to meet the needs of Indonesian society; aside from providing that protection, statutory regulations also provide support for efforts to fulfill these needs. According to this understanding, the principle of benefit as regulated in Article 3 of the ITE Law is also related to the legal protection of the right to meaningful internet access in Indonesia. The term principle of benefit means that the use of information technology and electronic transactions is sought to support the information process so that it can improve the welfare of society. The absence of legal protection in the form of legislation regarding the right to meaningful internet access will hamper efforts to achieve the objectives of the ITE Law as stipulated in Article 4 [37] which are to:

- a. Educate the nation's people as part of the world information society;
- b. Develop trade and the economy of the nation in order to improve community welfare;
- c. Increase the effectiveness and efficiency of public services;
- d. Open up the widest possible opportunities for everyone to advance their thinking and abilities in the field of the utilization and exploitation of Information Technology as optimally as possible and responsibly; and
- e. Provide a sense of security, fairness, and legal certainty for users and providers of information technology.

This principle of benefit can be said to be very closely related to efforts to realize the enactment of law as a reality as stated by Mochtar Kusumaatmadja according to his understanding of the law, namely as the entirety of the principles and rules that regulate human life in society, including the institutions and processes in turning this law in reality [38]. From this perspective, for the law to be useful it must be equipped with elements of institutions and processes, so that, in relation to this research, it can be said that institutions and processes to realize the right to internet access are absolutely necessary so that they are truly in line with, and are an implementation of, the principle of benefit.

From this institutional and process perspective, related to fulfilling internet access rights in Indonesia, the main institution is the Indonesian Ministry of Communications and Informatics (Kominfo) which, in preparing its programs and budgets, must coordinate with other ministries and/or institutions such as the Ministry of National Development Planning/National Development Planning Agency, Ministry of Finance, and Ministry of Home Affairs [24]. Their position, duties, and authority in relation to digital transformation are only regulated in the form of policies, not regulations. Finally, in the Digital Indonesia 2045 Vision Book created by Kominfo, the recommended material includes institutional aspects. Therefore, a legal basis is needed which must also touch on the program and budget aspects, so that it can have an effect on the implementation of the principle of benefit.

The principle of fairness and equity as contained in Article 2 of the Telecommunications Law and Article 2 of the Broadcasting Law can also be used as a basis for regulating meaningful internet access rights in Indonesia. According to the explanation of Article 2 of the Telecommunications Law, the principle of fairness and equity is that telecommunications operations provide equal opportunities and treatment to all parties who meet the requirements and the results are enjoyed by the community fairly and evenly. With this principle of fairness and equity, it is intended that the right to meaningful internet access can be enjoyed by all levels of society throughout the country, including the 3T areas. This principle must also be linked to the objectives of the Telecommunications Law as regulated in Article 3, namely to support national unity and oneness, improve the welfare and prosperity of the people fairly and equitably, support economic life and government activities, and improve relations between nations. In the absence of legal regulations governing the protection of meaningful internet access rights, efforts to achieve the objectives of the Telecommunications Law will encounter constraints or barriers, thereby hampering the goal of becoming a world digital society that has meaningful internet access rights which is equal to other nations

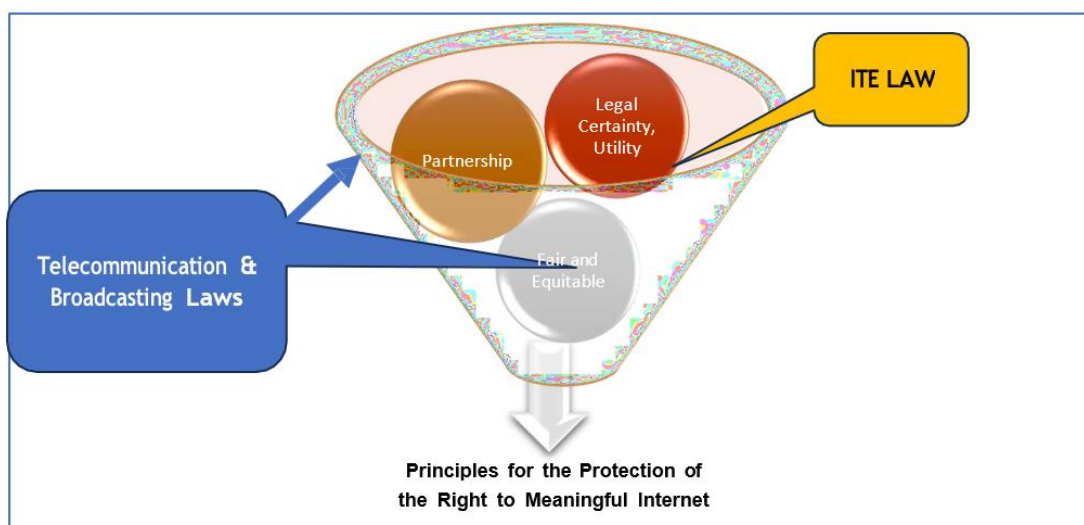
in the world.

