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TRAFFIC LAW ENFORCEMENT THROUGH *E-TILANG* IN INCREASING TRAFFIC LAW AWARENESS IN INDONESIA

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Abstract

This study aims to analyze the traffic law enforcement through E-Tikang in increasing traffic law awareness. The research method used is descriptive qualitative. The results showed that the National Police of the Republic of Indonesia issued a policy in traffic order enforcement called E-TLE, namely (Electronic Traffic Law Enforcement), which is an electronic system for monitoring and enforcement of traffic laws in the form of electronics that utilizes a supporting tool, namely CCTV. CCTV footage is used as evidence that the system uses a video camera to display and record images at a certain time and place where this device is installed, which means it uses a closed signal. Public legal awareness of traffic order in Indonesia is still far from expectations, therefore the implementation of ETLE (Electronic Traffic Law Enforcement) is expected to be able to increase public legal awareness in driving to comply with traffic rules for the creation of safety and mutual benefit.

Keywords: Law Enforcement, Traffic, E-Tilang, Electronic Traffic Law Enforcement, Legal Awareness.

A. INTRODUCTION

Legal awareness in the field of road traffic and transportation is felt to be very lacking at this time, there is a need for efforts to act on the quality and quantity, this is meant to minimize the occurrence of traffic violations. An offense related to a road traffic violation is itself a type of offense that is a specific criminal offense. In Indonesian law, every criminal act, both related to crimes and violations, must still be processed with existing legal rules (Rakhmadani, 2017).

One of the problems that arises is that there is a gap between assumptions about the basis of the validity of written law and the reality of the observance of the law (Hadirman, 2004). There is an opinion that says that binding the law depends primarily on one's beliefs. In general legal awareness is associated with the observance of the law or the effectiveness of the law (Fadli et al., 2021).

In other words, legal awareness concerns the issue of whether or not certain legal provisions actually function in society (Budiarto & Mahmudal, 2007). Legal awareness is an attitude of knowing or understanding and obeying the rules and provisions of existing and applicable laws and regulations. Because the purpose of the law itself is to regulate the association of life peacefully, the law wants peace in order to create a harmonious life (Y. M. Irsan, 2018).

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The National Police of the Republic of Indonesia issued a new policy in enforcing traffic order called E-TLE, namely (*Electronic Traffic Law Enforcement*) is an electronic system of electronic traffic law supervision and enforcement that utilizes supporting tools, namely CCTV, in order to keep up with the times, the police must understand IT (*Information Technology*) as well as abroad implementing E-LTE (electronic ticketing) (Chusminah, S., Haryati & Kristiani, 2018).

The basis of E-TLE (*Electronic Traffic Law* Enforcement) can be seen in Law Number 22 of 2009 concerning Road Traffic and Transportation (LLAJ) and Government Regulation Number 80 of 2012 concerning Procedures for Inspection of Motor Vehicles on the Road and Enforcement of Traffic and Road Transportation (Putranto, 2013). In Article 272 of the Road Transport Traffic Act, it states that to support violation enforcement activities in the field of Road Traffic and Transport, electronic equipment can be used, which has been entirely integrated in the NTMC (*National Traffic Management* Center) data center or the term Indonesian, namely the National Traffic Control Center of the Police (AK, 2011).

The results of the use of this electronic equipment can be used as evidence in court. What is meant by "electronic equipment" is an event recording device for storing information. Then added PERMA Number 12 of 2016 (procedures for resolving traffic offender cases), in article 1 number 2, namely "Electronic Traffic Violation Case Settlement is a judicial process for traffic violation cases which is held in an integrated electronic-based manner through the support of information and technology systems" (Dessi Perdani Yuris Puspita Sari, 2018)

The application of ETLE (*Electronic Traffic Law Enforcement*) is a new thing in road traffic law enforcement in Indonesia. As a novelty, ETLE is constantly undergoing improvements and refinements. Moreover, ETLE is developed in the existing road traffic law regime, so that it can be ensured that there is an intersection with other legal aspects in the enforcement of road traffic laws (Rahmadhan et al., 2020).

