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Development And Challenges of Telematics Law in The Digital Era in Indonesia

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Abstract

This study aims to examine telematics law in Indonesia, from regulatory, implementation, and challenges in the digital era. Telematics law, which covers laws regulating the use of information and communication technology (ICT), has become increasingly important as digital technology evolves. Using a qualitative approach, this paper explores how telematics law is applied in Indonesia and the challenges and solutions in its implementation. The study also analyzes relevant laws and practices in regulating the use of information technology in Indonesia. The findings show that although the regulations exist, the implementation and public understanding of telematics law need to be improved.

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1. INTRODUCTION

Telematics law is an important part of the legal system in Indonesia which regulates various aspects related to information and communication technology (ICT). Along with the rapid development of digital technology, the use of the internet and information systems is increasingly widespread in people's lives. Therefore, clear legal regulations are needed to regulate the use of digital technology so that it is not misused and can create justice and legal certainty for all users. Telematics law covers many things, from personal data protection, electronic transactions, to cybercrime (*cybercrime*). This discussion will explore the development of telematics law in Indonesia and the challenges faced in its implementation¹.

The rapid development of technology, especially in the field of information and communication, requires the state to formulate regulations that can regulate its use. Telematics law functions to provide regulations regarding the use of this technology, including electronic transactions, personal data protection, and increasingly widespread cybercrime. The existence of telematics law is very important because without clear regulations, the use of technology can be misused, causing harm to individuals and society at large. However, even though there are various regulations that regulate it, there are still many challenges that must be faced in implementing it, such as the public's low understanding of this law, as well as gaps in the laws that regulate digital technology.²

There are several problem formulations that can be identified from the background above. *First*, how is the development of telematics law in Indonesia in regulating the use of information and communication technology? *Second*, what are the challenges faced in implementing telematics law in Indonesia? and which *third* What solutions can be applied to overcome the challenges in implementing telematics law?

From the explanation background and summary, The author intends to explain the above

problems in an article entitled Developments and Challenges of Telematics Law in the Digital Era in Indonesia.

2. RESEARCH METHOD

This research uses a descriptive qualitative approach with normative analysis methods. The data sources used come from various relevant legal documents, such as statutory regulations related to telematics law in Indonesia, as well as other literature such as books, journal articles and previous research. The data obtained will be analyzed to understand the role of telematics law in Indonesia and the challenges faced in its implementation.

3. DISCUSSION

1. Development of Telematics Law in Indonesia

Telematics law in Indonesia became known with the enactment of Law no. 11 of 2008 concerning Information and Electronic Transactions (ITE), which regulates important aspects of information and communication technology (ICT). Act ITE is an early milestone in legal regulation in cyberspace, especially in terms of electronic transactions, protection of personal data, as well as increasingly increasing cybercrimes. In addition, this law provides legal certainty for the public in using digital facilities in a safe manner and in accordance with applicable legal provisions.

Along with the rapid development of technology, the ITE Law was amended in 2016 with the issuance of Law no. 19 of 2016. This amendment aims to improve several provisions that are considered inadequate in dealing with new challenges that have emerged, both in terms of cybercrime and in maintaining freedom of expression in cyberspace. One of the significant changes is stricter regulation of the distribution of content that has the potential to harm society, such as hoaxes, hate speech and pornography.⁵ Even though the ITE Law has attempted to regulate various aspects of the use of information technology, the implementation of this law is not free from challenges. One of the biggest challenges faced is the public's limited understanding of the importance of legal regulations in cyberspace. Many people do not fully understand the risks and potential misuse of technology, such as theft of personal data, online fraud and copyright infringement. In fact, high awareness of telematics law is very necessary so that the public can minimize existing risks and comply with applicable legal provisions. Therefore, education regarding telematics law needs to be intensified, so that the public understands better and can actively participate in maintaining a safe and orderly cyberspace.

Apart from that, law enforcement in cyberspace is also a challenge in itself. Digital technology, which continues to develop rapidly, often defeats the ability of law enforcement officials to monitor and deal with crimes that occur in cyberspace. Transnational cybercrime also worsens law enforcement, because criminals are often beyond the reach of national laws. This requires international cooperation in order to combat cybercrime, which is of course not easy considering the differences in legal systems between the countries involved. However, the development of telematics law in Indonesia shows that there are serious efforts by the government to create adequate regulations to regulate the use of information and communication technology. It is hoped that with this law regulating telematics law, Indonesia can create a safe and protected digital climate, as well as encourage the creation of a society that is aware of the law in using technology.

