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## Implementation of Road Traffic Observation with ETLE as a Form of Legal Development in the Digital Era

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**Abstract:** Legal development in the digital era, the implementation of road traffic monitoring with ETLE (Electronic Traffic Law Enforcement) is a new thing in Indonesia. As an innovation, the electronic traffic monitoring system (ETLE) continues to experience continuous development and improvement. It is relevant because the development of ETLE is conducted within an existing legal framework related to traffic regulations, which will most likely interact with other legal aspects in the context of road traffic law enforcement. The research aims to examine the existence of ETLE in the context of the development of traffic law in Indonesia in the digital era, as well as the extent to which traffic law in force in Indonesia is appropriate in responding to the use of ETLE as a new tool in enforcing road traffic law. The method used is a normative juridical method by reviewing existing regulations and literature related to the application of ETLE and traffic law in Indonesia. The research results show that ETLE is a lineup with the direction of the development of Indonesian national law, especially in the context of the current digital era. Apart from that, traffic law in Indonesia also tends to be in line with the use of ETLE as a new tool in enforcing traffic law, although several legal aspects need special attention.

**Keyword:** ETLE (Electronic Traffic Law Enforcement); Road Traffic Law; Legal Development.

### INTRODUCTION

In Indonesian legal regulations, the rules governing road traffic have been explained in Law Number 22 of 2009 concerning Road Traffic and Transportation.[1] Traffic includes the movement of vehicles and individuals within a road environment, which involves infrastructure designed for the movement of vehicles, individuals, and/or goods such as roads and supporting facilities. From this, it can be concluded that the substance of road traffic law is regulations that regulate the movement of individuals and/or vehicles within the road

space. Therefore, it is natural that road traffic law should not only focus on the movement itself but also regulate the entities involved in movement on the road, such as individuals and/or vehicles. It is reflected, for example, in regulations for pedestrians, competency standards for drivers, technical and safety requirements for vehicles as well as the registration and identification process for motorized vehicles.

In addition to regulating movements and entities involved on the road, traffic law also considers actions that are considered violations of the law. In the Road Traffic and Transportation Law, there are two main classifications of violations, namely: Administrative law violations; and Violation of criminal law. Violations of administrative law, which have the potential to be subject to administrative sanctions, include (a) violating provisions regarding registration and identification of motor vehicles; (b) violating the conditions regarding driving permits; (c) violating provisions regarding traffic impact analysis; and (d) violates the provisions regarding public transportation. Meanwhile, actions that are considered criminal offenses, which can be subject to criminal sanctions, are regulated separately in the chapter that regulates Criminal Provisions in the Road Traffic and Transportation Law.

By paying attention to the regulatory structure governing road traffic law as explained previously, it is very interesting to observe how road traffic law enforcement is developing, especially in the context of the industrial revolution 4.0 era where data is central to the traffic law enforcement process. Nowadays, the Indonesian National Police (Polri) has started an initiative with the ETLE or Electronic Traffic Law Enforcement program as an electronic solution for enforcing road traffic laws. This program has been tested in several Regional Police (Polda) areas and is an interesting subject to assess its compatibility with road traffic laws in Indonesia. In connection with the previous explanation, this research focuses on the problem of the existence of ETLE in the development of Indonesian road traffic law in the digital era and the compatibility of road traffic laws in force in Indonesia responding to ETLE as a new mechanism for enforcing road traffic law.

## **METHOD**

This research is normative juridical research,[2] using library materials, which are composed of two legal materials, namely: (1) primary legal materials which are divided into basic norms or rules, basic provisions or regulations, as well as statutory regulations; and (2) secondary legal materials are legal materials that provide further explanations of primary legal materials in the form of literature, journal articles and also relevant research results.[3] Data collection was carried out by literature study of books, articles, research results, as well as relevant laws and regulations. Data analysis was carried out descriptively and qualitatively to answer the problem formulation in this research.