The research tries to see the existence of ETLE in the development of Indonesian road traffic law in the digital era as well as the compatibility of road traffic laws in force in Indonesia responding to ETLE as a new mechanism in enforcing road traffic laws (Redaksi, 2022).

Regarding what is written in Article 272 paragraph 2 of the Road Transport Traffic Law that: "The results of the use of electronic equipment as referred to in paragraph (1) can be used as evidence in court" then further regulated in Article 23 of Government Regulation: 80 of 2012, which stipulates that the enforcement of Road Traffic and Transport Violations is based on the results of: a) findings in the process of Inspection of Motor Vehicles on the Road; b) Reports; and/or c) electronic equipment recordings (Arifin, 2016).

The underlying reason for the Indonesian national police to implement the E-LTE system is a system that is believed to reduce the practice of levies (illegal levies) and bribes. This ticketing process is assisted by the installation of CCTV (Closed Circuit Television) cameras at each red light to monitor the condition of the road (Nugroho & Pujiyono, 2022). The development of criminality or criminal acts in a modernized society includes problems related to the frequency of crimes, the quality of crimes, and the possibility of new types of crimes or criminal acts. Responding to this situation, it must be faced and found a way out, one of which is by using this information technology such as CCTV camera footage (Fadli et al., 2021).

CCTV recording is a medium that can be used to contain recordings of any information that can be seen, and heard with the help of CCTV recording means. CCTV footage is used as evidence whose system uses a video camera to display and record images at a certain time and place where this device

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is installed which means it uses a closed signal, unlike ordinary television that uses *broadcast* signals (Y. M. Irsan, 2018).

Public legal awareness of traffic order in Indonesia is considered to be far from expectations, therefore the implementation of ETLE (*Electronic Traffic Law Enforcement*) is expected to be able to increase public legal awareness in driving to comply with traffic rules for the creation of safety and mutual benefit. The higher the awareness of the community's law, the better the legal culture will be created and can change people's mindset about the law so far (Dessi Perdani Yuris Puspita Sari, 2018).

In simple terms, the degree of public compliance with the law is one of the indicators of the functioning of the law. Which determines how the law is used, avoided, or abused. This is in accordance with the main purpose and the main purpose of the law is order, the need, of order is a fundamental condition for the existence of an orderly human society (K. Irsan, 1998). Another goal of law is the attainment of justice of varying content and size according to society and its times. Furthermore, through ETLE, legal expediency is expected to be achieved. Expediency is the most important thing in a legal goal, the law is only one of the tools to achieve goals in social and state life. The purpose of law can be seen in its function as a function of protecting human interests, the law has goals to be achieved (Andasia, 2015).

The application of ETLE is expected to be able to create an orderly society in traffic. The state of order in question can be characterized as follows; foreseeable, cooperation, control of violence, conformity, lasting, steady, tiered, obedience, without disputes of uniformity, togetherness, order, orderliness, complexion, pattern of birth, and composed (Syamsuddin, 2008).

B. DISCUSSION

1. E-LTE Policy in ELECTRONIC TRAFFIC LAW ENFORCEMENT (ETLE)

The enforcement of traffic violations is carried out by police officers both educationally and juridically, this is in accordance with their role, in Article 1 paragraph 2 of Government Regulation No. 80 of 2012 states that the enforcement of traffic and road transport violations is a series of actions carried out by investigators of the National Police of the Republic of Indonesia or Civil Servant Investigators in the field of Road Traffic and Transportation against violations of Traffic and Road Transportation (Yu et al., 2021).

Proof of Violation or abbreviated as Tilang is a penalty in the form of a fine imposed by the police on road users who violate the regulations. Tilang is expected to be able to handle traffic problems. There are three main functions of ticketing, namely: (1) As a subpoena to the District Court; (2) As an introduction to pay the fine to the Bank/Registrar; and (3) As a sign of confiscation of seized evidence, such as a driver's license, vehicle registration or vehicle (Nugraha, 2023).