The principle of partnership as contained in Article 2 of the Telecommunications Law and Article 2 of the Broadcasting Law can also be used as a basis for regulating meaningful internet access rights in Indonesia. According to the explanation of Article

2 of the Telecommunications Law, the principle of partnership means that telecommunications operations must be able to develop a climate of harmony, reciprocity, and synergy in telecommunications operations. In this case, cooperation between the government and the private sector needs to be conditioned so that it can effectively and efficiently provide meaningful internet access rights to all levels of society throughout Indonesia.

Security principles can also be used to regulate meaningful internet access rights in Indonesia. This principle is also contained in Article 2 of the Telecommunications Law and Article 2 of the Broadcasting Law. The explanation of Article 2 of the Telecommunications Law states that the principle of security is intended to ensure that telecommunications operations always pay attention to security factors in planning, building, and operating them. With this security principle, it is intended that providing meaningful internet access rights must be accompanied by efforts to provide safe conditions and products, especially considering the variety of security threats to digital products and services today.

With the principle of legal certainty and the principle of benefits contained in the ITE Law, as well as the principle of fairness and equity and the principle of security contained in the Telecommunication and Broadcasting Laws, it can be said that the principle of protecting the right to meaningful internet access is a combination between the cyber legal system and telecommunications and broadcasting. In other words, the law to protect the right to meaningful internet access is a law that is convergent in nature.

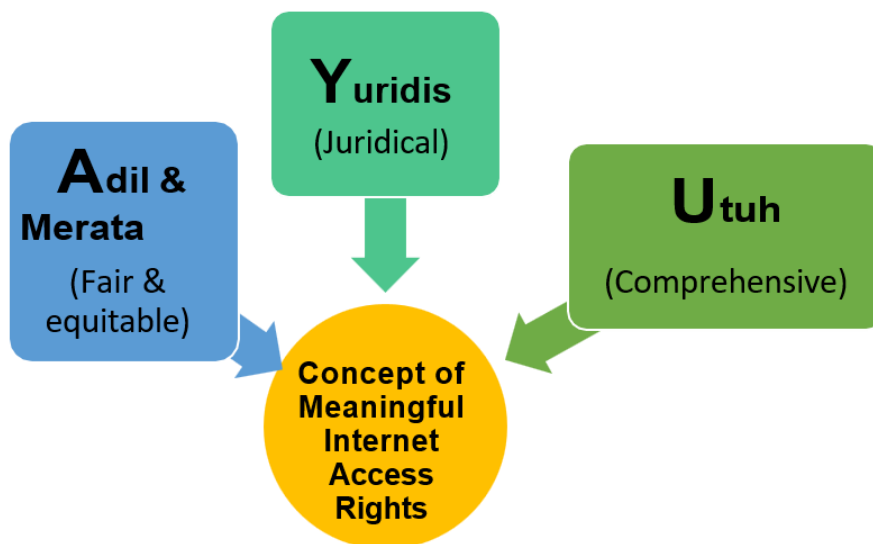


**Figure 14.** Legal analysis of the principles of the Telecommunications and Broadcasting Law

The regulatory concept proposed is based on the analysis in the previous sections related to the theories and principles for providing protection of the right to meaningful internet access. This regulatory concept is called the A-Y-U Concept, which is the abbreviation (in Indonesian) for Fair and Equitable, Juridical, and Comprehensive. This concept or formulation will be able to place internet access laws as a transformation infrastructure, from which a competitive digital transformation ecosystem will be able to be built.

The A-Y-U abbreviation is derived from the Indonesian words *Adil & Merata*, *Yuridis*, and *Utuh*. In the Kamus Besar Bahasa Indonesia (the official dictionary of the Indonesian language), the word "*Adil*" is an adjective that means "equitable", "not biased", "unbiased", "proper", or "not arbitrarily". The word "*Merata*" is a verb that means "to become even", "to make equitable", or "to spread in all directions". "*Yuridis*"

is an adjective that means "juridical", "according to the law", or "legally". The word "*Utuh*" is an adjective that means "intact", "comprehensive", or "(in) perfect condition as before."



**Figure 15.** A-Y-U Concept (Fair and Equitable, Legal, and Intact)

The first concept, namely fair and equitable, relates to the protection of meaningful internet access rights which is primarily aimed at reaching all levels of society throughout Indonesia, so that no Indonesian people are left behind or left internet blind in using the internet for fulfilling basic needs in the field of electronic commerce (e-commerce) and electronic-based government services (e-government). Fairness here primarily means that the quality of internet access is provided equally to all levels of society and evenly throughout the country. This concept is very important in order to create a digital society by providing service to all levels of Indonesian society and to people in the remotest corners of the country (3T) regardless of social status, ethnicity, race, religion, class, political preference, and so on; this will ultimately enable the Indonesian nation to be on par with other nations in the world in the use of digital technology via the internet. This concept is philosophically based primarily on the ideal of social justice as explained in the previous section.