## **RESULT AND DISCUSSION**

### **Implementation of ETLE in Indonesia: Development of Indonesian Road Traffic Law in the Digital Era**

Before evaluating how ETLE is implemented as part of the evolution of road traffic law in Indonesia in the digital era, it is important to understand the essence of the concept of legal development. Legal development focuses on the process of creating and perfecting legal materials so that they can adapt to the changes and needs of the times.[4] The legal development pattern entails a comprehensive reorganization or restructuring of legal objectives as laid out in the Constitution. Nonetheless, amidst the national legal development process, the significance of the "legal development map" often goes overlooked. This map is intricate and arduous to formulate; however, it is of utmost importance. Without it,

determining the direction and positioning of law in the development process can be a daunting task.

The purpose of legal development is to discover efficient ways of reinforcing social structures. It is believed that having a high-quality legal system, both in terms of content and implementation, will motivate citizens to abide by the regulations set by the government, not due to coercion from the authorities, but because they recognize the fairness and impartiality of these regulations.[5] Bagir Manan stated that in the process of developing national law, special attention needs to be given to three fundamental aspects, namely: (a) development of higher education programs in the field of law; (b) preparation of a law formation program; and (c) increasing law enforcement programs.[6]

In the Indonesian legal system, national legal development efforts are regulated within the framework of Law Number 17 of 2007 concerning the National Long Term Development Plan for 2005-2025 (UU RPJPN), which stipulates:[7]

- a. Legal development aims to support sustainable economic growth, regulate economic-related issues, especially in the world of business and industry, and create a stable investment environment with strong law enforcement and adequate protection.
- b. Legal development also aims to prevent acts of corruption and handle and completely resolve problems related to collusion, corruption, and nepotism (kkn).
- c. The focus of legal development is to strengthen the national legal system which is based on the values of Pancasila and the 1945 constitution of the republic of Indonesia. The process involves the creation of legal resources and frameworks, such as law enforcement officials and legal systems, as well as enhancing legal awareness within society to establish a lawful state. Additionally, it encompasses the establishment of a fair and democratic society.

If we look at the outlines of the RPJPN Law, there are 7 main directions in the development of national law, namely:

1. Support sustainable economic growth.
2. Regulate economic problems, especially in industry and the business world.
3. Establish a stable investment environment with effective legal enforcement and protection.
4. Prevent corruption and thoroughly handle problems related to collusion, corruption, and nepotism (KKN).
5. Building a strong national legal system based on the values of Pancasila and the 1945 Constitution of the Republic of Indonesia, including the development of legal materials, legal structures including law enforcement officers, and legal infrastructure.
6. Forming a society that has high legal awareness to create a legal state.
7. Creating a just and democratic society.

When considering the ETLE application, it should be noted that the steps to implement ETLE are in line with the objectives of national legal development, especially in the fourth direction of national legal development which aims to reduce the risk of criminal acts of corruption and resolve problems related to collusion, corruption, nepotism (KKN). The implementation of ETLE which uses digital data technology and camera recording with intelligent software minimizes direct interaction between Polri members and violators, thereby reducing the opportunity for corrupt behavior from Polri members and/or traffic violators.

Apart from being in line with the direction of the development of national law, the implementation of ETLE is also in line with the evolution of Information and Communication Technology (ICT), which is currently experiencing the era of the Industrial Revolution 4.0. The process of technological change known as digitalization is the transition from analog technology to digital technology, which allows information in various forms (voice, data, video) to be transmitted over various types of networks in a binary manner.[8]

This technological development has inspired the emergence of new services such as direct interaction, multimedia, long-distance shopping transactions (teleshopping), long-distance banking services (teleshopping), and interactive games. Apart from that, this technology also encourages the development of high-speed internet services (broadband), interactive communication systems, and high-speed information channels (information superhighways).