In line with the Policy of the Chief of Police of the Republic of Indonesia on July 13, 2016, General of Police Prof. Drs H M Tito Karnavian MA, PhD, carries the realization of an increasingly professional, modern, and trusted National Police, so the improvement of public services that must be based on information technology (IT), technological advances in this era of globalization will help law enforcement in overcoming the problem of violations, especially violations of road traffic driving (Pribadi, 2020).

Korlantas Polri innovates IT-based services to build public trust. E-Tilang is one of the service innovations in 10 10 enforcement of traffic violations, while the basis for the issuance of E-Tilang based on Article 272 Paragraph (1) of 2009 concerning road traffic and transportation explains "To support violation enforcement activities in the Field of Road Traffic and Transportation, electronic equipment

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can be used". E-Tilang is published by kakorlantas Polri. The implementation of the E-Tilang system is to prevent the practice of illegal levies (pungli) and make it easier for the public to transact or pay ticket fines (Noor Al-Azam et al., 2021).

Electronic ticketing, commonly called E-tilang, is the digitization of the ticketing process, by utilizing information technology, "it is hoped that the entire ticketing process will be an innovation that can help the police in enforcement management and Payment of Traffic Violation Fines. With the ETLE system, violators only pay fines on articles that are violated through bank accounts belonging to violators (Fauzi, 2020)

After receiving notification of the payment of the ticket fine, the violator can immediately show the officer that the ticket has been paid, then the violator can take the confiscated goods and continue the journey. The result of the verdict of the ticket hearing on the fine to be paid by the violator awaits the implementation of the hearing. When the verdict is determined by the court about the nominal ticket fine, the violator will get a notification in the form of notification and refund of the fine that has been paid by the violator through the offender's bank account (Dewanto, 2019)

The implementation of E-LTE is a good step taken by the police in realizing public services to be more effective, efficient, transparent and accountable. Prioritizing professional services in order to increase public trust in Polri agencies and increase community participation in law enforcement, especially in the enforcement of traffic violations where the community is the subject of law from the occurrence of a violation on the highway (Triono, 2022)

The effectiveness of using the e-LTE application in paying traffic violation fines can be seen based on 5 indicators in measuring the effectiveness of a program, including: (1) Productivity; (2) work adaptability; (3). Job satisfaction; (4). ability to profit; and (5). Resource Search (Nasali, 2021)

The first indicator is productivity which is the quantity or volume of the main product or service that the organization produces. Can be measured according to three levels, namely individual levels, groups and the entire organization. Productivity indicators in terms of organization can be seen in terms of the effectiveness of a program, the etilang application has been operating for more than two years and still requires some changes to the system that regulates the e-ticket blangko to violators (Santalova et al., 2022).

The second indicator is, work adaptability which is an ability to change or overhaul the standardization of operating procedures when the environment changes as well, this is intended to prevent observance of environmental stimuli (Suryanto & Adhitia, 2022).

The third indicator is job satisfaction, which is an indicator that measures the level of pleasure a person feels for their role or work in the organization. The level of individual satisfaction that they get the reward they deserve from various aspects of the situation in which they are located. This job satisfaction factor is certainly a subjective matter, each offender has their own assessment of the e-LTE application service (Prawitasari & Setyawan, 2023).

The fourth indicator is the ability to profit, is the ability to earn income on investments used to run the organization from the point of view of the owner.

The fifth indicator is the search for resources, which is the ability of the organization to search for the necessary resources that have qualified capabilities in the required field.

This e-ticket application service requires the right means to increase interest in the use of e-LTE in paying traffic violation fines, one of which is EDC (*Electronic Data Capture*). In accordance with article 7 paragraph 1 of the Regulation of the Head of the Traffic Corps of the National Police of the Republic

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of Indonesia Number 6 of 2018 states that investigators or auxiliary investigators as a security in article 6 carry out the enforcement of certain traffic violations with the e-ticket system, using: (a) Electronic ticketing letters; (b) Mobile phone android system (e-ticket smartphone); and (c) Banking electronic transaction instruments for electronic deposit of fines through the bank (Azis Abdullah & Windiyastuti, 2022)

In letter c, it emphasizes that EDC as a means of servicing e-ticket applications in payment of fines needs to be presented in every use of the e-ticket application, but in fact, edc is still not available in every traffic violation enforcement post, there is only 1 post out of 6 posts that use EDC, this needs to be considered by the leadership to the existence of the use of e-ticket applications (Yuliantoro & Sulchan, 2021).