The juridical concept is intended to provide a clear and definite legal basis in an effort to provide protection for the right to meaningful internet access. With this "juridical" concept, apart from guaranteeing rights for citizens, it also becomes the basis for the state to intervene in the industry to encourage the fulfillment of the basic right to meaningful internet access. Lessons learned from comparisons with other countries show that the existence of clear and definite regulations can guarantee the fulfillment of the right to meaningful internet access for the community. This concept is philosophically based primarily on the ideal of protection as explained in the previous section.

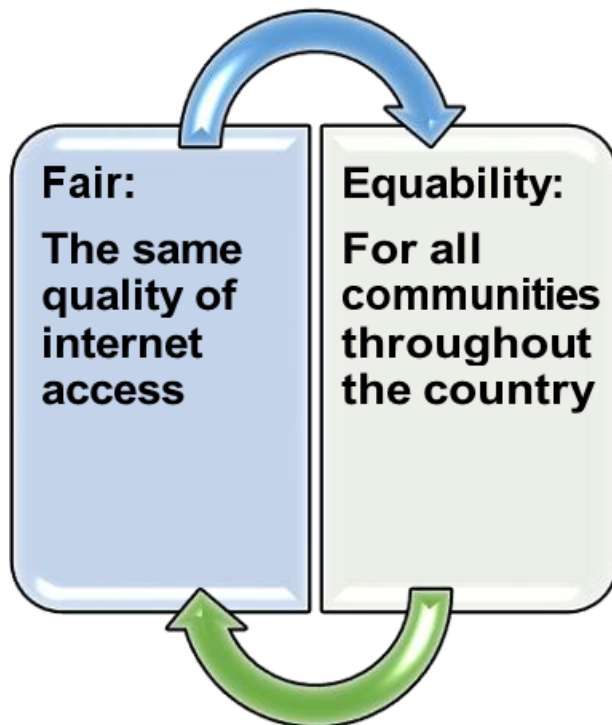


Figure 16. Implementation of the concept of fair and equitable

Through this juridical concept, it is also intended that legal regulations that provide protection for the right to meaningful internet access are substantively capable of implementing the mandate of human rights as regulated in Article 28 C and Article 28 F of the 1945 Constitution, Fourth Amendment (vertical harmonization) and harmonize with other laws and regulations such as the Telecommunications Law, Broadcasting Law, and the ITE Law (horizontal harmonization). Likewise, legal regulations that provide protection for the right to meaningful internet access must be able to fill the legal vacuum (wet vacuum, rechts vacuum) created in a manner that is in accordance with the mechanisms or procedures for forming statutory regulations based on Law No.12 of 2011.

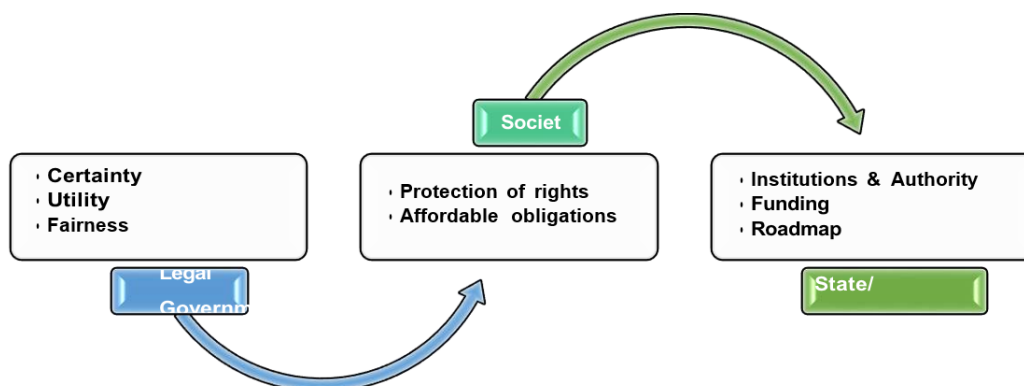


Figure 17. Implementation of the legal concept

The concept of comprehensiveness is intended to provide regulations and policies to guarantee the fulfillment of the right to meaningful internet access and do not only cover technical aspects but also

institutional and funding aspects. In this case, it is very important to take a complete legal approach in terms of government strata vertically, and institutions horizontally; this cannot be done partially because if it is partial it will result in inefficiency and ineffective efforts to provide meaningful internet access rights for all levels of society throughout the country.