The implementation of ETLE aims to utilize Information and Communication Technology (ICT) to support road traffic law enforcement. It is reflected in the way ETLE works, which changes traffic law enforcement methods from direct arrests with visual observations to the use of cameras with intelligent software to detect traffic violations. In general, the ETLE implementation scheme can be explained as follows:[9]

- a. Camera Sensors: Implementation of cameras with intelligence software to capture traffic violations.
- b. Evidence Validation: Matching photos of Police Numbers with reading results from software supported by Automated Number Plate Recognition (ANPR).
- c. Validation of Resident Data: Physical matching of vehicles (photos and videos) with data from the motor vehicle identification registration database.
- d. Document Printing: Printing a violation confirmation letter. The vehicle owner's address is obtained from the registration database and motor vehicle identification is included on the confirmation document and the delivery address on the envelope.
- e. Delivery: Sending a confirmation letter via post.
- f. Confirmation
- g. Completion: After you receive a blank traffic ticket, you can resolve the related violation by paying via bank using the payment code you received.

According to the assessment provided, it is clear that ETLE represents an evolutionary step in the progress of road traffic law in Indonesia during the digital age. This is because ETLE has transformed the approach to enforcing road traffic laws from a manual and restricted process carried out solely by members of the National Police, to a more technologically advanced and all-encompassing method that incorporates data from a variety of sectors within the National Police's jurisdiction. As a result, the task of enforcing road traffic laws is no longer limited to the law enforcement sub-function independently but is also linked to data managed by the registration and identification sub-function, for both drivers and motorized vehicles.

### **Compatibility of Indonesian Road Traffic Law with ETLE as a New Mechanism for Road Traffic Law Enforcement**

Before evaluating the suitability of road traffic laws in Indonesia with the use of ETLE, it is fundamental to understand the basic concepts of ETLE. The background to the ETLE initiative is to improve law enforcement in road traffic, which includes (a) preventing accidents and traffic jams; (b) protecting and service to road users from violations of the law, to ensure smooth running and safety; (c) promoting a culture of order in traffic as part of the nation's culture; (d) confirming legal certainty in enforcing road traffic laws; and (e) using ETLE as a tool to educate the public about traffic rules.[10] From these five incentives, it can be concluded that traffic is an integral part of everyday life that requires order, safety, and smoothness.

ETLE is an efficient traffic law enforcement system that uses electronic technology, such as ANPR (Automatic Number Plate Recognition) cameras, to automatically detect, record, and store evidence of Motor Vehicle Number Plate violations, which can be used as evidence in law enforcement processes. Based on this concept, ETLE aims to be an effective traffic law enforcement system, using electronic technology to collect evidence of traffic law violations. Until now, there are no regulations that specifically regulate ETLE as a valid legal

term. Therefore, this definition only acts as a guide to understanding the concept of ETLE and does not have binding legal force because it is not regulated by specific laws and regulations. In Indonesian positive law, the term often used is "Reaction to Traffic and Road Transportation Violations," which includes a series of actions by investigators from the Indonesian National Police or Civil Servant Investigators in the field of Traffic and Road Transportation against Traffic and Road Transportation violations.[11] In this way, ETLE gains legitimacy as part of the action against traffic and road transportation violations.

In Indonesian road traffic law, two regulations are relevant to the use of ETLE in law enforcement, namely Law Number 22 of 2009 concerning Road Traffic and Transportation (UU LLAJ), and Government Regulation Number 80 of 2012 concerning Procedures for Inspecting Motorized Vehicles in Roads and Enforcement of Traffic and Road Transportation Violations (PP 80/2012). Although the law is the undertaking of ETLE as a new mechanism for enforcing road traffic laws in Indonesia, several legal considerations need to be initiated, including:

1. First Note, the implementation of ETLE must be carried out in conjunction with the provision of a Road Traffic and Transportation Information System control center.

The Road Traffic and Transportation Information and Communication System, which is managed by the National Police, has a control center that regulates the Road Traffic and Transportation information and communication subsystem which is managed by the Government and/or Regional Government in its area of authority. It places the National Police as the control center manager, which requires the integration of data from LLAJ supervisors and the Regional Government into the system.[1] Even though it has been explicitly regulated in the LLAJ Law, implementation in the field is not by the provisions stipulated by the Law. The National Police established the National Traffic Management Center (NTMC) as the realization of the Road Traffic and Transportation Information and Communication System in 2010. The National Police's organizational structure regulates 1 NTMC unit at the National Police Traffic Corps, 31 RTMC units at the Regional Police level, and 445 TMC at the Regional Police level.