2. Challenges in Implementing Telematics Law

One of the main challenges in implementing telematics law in Indonesia is the lack of

understanding among the public regarding their rights and obligations in the digital world. Even though laws such as the ITE Law are clearly regulated, the public in general still does not fully understand the legal boundaries that exist in cyberspace. For example, many internet users are unaware that actions such as unauthorized distribution of personal information or illegal downloading of copyrighted content can be subject to legal sanctions. This low legal awareness is exacerbated by ignorance of the risks faced, such as misuse of personal data and other criminal acts. In this case, the role of legal education is very important to ensure that people understand more about their rights and obligations in the digital world. This is because minimal legal knowledge can lead to unintentional violations, which ultimately worsen legal conditions in cyberspace.

In addition, the diversity of technology that continues to develop and involves many parties from abroad makes it difficult for effective law enforcement. Cybercrime often involves perpetrators located abroad, while Indonesian law only applies within the jurisdiction of this country. This challenge becomes increasingly complex as cybercriminals use technology that continues to evolve, such as use *Virtual Private Network* (VPN) or overseas servers to hide their identity and location. This makes the process of investigation and law enforcement more difficult, due to limitations in coordination between countries. For example, online fraud and the distribution of illegal content are often carried out by individuals or groups who are not bound by Indonesian law, thus requiring international cooperation in combating cybercrime. This is where international law and agreements between countries are important to form an effective cooperation network in handling telematics legal issues.

On the other hand, Indonesia also faces problems related to limited infrastructure and resources in terms of enforcing telematics laws. Many law enforcement officers do not have adequate skills and training to handle cybercrime cases. Digital crime requires specialist skills, such as in digital forensics and data analysis, which are often not available in most regional police forces. For this reason, there is a need for special training and strengthening the capacity of human resources to deal with cybercrime. The Indonesian government has begun making several efforts to improve the quality of law enforcement officers through education and training regarding telematics law, but this process still needs to be improved to be able to provide maximum results.

Apart from that, technical problems are also a challenge in implementing telematics laws. Many regulations have not been prepared in detail regarding the technical aspects needed to monitor and control cybercrime. Legal regulations governing the misuse of technology often cannot keep up with the pace of technological development itself. For example, many digital applications or platforms operate in Indonesia, but not all of them are registered or subject to existing regulations. This makes monitoring the content distributed, especially that which is illegal, more difficult. Therefore, revisions to existing laws and regulations need to be carried out continuously so that they can cover all aspects of technological developments that occur. In the future, regulations that are more comprehensive and based on the latest technology are needed so that telematics law can run more effectively.

In this context, community participation and the private sector also play an important role. The public, as technology users, must be more active in reporting unlawful actions that occur in cyberspace. Likewise, the private sector, especially technology companies, has a responsibility to ensure that the platforms they operate comply with applicable legal provisions. These companies must be more transparent in reporting suspicious activity and cooperate with law enforcement officials in efforts to eradicate cybercrime. With collaboration between the government, private sector and society, it is hoped that telematics law can be implemented more effectively and have a positive impact on cyber

security in Indonesia.

3. Solutions and Improvements in the Implementation of Telematics Law

One solution that can be implemented to increase the application of telematics law in Indonesia is through increasing education to the public regarding the rights, obligations and ethics of interacting in cyberspace. As part of an increasingly digital world, society needs to be empowered with adequate knowledge about how to behave in accordance with the regulations that apply in cyberspace. Counseling about intellectual property rights, privacy, and the threat of cybercrime, such as fraud *online*, *phishing*, and hacking, should be included in educational curricula in schools as well as organized through campaigns involving social media. This kind of education can increase public legal awareness which will have an impact on reducing the number of violations that occur. People who better understand their legal rights and obligations in cyberspace can be more careful in using technology and protecting their personal data. ¹⁴ To achieve this goal, the government, educational institutions and civil society need to work together to design more effective curricula and educational programs. For example, the government can work with universities and research institutions to create educational modules that are easily accessible, both in formal and informal education environments. These institutions can also involve legal practitioners, technology experts, and technology companies to provide a comprehensive understanding of how law can be applied in cyberspace. In addition, the government can introduce technology-based learning that can be reached by the wider community, such as applications or websites that provide information related to telematics laws and ways to protect yourself from cybercrime.

Not only from an educational perspective, improvements in the implementation of telematics laws also require strengthening coordination between countries. Bearing in mind that cybercrime often involves actors from abroad, international collaboration becomes crucial. For example, cybercrimes such as illegal data trading or hacking involving foreign servers can be overcome with cooperation between countries. Indonesia needs to strengthen cooperation with other countries, especially those that have international agreements on cyber law enforcement. With this collaboration, cross-border cybercrime can be handled more effectively, through mutually agreed mechanisms, such as: *Mutual Legal Assistance Treaties* (MLATs) that allow states to cooperate in law enforcement.