With this comprehensiveness concept, the technical obstacles to fulfilling meaningful internet access rights, including funding, can be overcome through synergy and collaboration between the central government and regional governments, and between ministries/agencies and the industry. The central government must create national plans and programs related to fulfilling meaningful internet access rights which then, their implementation, will be actively and fully involved in the existence and role of local government, the industry, and society. Community involvement is carried out by, among other things, asking for information about the community's wishes and expectations regarding the condition of meaningful internet access in their area. The community must also be involved in preparing and implementing program action plans and actively monitoring and providing feedback on program implementation. In this framework, transparency is needed starting from planning and implementation, to monitoring the progress of the implementation of the program in question.

In their implementation, laws use the approach of laws as principles or laws as standards. Fulfillment of basic rights is carried out solely so that, in principle, there is an action plan to fulfill the regulations in the law in question. For example, compliance with the rule stipulating a minimum of 20% APBN allocation for education is carried out, in principle, by calculating the State Revenue and Expenditure Budget (APBN) allocation for regions as stated in the Regional Revenue and Expenditure Budget (APBD). The legal approach as a principle or standard becomes a consensus when there are limitations in applying the law as a rule.

The same thing can be found in the implementation of Article 28F of the 1945 Constitution which stipulates the people's right to obtain information. Applying this rule is carried out by implementing action plans to implement this rule. These plans are not accompanied by a clear declaration regarding the achievement of the objectives of the regulation on the right to obtain information in a certain and fair manner, both in terms of time and the form of realization.

Given the circumstances described above, it appears that there is incoherence between these laws, in this case Article 28F, and its implementation as a principle or standard, in terms of achieving its legal objectives. In this context, it is necessary to emphasize regulations in the law regarding the form of the people's right to obtain information, so that the law is applied as a rule that directly fulfills the people's right to information.

In the era of digitalization, all information media rely on internet access. Communication media, broadcasting, and electronic transactions can only be utilized by people if they have internet access. Furthermore, in some countries, meaningful internet access is not only available but also reliable and affordable. This makes internet access an essential part of people's lives. Internet access brings people's lives to globalization. With the internet, people can connect globally and become a global society. Global information is an important part of everyone's life to obtain to complete their life. This condition has been referred to as "The world is flat".

Seeing the reality above, that the legal application of the right to obtain information in Article 28F of the 1945 Constitution is carried out empirically according to principles and standards, and that internet access is the main tool in obtaining information; therefore, to restore legal principles as rules, the law on the right to internet access was drafted (as applied in several countries), namely regulations that establish internet access as a basic right for the people. The internet access in question means access is easily available, of good quality, and affordable.