What about other LLAJ supervisors such as the Ministries of Public Works, Transportation, Industry, and Research and Technology? The Ministry of Transportation, for example, took steps in 2014 by launching a Traffic Management Information System (SIM LALIN), which records road assets such as markings, signs, guardrails, and traffic lights. In 2017, the Ministry of Transportation also introduced the Ministry of Transportation Data Center as a response to PM 26 of 2017 concerning the Transport of People by Public Motorized Vehicles Not on Routes, with a focus on digital dashboard access by the Directorate General of Land Transportation and the implementation of public transportation for monitoring online taxi operations.[12] The Regional Government implements various forms of information and communication subsystems for Road Traffic and Transportation.

The existence of various forms of information and communication subsystems for Road Traffic and Transportation at the Central Government (as LLAJ Supervisor) and Regional Government levels, both in terms of interfaces and content management systems, shows that data integration has not occurred, as mandated by the LLAJ Law. It is certainly a challenge for the implementation of ETLE in the future. If ETLE is to be implemented widely throughout Indonesia, it is important to immediately provide a Road Traffic and Transportation Information System control center that is connected to comprehensive data integration, both at the Central Government and Regional Government levels.

2. Second Note

The application of ETLE is limited to motor vehicle inspection incidents on the road when violations occur that can be seen directly or captured by electronic law enforcement



tools. Thus, this arrangement makes ETLE part of incidental inspections of motorized vehicles on the road when violations occur. However, if ETLE is applied in the context of police operations or crime prevention, this needs to be taken into account because the regulation limits ETLE only to incidents of checking motor vehicles on the road when violations are caught red-handed, not for situations of checking motor vehicles on other roads.

3. Third Note, criminal liability in implementing ETLE.

The regulations for implementing ETLE in PP 80/2012 have the potential to cause fundamental problems regarding legal liability for violators who are prosecuted. PP 80/2012 stipulates that a ticket will be handed over to the violator as notification and summons for a court hearing. However, this approach raises questions, because the camera only records the vehicle's license plate number, which is then matched with the vehicle's registration and identification data. It raises the possibility that the violator is not the owner of the vehicle, even though a traffic ticket will be sent to the vehicle owner in the database. To respond to this problem, two options can be proposed, namely:[13]

- a. The first proposal is to increase camera capacity to be based on facial recognition.
- b. Several Polda, such as Polda Metro Jaya, have started taking initiatives by trialing ETLE. For example, the East Java Regional Police have collaborated with the Surabaya City Government in implementing facial recognition-based cameras that are integrated with the Surabaya Intelligent Transport System (SITS) program, which is connected to a population database. This step aims to improve the security and comfort of the city. Therefore, this option is worthy of further investigation through cooperation between the National Police and the Regional Government.
- c. Second proposal, adopt the concept of vicarious liability in implementing ETLE.
- d. If the First Proposal is difficult to implement due to budget constraints for the National Police and Regional Government, a more relevant option is to overhaul the principle of criminal responsibility in implementing ETLE. Currently, Indonesian positive law adheres to the principle of "no punishment without guilt" (*geen straf zonder schuld*). Fault determines whether an action is considered a criminal offense and whether a person can be subject to criminal penalties. This principle is a logical consequence of the basic principle of criminal law, namely that there is no punishment without guilt.[14] The Criminal Code (KUHP) does not provide an official definition of the concept of guilt, so to understand its meaning, it is necessary to refer to the doctrine, which is:
  - 1) The concept of guilt is used as a general prerequisite for prosecuting someone for their actions. In this context, blame is interpreted as a characteristic that can be blamed on the perpetrator. In other words, this is related to the reasons that can remove criminal sanctions.
  - 2) The concept of error is used to explain a special part of the formulation of a criminal act (*delict*), which is a synonym for carelessness or as a substitute for the term negligence/mistake (for example in Article 359 of the Criminal Code), which states that due to negligence it results in the death of another person. Usually, for the concept of error in this context, the Latin term *culpa* is used, or in doctrine, it is often referred to as error in the narrow sense.
  - 3) The concept of error in a broad sense includes various forms of error, both intentional and negligent.
  - 4) Errors used to show that someone has committed a criminal act (is suspected of having committed a criminal act). In this context, a mistake is defined as an action that has been taken.