Apart from that, this international cooperation can also speed up the extradition process for cybercriminals who are abroad and facilitate the exchange of data and information needed in investigations. Countries that have more advanced regulations in dealing with cybercrime can be valuable partners in terms of exchanging technological information as well *best practices* in law enforcement. Thus, it is important for Indonesia to establish bilateral and multilateral relations with countries that have strong telematics legal regulations, so that the law enforcement process becomes more coordinated and effective.

In addition, regulatory updates that accommodate rapid technological developments are very necessary. Information and communication technology continues to develop rapidly, while law often lagging behind in responding to these changes. Therefore, laws and regulations governing telematics need to be evaluated and renewed periodically to ensure compliance with the latest technological developments. Revisions to the ITE Law (Electronic Information and Transactions Law), for example, could include more indepth aspects regarding the protection of personal data, protection against misuse of algorithms, and overcoming hoaxes which are now increasingly circulating. This update is very important so that the law remains relevant and effective in facing increasingly

complex cyber challenges.

Apart from that, the resulting regulations must also be able to accommodate the growing needs of the private sector, especially technology companies which are major players in the digital world. These companies, whether based domestically or overseas, often have to comply with regulations that vary by country. Therefore, the regulations made must be able to create harmony between national and global policies. This aims to ensure that technology companies do not feel burdened by overlapping regulations, so that they can focus more on creating innovations that can support the development of Indonesia's digital economy. Implementing proper regulations will help create a healthy digital ecosystem, which not only benefits companies, but also provides protection for technology users.

Furthermore, in updating regulations, it is not only important to pay attention to the technical side of the law, but also the social and cultural side of Indonesian society. As a country with very wide cultural diversity, it is important for existing regulations to be drawn up taking into account the social context that applies in each region. In this way, the application of telematics law can be more easily accepted and understood by people who have diverse cultural backgrounds. Therefore, continuous outreach and strengthening regulations at every level of government are important steps to create a legal system that can provide an equal sense of justice for all of society.

4. Conclusion and Suggestions

Telematics law in Indonesia has a very vital role in regulating the use of information and communication technology (ICT) in the digital era. Along with the rapid development of technology that continues, the existence of regulations governing cyberspace is very important to create a safe and fair environment for all users. Telematics law in Indonesia functions not only to regulate electronic transactions and protect personal data, but also to mitigate various forms of cybercrime which continue to grow along with the rapid use of digital technology. Therefore, the presence of telematics law is very important to create a sense of security and fairness in interacting in cyberspace.

However, even though the telematics law has a strong foundation, the implementation and public understanding of this law still faces a number of challenges. One of them is the lack of public awareness regarding the importance of telematics law in everyday life. Many people do not fully understand their rights and obligations when interacting in cyberspace, such as the right to privacy, protection of personal data, and responsibility for activities carried out on the internet. This lack of understanding has the potential to cause widespread violations of telematics law, such as the spread of false information, copyright violations, or even other cybercrimes.

For this reason, the first solution that needs to be considered is increasing public understanding of telematics law. More intensive education about the rights of technology users, the importance of protecting personal data, and the correct procedures for carrying out activities in cyberspace must be a priority. For example, governments, educational institutions, and the private sector can work together to provide training, seminars, or online courses on telematics law. This educational material can include a basic understanding of cyber law, personal data protection regulations, and techniques for avoiding cybercrime. This educational activity must be able to reach various levels of society, both in urban areas and in more remote areas. Counseling can also be done through social media or mobile applications which can be accessed easily by the public.

Apart from that, it is important for the government to strengthen international cooperation in dealing with cross-border telematics legal issues. Cybercrime, such as data

hacking, electronic fraud, and personal data trafficking, often involves perpetrators from different countries. Therefore, cooperation between countries in the world is very important to effectively eradicate cybercrime. Indonesia, which has joined various international forums related to countering cybercrime, needs to improve bilateral and multilateral relations with other countries to facilitate the exchange of information and strengthen law enforcement mechanisms. For example, cooperation in exchanging data between countries will facilitate the process of investigating and prosecuting cybercriminals who are abroad. Thus, this international collaboration will strengthen Indonesia's arresting power in dealing with cybercrime.