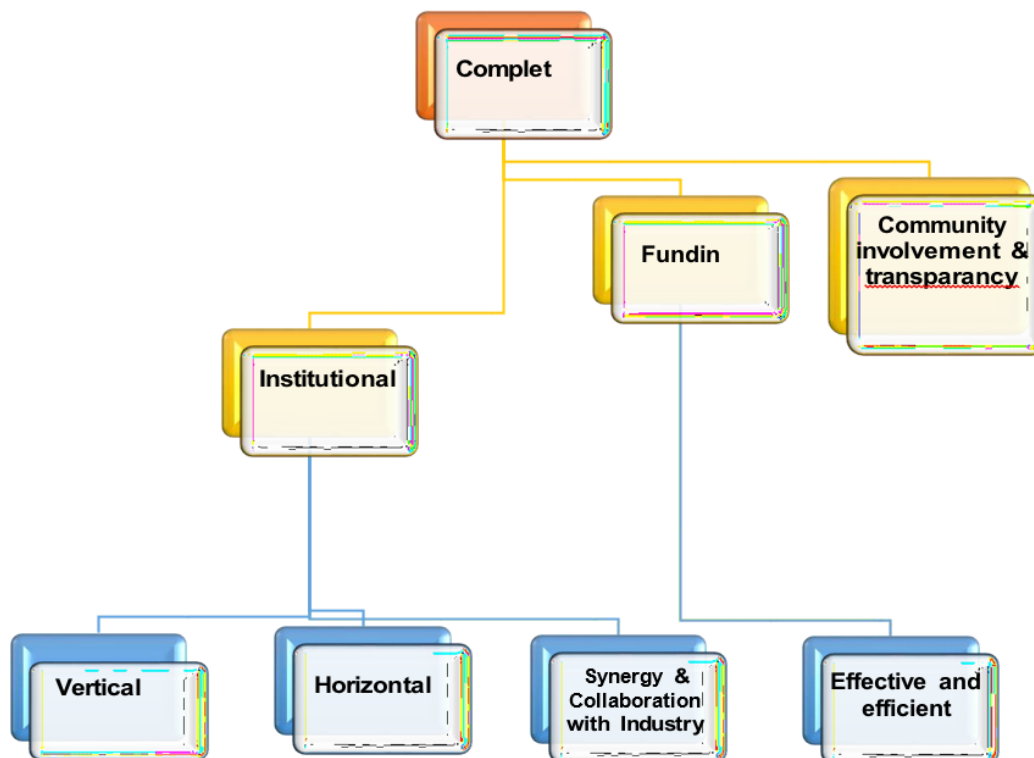


Figure 18. Internet access rights law

### 3.2. Comparison of Arrangements & Practices in the United States, European Union, Malaysia, and Singapore

The recognition and operationalization of new human rights is a long process that requires consensus from international actors, joint agreements conceptualized by academics and experts and—last but not least—the willingness of governments to commit themselves to other human rights obligations [39]. The current situation regarding this matter is that there has been the adoption of a resolution on "the promotion, protection, and enjoyment of human rights on the Internet" at the UN Human Rights Council. Based on these developments at the international level, many countries have begun to carry out reforms related to protecting human rights regarding internet access. In India, for example, there is the idea that freedom of speech and expression, as stipulated in Article 19 of the Indian Constitution, always expands its scope and includes countless rights, thus giving recognition to new rights that develop over time. One such right is "The Right to Free Internet Access". The importance of internet freedom over time has gained momentum in the international community and is gradually being recognized as an important part of sustainable development goals. The role of the judiciary in this regime is also immense as it has recognized the importance of internet access with the above expanding the contours of Article 19 of the Indian Constitution [40]. Russia is also developing "The Concept of Complex Legal Regulation of Relations Arising in Connection with the Digital Economy Development", which tries to facilitate the use of the internet in digital economic activities [41].

In general, it can be stated that these countries have legislation and regulations that clearly and firmly regulate the right to access the internet which means it is a protected right; this is followed by institutional and funding aspects, meaning they have a sound and very clear foundation and program to develop optimal use of technology for the welfare of the nation. In the US (at the federal level), there is a First Bipartisan Broadband Access Anti-Discrimination Law which was implemented by the Federal Communications Commission (FCC) on November 15, 2023, in response to the Bipartisan Infrastructure Act [42]. The FCC has set internet speed standards in its report document to Congress dated March 14, 2024 [25]. The report states that, for

fixed services, it is 100 Mbps download and 20 Mbps upload, for mobile services it is 35 Mbps download and 3 Mbps upload, and for schools, it is 1 Gbps for every 1,000 students and teachers. This standard will be increased again to 1 Gbps download and 500 Mbps upload for fixed network internet services [43]. The FCC also categorizes internet speed as basic if it is between 3–8 Mbps, and advanced if it is at least 25 Mbps. Average internet speeds in the US would be 219 Mbps for download and 24 Mbps for upload in November 2023, according to Speedtest.net. Most cities and suburban areas have access to fast internet of at least 1 GB from a cable internet or fiber provider [44].

Most states in the US also have laws regulating broadband internet access rights. The majority of the regulations in question were formed between 2021–2022, which were generally made to follow up on the 2021 Infrastructure Law. For example in the Connect Alabama Act of 2021 in SB123 [45], Alaska's HB 363 (Alaska, 2022),

California AB 1426 [47], Colorado HB 1306 Public Utilities (Colorado, 2022), and Wisconsin S 325 2023 WISCONSIN ACT 77 Broadband Expansion Grant Program [49], the minimum service threshold for the Internet is defined as the minimum speed required to meet requirements of certain federal regulations, increasing the minimum service threshold for the internet to a minimum of 100 megabits per second for downloads and 20 megabits per second for uploads. This is done to conform to the standards set by the FCC [25]. Under existing law, the Alabama Division of Digital Expansion is required to use 70% of funds received by the Connect Alabama Fund to expand last-mile infrastructure in unserved areas.

In the EU there is a regulation regarding Open Internet Access (The European Parliament and the Council of the European Union, 2015) protecting equal and non-discriminatory treatment of internet traffic and promoting the quality of internet access services through measures of transparency and regulatory oversight. Therefore, this regulation provides meaningful internet access. This regulation creates individual and enforceable rights for end users in the EU to access and distribute internet content and services of their choice, including enforcing the right to freedom of expression [51]. EU member states have and are harmonizing their laws with the EECC. The latest data shows that most EU member states have implemented the EECC into their national law, including the Netherlands since March 1 2022 with the exception of provisions on e-privacy [52].