The understanding of the principle that there is no crime without fault usually appears in discussions about criminal responsibility, especially those related to issues of intent and negligence.[15] The definitions of intention and negligence are not explicitly explained in the Criminal Code. Therefore, an explanation of the concept is often sought through doctrine. Deliberation is explained as "willen en weten" or will and knowledge, which means a person deliberately carries out an action that he already knows the consequences of.

Proposing the application of the principle of vicarious liability in ETLE indicates a rejection of the principle of *geen straf zonder schuld* which has been explained previously. Discussion about the principle of vicarious liability is not something new, especially in the context of road traffic law. In the context of ETLE, members of the National Police do not need to actively search for traffic violators because the principle of vicarious liability stipulates that the owner of the motor vehicle is responsible for the violation. However, the proposal to apply the principle of vicarious liability in ETLE requires changes to the LLAJ Law because the fundamental principle in forming criminal law norms is to adhere to the principle of *lex scripta*, which requires the formation of criminal provisions through legislation. Apart from providing legal certainty to citizens, what is equally important is providing certainty to government officials tasked with enforcing criminal law, such as police, prosecutors, and judges. To achieve legal certainty, it is necessary to formulate clear and firm criminal law provisions (*lex certa*) and must have fairly strict limitations and be limited in scope (*lex stricta*).

After analyzing both the First Proposal and the Second Proposal, it can be concluded that there are different legal implications for their implementation. However, regardless of which proposal is chosen, it is crucial to address the legal loopholes related to criminal liability in executing ETLE. Failure to do so could result in the ineffectiveness of ETLE as a traffic law enforcement system. This is because members of the National Police may still prioritize punishing violators, even with the assistance of cameras equipped with Automated Number Plate Recognition (ANPR) sensors.

4. The fourth note is the need for *sui generis* regulations governing ETLE.

The Regulation of the Head of the National Police of the Republic of Indonesia gives the Chief of Police the power to regulate the prosecution of violations based on electronically recorded evidence, as stated in PP 80/2012. However, there is currently no National Police Chief Regulation that specifically governs the prosecution of violations using electronic recording evidence. This article emphasizes the importance of regulating everything by law. The National Police initiated the process of drafting these regulations in 2018, but the draft has not yet been ratified and is not legally binding. This delay is against the spirit of enforcing norms related to prosecuting traffic violations using electronic recording devices, which will only take effect one year after the promulgation of PP 80/2012.[16] Delays in implementing the norms mentioned should be considered as an opportunity to prepare everything needed, be it facilities, infrastructure, or the relevant legal framework, to support the implementation of ETLE.

## CONCLUSION

Based on the analysis and explanation above, several important conclusions can be drawn. First, the implementation of ETLE is by the development direction of Indonesian national law as mandated in the RPJPN Law, which emphasizes efforts to eliminate corruption and deal with related problems. Apart from that, ETLE's suitability for the development of Information and Communication Technology (ICT), especially in the Industrial Revolution 4.0 era, shows its harmony with the dynamics of modern technology. The ETLE mechanism, which utilizes ICT to support traffic law enforcement, represents a

shift from conventional enforcement to advanced technology such as cameras with intelligent software to detect traffic violations. Second, although Indonesian road traffic law is generally by the implementation of ETLE as an innovation in traffic law enforcement, several legal aspects need to be considered. It includes the need for a Road Traffic and Transportation Information System control center, limits on the application of ETLE to incidental inspections, criminal liability in the context of ETLE, and the need for regulations specifically governing the use of ETLE.