2. Traffic Law Enforcement Through E-LTE In Raising Traffic Law Awareness

The increase in traffic violations is a new challenge for the Police to be able to implement sanctions that are educational but still have a deterrent effect. One way to suppress violations is to carry out administrative sanctions (Tilang) carried out by the police (Bahri, 2018). However, what has happened so far is that the ticketing system is often distorted by civil servants and police members to compromise with each other so that their respective interests can be achieved without following applicable procedures, so that every act of violation committed by the community is only recorded in a ticket letter and inventoried in the Ticketing Administration Section then sanctions are carried out, and only up to the final recording level, So that when there is a repetition of violations by the same person there is no significant increase in sanctions (Rahmadany & Windiyastuti, 2022).

Before the existence of e-ticket, there is an act of checking motor vehicles on the road and if a violation is found, it will be given a ticket sanction which is carried out with a quick event inspection. Mertokusumo (2008)mentioning sanctions is nothing but a reaction, consequence or consequence of the violation of social rules. In traffic, vehicle users often violate the rules or regulations that have been set. The sanki given is in the form of proof of a ticket or better known as a ticket (Wibowo et al., 2022).

The implementation of e-TLE uses CCTV to monitor the state of the road which is the point where electronic ticketing is enforced. The electronic ticketing law can be seen in Law Number 22 of 2009 concerning Road Traffic and Transportation (LLAJ Law). Article 272 of the LLAJ Law states that "to support the enforcement of violations in the field of Road Traffic and Transport, electronic equipment can be used." The results of the use of this electronic equipment can be used as evidence in court. What is meant by "electronic equipment" is an event recording device for storing information (Kurniawan & Suwandi, 2021).

And further regulated in Government Regulation Number 80 of 2012 concerning Procedures for Inspection of Motor Vehicles on the Road and Enforcement of Traffic and Road Transport Violations, in article 23 which states that:

"The enforcement of Road Traffic and Transport Offenders is based on the results of:

- a) Findings in the process of Inspection of Motor Vehicles on the Road,
- b) Report; and/or,
- c) Electronic equipment recording."

The E-Tilang system that is carried out is expected to be managed properly so that in each of its implementations it produces a deterrent effect for the traffic offender community. So the information system for every violation by motorists on the road must be able to be the basis for cracking down on

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violations in the next stage, meaning that information on violations that have been committed by everyone must always be identified by every member of the police who commits ticketing (Aina, 2019).

In the case of traffic violations, the existence of CCTV can be used as evidence. Evidence is an object used to convince the Judge of the guilt of the accused in the criminal case alleged against him; goods that can be used as evidence in a case. According to Andi Hamzahthat "Evidence is something to convince the truth of a postulate, stand or indictment. Evidence of offences abbreviated as Tilang is a fine imposed by the Police on motorists who violate traffic rules". The court together with the police and prosecutors is an institution mandated to organize the management of traffic violation cases based on Law Number 8 of 1981 concerning the Criminal Procedure Law (Sianturi, 2018).

A person who violates the rules or regulations that have been made and established by law enforcement, will be subject to sanctions on the violator. The sanctions given aim to provide a deterrent effect, as punishment to the offender for what he has done, for violating rules or regulations. The sanctions given are expected to be able to provide awareness and a deterrent effect, so that in the future the offender does not commit or repeat his actions again. Conventionally, there can be a distinction between positive sanctions that are rewards, and negative sanctions in the form of punishments. In general the forms of punishment in criminal law are, for example, fines and corporal punishment.