**Figure 19.** Map of the European Union (Open Internet Access Users)

In 2023, the Netherlands ranked 2nd according to the IMD's World Digital Competitiveness Ranking [53]. This is not surprising considering that the Netherlands has various ambitious and clear programs to acquire and make optimal use of advances in digital technology. In line with the target of forming the EU's Gigabit Society, the Netherlands then created the Dutch Digitalization Strategy (DDS) [54]–[56], a Connectivity Action Plan [57], and Digital Economic Strategy [58]. In the Netherlands, several public authorities including municipal, provincial, and national governments, the Ministry of Economic Affairs and Climate Policy are responsible for broadband development in the country. The Authority for Consumers and Markets oversees fair business competition and consumer protection in the energy, telecommunications, transport, and postal services sectors [59].





Figure 20. Dutch Digitalization Strategy

The DDS was updated in 2021 and states what is needed to prepare the Netherlands for a digital future. The challenge for governments is to accelerate and support the digital transition in the public sector and to further strengthen the protection of privacy, cybersecurity, digital skills and fair competition. In 2020, the Ministry of Economic Affairs and Climate Policy strengthened its collaboration with local governments by establishing a digital connectivity task force. As part of this task force, the Association of Dutch Municipalities and municipal authorities are working together on products such as guidelines, sample memoranda, and information materials to stimulate the harmonization of local policies on fixed and mobile networks and related issues, such as radiation and health.

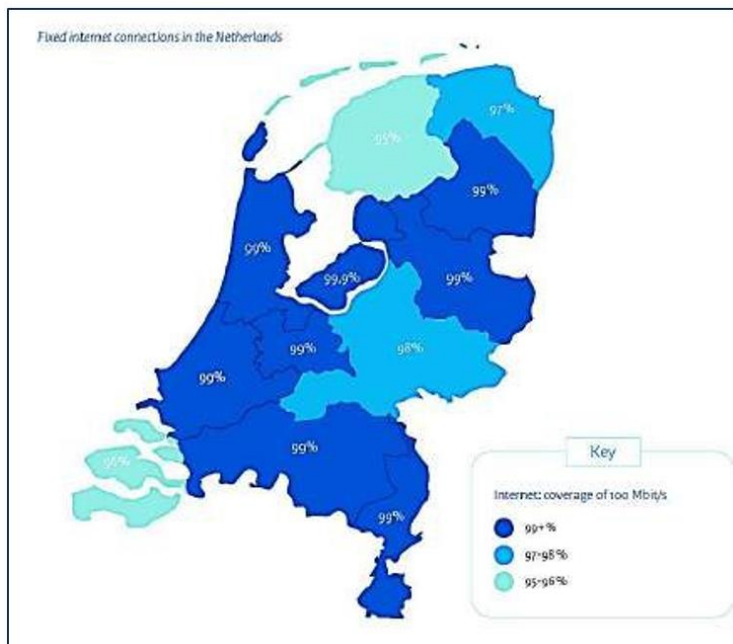


Figure 21. The differences of Connectivity Action Plan

The Connectivity Action Plan enhances the objectives of the DDS and outlines the government's efforts to remain Europe's digital leader with the aim of providing high-quality connectivity that can serve a wide range of demands and is available at competitive prices at any time and anywhere. In this plan, the Dutch government supports the EU's Gigabit Community target. All households should have the opportunity to access a broadband network of at least 100 Mbps and most should utilize 1 Gbps by 2023 [56]. The DDS was updated in 2021 and states what is needed to prepare the Netherlands for a digital future. The challenge for governments is to accelerate and support the digital transition in the public sector and to further strengthen the protection of privacy, cybersecurity, digital skills, and fair competition. In 2020, the Ministry of Economic Affairs and Climate Policy strengthened its collaboration with local governments by establishing a digital connectivity task force. As part of this task force, **the Association of Dutch Municipalities** and municipal authorities are working together on products such as guidelines, sample memoranda, and information materials to stimulate the harmonization of local policies on fixed and mobile networks and related issues, such as radiation and health.

The Connectivity Action Plan enhances the objectives of the Dutch Digitalisation Strategy (DDS) and outlines the government's efforts to remain Europe's digital leader with the aim of providing high-quality connectivity that can serve a wide range of demands and is available at competitive prices at any time and anywhere. With this plan, the Dutch government supports the EU's Gigabit Community target. All households should have the opportunity to access a broadband network of at least 100 Mbps and most should have utilized 1 Gbps by 2023 [56].

Malaysia has determined that the internet and connectivity is a form of human right [60], so the next steps of the Ministry of Communications and Multimedia aimed to achieve this aspiration. Access to internet facilities must be viewed comprehensively because to become a developed and modern nation, the internet and related facilities in Malaysia must meet world standards [61]. All provisions related to the internet are based on the Communication and Multimedia Act 1998, which is then implemented with various directions, declarations, guidelines, and so on (Bernama, 2021). Malaysia already has a Ministerial Direction on the Deployment of 5G Infrastructure and Network, namely Direction No.3 of 2021 from the Minister of Communications and Multimedia Malaysia [62]. In Article 4 of the Direction, the Malaysian Government appointed a single wholesale 5G network operator called Digital Nasional Berhad, which is

wholly owned by the Ministry of Finance, as the only neutral party carrying out infrastructure development in Malaysia and providing wholesale 5G services.