## REFERENCES

*Law Number 22 of 2009 concerning Road Traffic and Transportation.*

S. Soekanto and S. Mamudji, *Penelitian Hukum Normatif Suatu Tinjauan Singkat*. Jakarta: Rajawali Press, 2015.

S. Soekanto, *Pengantar Penelitian Hukum*, Cet. 3. Jakarta: UI Press, 2005.

[D. Risdiarto, "Kebijakan Dan Strategi Pembangunan Hukum Dalam Memperkuat Ketahanan Nasional," *Jurnal Penelitian Hukum De Jure*, vol. 17, no. 2, p. 177, Jun. 2017, doi: 10.30641/dejure.2017.V17.177-193.

W. Djatmiko, "PARADIGMA PEMBANGUNAN HUKUM NASIONAL YANG RESPONSIF DALAM PERSPEKTIF TEORI J.H.MERRYMAN TENTANG STRATEGI PEMBANGUNAN HUKUM," *Arena Hukum*, vol. 11, no. 2, pp. 415–433, Aug. 2018, doi: 10.21776/ub.arenahukum.2018.01002.10.

B. Manan, "Menemukan Kembali Pembangunan Hukum Nasional," *Varia Peradilan No. 326*, 2013.

*Attachment to Law Number 17 of 2007 concerning National Long Term Development Plan 2005-2025.*

D. Budhijanto, "Peran Hukum Telekomunikasi terhadap Implikasi Konvergensi Teknologi Informasi dan Komunikasi," *Jurnal Dinamika Hukum*, vol. 14, no. 1, 2014, Accessed: Apr. 25, 2024. [Online]. Available: <https://dinamikahukum.fh.unsoed.ac.id/index.php/JDH/article/view/283>

D. A. Wicaksono and C. Dwilaksana, "PENEGAKAN HUKUM LALU LINTAS JALAN SECARA ELEKTRONIK SEBAGAI WUJUD PEMBANGUNAN HUKUM DALAM ERA DIGITAL," *Jurnal Rechts Vinding: Media Pembinaan Hukum Nasional*, vol. 9, no. 2, p. 311, Aug. 2020, doi: 10.33331/rechtsvinding.v9i2.445.

Reqnews.com, "Chrysnanda DL : Yang Menghambat Itu Durhaka!," *Reqnews.com*, Jakarta, Dec. 17, 2018. Accessed: Apr. 25, 2024. [Online]. Available: <https://www.reqnews.com/read/wawancara/72/chrysnanda-dl-yang-menghambat-itu-durhaka>

Article 1 number 2 Government Regulation Number 80 of 2012 concerning Procedures for Inspecting Motorized Vehicles on the Road and Taking Action against Traffic and Road Transport Violations.

Communications and Public Information Bureau, "Kemenhub Transformasi Pelayanan Berbasis Teknologi Informasi," Kementerian Perhubungan Republik Indonesia. Accessed: Apr. 25, 2024. [Online]. Available: <https://dephub.go.id/post/read/kemenhub-transformasi-pelayanan-berbasis-teknologi-informasi>

M. A. R., "Fitur Pengenalan Wajah akan Dikembangkan di Kamera E-TLE Cegah Nopol Palsu," *detiknews*. Accessed: Apr. 25, 2024. [Online]. Available: <https://news.detik.com/berita/d-4642127/fitur-pengenalan-wajah-akan-dikembangkan-di-kamera-e-tle-cegah-nopol-palsu>



- A. Priyono, “KONSTRUKSI PENEGAKAN HUKUM LALU LINTAS ELEKTRONIK WUJUD KONSEP DIGITALISASI (Studi Penelitian di Satuan Lalu Lintas Polres Wonosobo),” Postgraduate Thesis, Universitas Islam Sultan Agung, Semarang, 2023.
- B. N. Arief, *Perbandingan Hukum Pidana*, Revised Edition., Cet. 11. Jakarta: Rajawali Press, 2014.
- Article 37 Government Regulation Number 80 of 2012 concerning Procedures for Inspecting Motorized Vehicles on the Road and Taking Action against Traffic and Road Transport Violations.