Renewing regulations is also a very important step in increasing the effectiveness of telematics law in Indonesia. Given the rapid development of technology, current regulations, such as the Information and Electronic Transactions Law (UU ITE), may no longer be able to accommodate all the challenges and new developments in the field of technology. Therefore, the government needs to revise existing regulations to ensure that telematics laws remain relevant and effective in regulating electronic transactions and protecting personal data. For example, there needs to be more in-depth updates regarding personal data protection, especially related to increasingly complex data transactions in cyberspace. Apart from that, existing laws must also be able to accommodate new problems that arise, such as the misuse of algorithms and artificial intelligence (AI) technology which has the potential to harm technology users.

Apart from regulations, stricter supervision and law enforcement are also needed. Supervision of the implementation of telematics laws, both in the public and private sectors, must be carried out more strictly. This aims to ensure that every electronic transaction, use of personal data and activities in cyberspace carried out by internet users can remain inside applicable legal corridors. In addition, law enforcement officers need to be equipped with better knowledge and skills in handling cases related to cybercrime. Indecisive law enforcement against cybercriminals can create a sense of impunity and reduce the level of public trust in the existing legal system. Therefore, efforts that need to be made are to strengthen the capacity of law enforcement officers by providing special training regarding cybercrime, information technology and related regulations.

Dispute resolution in cyberspace also needs special attention. In some cases, dispute resolution that occurs in the context of telematics law is still very limited. Most disputes related to electronic transactions, copyright and personal data protection cannot be resolved in a simple way, given their nature involving very complex technology and data. Therefore, there needs to be a special institution or judicial institution that handles legal disputes in cyberspace. This aims to provide fast and precise justice for people involved in legal disputes related to the use of information technology.

Thus, to ensure that telematics law in Indonesia can be implemented effectively, comprehensive efforts are needed to increase public understanding, strengthen international cooperation, update existing regulations, and increase the capacity for law enforcement and dispute resolution. Increasing public understanding and awareness regarding telematics law will have a positive impact on creating a safer, more orderly and just digital environment. Ultimately, through collaboration between all parties and appropriate regulatory updates, Indonesia can create a better legal system to face the challenges of the digital era.

4. BIBLIOGRAPHY

- [1] H. Nizar, Aspek Hukum dalam Penggunaan Teknologi Digital. Jakarta: Penerbit Alfabeta., 2020.
- [2] "Law of the Republic of Indonesia no. 19 of 2016 concerning Amendments to Law

- no. 11 of 2008 concerning Information and Electronic Transactions, State Gazette of the Republic of Indonesia of 2016 No. 251.".
- [3] "Law of the Republic of Indonesia no. 27 of 2022 concerning Protection of Personal Data, State Gazette of the Republic of Indonesia of 2022 No. 98.".
- [4] S. Putra, *Penyusunan dan Penegakan Hukum di Dunia Maya*. Jakarta: Sinar Grafika., 2019.
- [5] A. Sulaiman, *Peraturan Teknologi Informasi di Indonesia*. Bandung: PT. Refika Aditama., 2016.
- [6] A. Manan, *Peraturan tentang Teknologi Informasi dan Hukum Telematika*. Surabaya: Airlangga University Press., 2015.
- [7] S. Kusumah, *Perlindungan Data Pribadi dalam Hukum Telematika*. Malang: Universitas Brawijaya Press., 2016.
- [8] B. N. Arief, *Perundang-Undangan Telematika di Indonesia: Teori dan Praktik.* Yogyakarta: Pustaka Pelajar., 2018.
- [9] "Regulation of the Minister of Communication and Information of the Republic of Indonesia No. 20 of 2016 concerning Protection of Personal Data in Electronic Systems.".
- [10] "Republic of Indonesia Government Regulation no. 71 of 2019 concerning Implementation of Electronic Systems and Transactions, State Gazette of the Republic of Indonesia of 2019 No. 163.".
- [11] T. Sari, *Teori Hukum dan Perundang-Undangan Telematika*. Jakarta: Rajawali Press., 2017.
- [12] A. Haryanto, Cybercrime dan Hukum di Indonesia. Yogyakarta: Liberty., 2018.
- [13] H. Mardani, *Hukum Informasi dan Transaksi Elektronik*. Bandung: Mandar Maju., 2020.
- [14] A. Abdurrahman, *Hukum Telematika di Indonesia: Kajian Regulasi dan Implementasi*. Jakarta: Penerbit Rineka Cipta., 2017.
- [15] "Law of the Republic of Indonesia no. 11 of 2008 concerning Information and Electronic Transactions (ITE), State Gazette of the Republic of Indonesia of 2008 No. 58, and Supplement to the State Gazette of the Republic of Indonesia No. 4843.".
- [16] "Law of the Republic of Indonesia no. 15 of 2003 concerning Eradication of Criminal Acts of Terrorism, State Gazette of the Republic of Indonesia of 2003 No. 38.".