With the protection of meaningful internet access rights in statutory regulations, it can be said that these countries have much better conditions compared to Indonesia. This can be seen from Indonesia's ranking which is below these countries, in terms of both mobile and fixed broadband internet speeds. Likewise, according to the 2023 world digital competitive ranking, Indonesia was 45th, far below the US in 1st place, the Netherlands in 2nd place, Singapore in 3rd place, and Malaysia in 33rd place. Only the Philippines, ranked 59th in the world, is below Indonesia [21]. Looking at the comparison of the conditions of the sub-factors assessed by the IMD, it is clear that the position of the regulatory framework aspect has a correlation with the ranking of technological factors, which in turn influences the overall ranking value. In a comparison of the regulatory framework between Indonesia, Singapore and the US, the following facts were obtained:

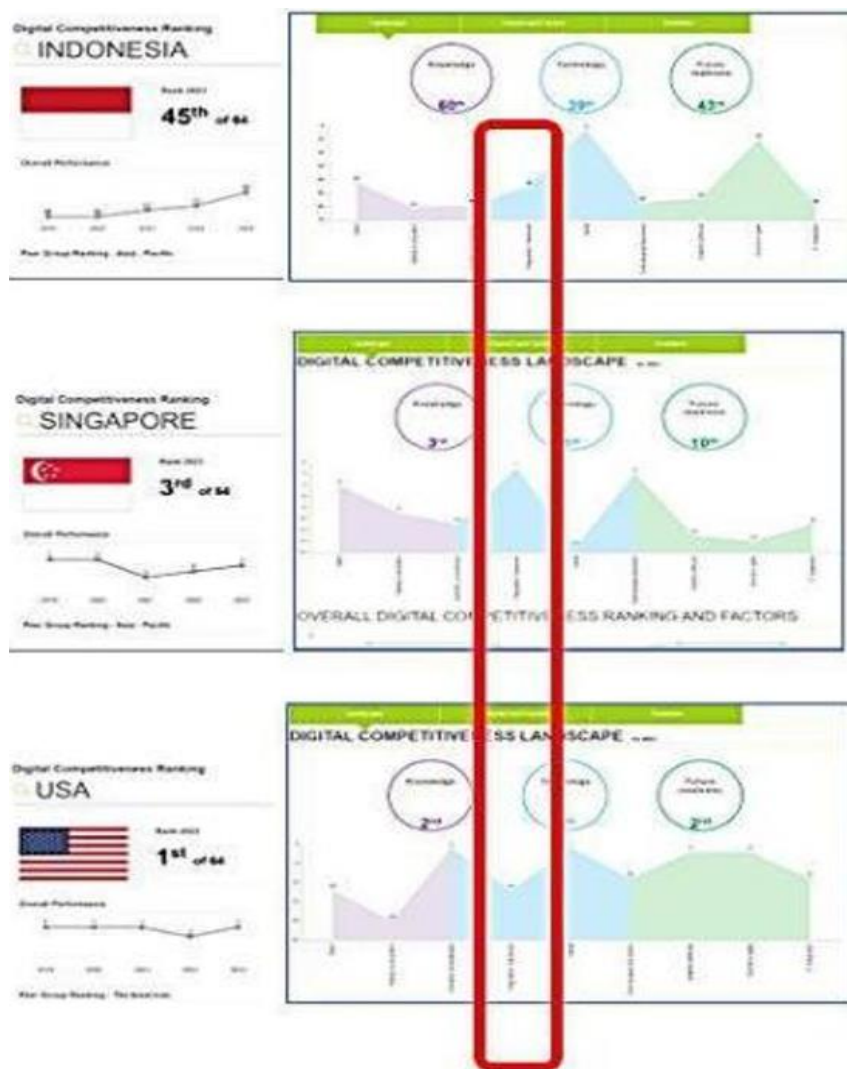


Figure 22. World Digital Competitive Ranking in 2023

Based on these facts, Singapore, which has the 1st-place score for the regulatory framework sub-factor, has also succeeded in obtaining a digital competitiveness ranking of 3rd place [63]. Likewise, the US, which has the 12th- place score for the regulatory framework sub-factor, managed to obtain a digital competitiveness ranking of

1st place because the future readings factor has a high value [64]. As for Indonesia, its regulatory framework sub-factor score means it is only ranked 45th. Notes given for further development include the need for continuous government reform (overseeing government reformation persistently), which means that the government needs to make clear and firm regulations and policies as a basis for carrying out digital transformation related to increasing understanding or awareness, ability technological adaptation, and readiness to face the future through careful planning [65].

Implementation of the benefit principle in other countries includes the implementation of free internet programs in public places (Philippines), utilization of frequency spectrum (Philippines), 5G networks to optimize the digital economy (Malaysia), avoiding duplication of infrastructure (Malaysia), optimizing scarce resources (Malaysia), guaranteed access for people with disabilities (US and EU), optimizing internet use in various fields such as education and health (US, EU, Malaysia, and the Philippines), and standardizing internet speed (all countries).

Regulations in several other countries also reflect the principles of fairness and equality, including by regulating internet access without discrimination, for rural areas, for people with disabilities, and so on. For example, in the US (at the federal level), there is a First Bipartisan Broadband Access Anti-Discrimination Law which generally regulates an anti-discrimination approach to broadband access and aims to prevent and eliminate discrimination. digital in access to broadband services. This law addresses discrimination against people based on their income level, race, ethnicity,

color, religion, or national origin. These new regulations establish a framework to ensure equal access to reliable high-speed broadband services [66]. In Alabama, under the existing law (the Connect Alabama Act of 2021), the Alabama Digital Expansion Division is required to use 70% of funds received by the Connect Alabama Fund to expand last-mile infrastructure in underserved areas. This law allows all funds received by the Connect Alabama Fund to be used to expand last-mile infrastructure in underserved areas. This Act allows governmental entities to participate in the grant program and requires them to contribute information on the statewide availability of broadband services to Alabama's broadband mapping program during the previous year to qualify for a grant. In Wisconsin, the aforementioned SB 365 made various changes to the broadband expansion grant program. The current law requires the Public Service Commission to administer a broadband expansion grant program by which it designates "underserved areas" in the state served by fewer than two broadband service providers and awards grants to qualified applicants to build infrastructure broadband in underserved areas. The law changed the purpose of the grant program to build broadband infrastructure in "underserved areas". Under current law, "unserved areas" are those that are not served by an internet service provider (ISP) that is a fixed wireless service or a wireline service and that provides service at an actual speed of at least 20% of the upload and download speed for advanced telecommunications capabilities as defined by the Federal Communications Commission.

In the European Union, the Regulation on Open Internet Access (The European Parliament and the Council of the European Union, 2015) protects the equal and non-discriminatory treatment of internet traffic and promotes the quality of internet access services through transparency measures and regulatory oversight. Therefore, this regulation provides meaningful internet access.

The lesson that can be drawn from comparing the arrangements of other countries; for example, in the US, to achieve a "fair and equitable" service, a special program was created, namely the Broadband, Equity, Access & Deployment (BEAD) Program [67], which is implemented by the US Department of Commerce's National Telecommunications and Information Administration (NTIA). The quality of broadband internet in the US under the BEAD program was made standard for "underserved" areas in the map are areas that do not have access to at least 25 Mbps for downloading and 3 Mbps for uploading, while "underserved" areas do not have access to 100/20 Mbps service, or faster.

In Malaysia, this partnership has been carried out by the Malaysian Ministry of Communications and Multimedia by granting "monopoly" rights to Digital Nasional Berhad (DNB) to then carry out infrastructure development and provide wholesale 5G services. In further developments, DNB partners with relevant stakeholders such as the government, regulators, state and local authorities, network

equipment providers, telecommunications operators, infrastructure owners, and user groups. The partnership was carried out with the aim of accelerating the deployment of 5G infrastructure and networks in Malaysia, spurring economic activity by utilizing 5G networks, narrowing the urban-rural digital divide, improving infrastructure conditions, avoiding duplication of infrastructure, optimizing the use of scarce resources, and promoting service-based competition in the telecommunications industry.

#### 4. Conclusion

There is a correlation between the level of the regulatory framework as a sub-factor in the assessment and the final ranking of a country's digital competitiveness. Thus, the existence of legal certainty (in the sense that there are clear and firm regulations covering the recognition and protection of rights, institutions, and funding) will determine the level of a country's digital competitiveness. As of now, Indonesia can be said to still not have legal certainty.

The proposed regulatory concept that can be used to provide protection for meaningful internet access that is fair and increases the nation's competitiveness is a concept that is based on the theories and legal principles contained in the previous section. This regulatory concept is called the A-Y-U Concept, which is an abbreviation derived from the Indonesian words meaning Fair and Equitable, Juridical, and Comprehensive. This concept or formulation will be able to position internet access laws as transformation infrastructure, from which a competitive digital transformation ecosystem will be able to be built.

In order to increase global competitiveness and digital competitiveness, Indonesia needs to immediately improve the regulatory framework and technological framework related to internet access rights. This absolutely must be done so that, within the planned time period, Indonesia can become one of the top 10 countries in terms of global competitiveness and strong digital competitiveness.

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