The application of E-Tilang has a strong legal foundation, namely Law Number 11 of 2008 Article 5, concerning electronic transactions and Law Number 22 of 2009 concerning Road Traffic and Transportation. The electronic ticketing mechanism also makes the enforcement process more practical. Data from CCTV cameras is directly integrated with the Police *traffic management centre* (TMC) back office for later verification to avoid data errors. Violators also do not need to participate in trials like the current Tilang stage, just pay a fine via the bank. To maintain the accuracy of image capture, the Police use cameras with special specifications that are able to recognize objects well in optimal lighting conditions, as well as in the dark. The image accuracy rate of such cameras reaches 90 percent. There are two orientations behind the implementation of electronic ticketing using CCTV cameras, namely reducing traffic violations, and efforts to increase the value of non-tax state income (PNBP) from ticket fines. CCTV is expected to reduce the number of traffic violations by up to 50 percent. With these optical devices, motorists must comply with all traffic rules (Santalova et al., 2022).

CCTV is a digital video camera device that is used to send signals to the monitor screen in a certain room or place. It has the aim of being able to monitor the situation and conditions of certain places in real time, so as to prevent crimes from occurring or can be used as evidence of crimes that have occurred. In general, CCTV is often used to monitor public areas such as: banks, hotels, airports, shops, factories and warehousing. Even in its development, CCTV has been widely used within private homes (Nugraha, 2023).

CCTV recording is a medium that can be used to contain recordings of any information that can be seen and heard with the help of CCTV recording means. CCTV footage is used as evidence whose system uses camera video to display and record an image at a certain time and place where this device is installed which means using a closed sinyak, unlike ordinary television that uses *broadcast signals*. The way CCTV works is almost the same as television stations, which is to send data in the form of images and sounds to a monitor. The difference is that television stations send data through a transmitter, while CCTV sends data through cable or wifi media that is installed or transmitted on a monitor (Noor Al-Azam et al., 2021).

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The Law of the Republic of Indonesia concerning Road Traffic and Transportation explains that the Road Traffic and Transportation Information and Communication System is a set of interconnected subsystems through the merger, processing, storage, and distribution of data related to the implementation of Road Traffic and Transportation. To achieve a relevant ticketing process, it is necessary to have an information system supported by a network-based software or website that allows the dissemination of information to each member of the police in real time. The software in question is an application program that can store information on every enforcement of traffic rule violations committed by the community in a database (Triono, 2022).

When the violation is repeated by the same person, then this application program or information system will review the violation committed before, and the violation data that is displayed again (review) will be the basis for further enforcement, so that the violator does not get sanctions at the same level but can be acted on at a higher level, and of course this will have a deterrent effect on the violator. With the existence of E-Tilang, it makes it easier for people to pay fines through banks. However, not all communities can follow the E-Tilang procedures provided by the police. Especially for ordinary people who don't understand technology (Nasali, 2021)

E-Tilang is a traffic violation ticketing system using electronic devices in the form of gadgets or mobile phones based on Android. Prastica Wibowo said that E-Tilang is a digitization of the ticketing process, by utilizing technology, it is hoped that the entire ticketing process will be more efficient and also help the police in administrative management. The E-Tilang system replaces the manual Ticketing system that uses ticket blanks/letters, where violating motorists will be recorded through an application owned by police personnel. With the existence of E-Tilang, it makes it easier for people to pay fines through banks. However, not all communities can follow the E-Tilang procedures provided by the police. Especially for ordinary people who don't understand technology.

The E-Tilang system implemented pays attention to the community. With the E-Tilang system, it has a good impact on people who are familiar with technology. However, for people who are not familiar with technology, it is difficult to follow the development of this technology. The factors that are considered by the community are in the use of the E-Tilang system which has not been well understood and widespread. (Suryanto & Adhitia, 2022)

E-Tilang gives an opportunity for violators to entrust fines directly to the bank with the facilities they have, perhaps with e-banking, ATMs, or come to the teller himself. Motorists are required to pay the maximum fine according to the violated article. After completing the payment, the crossing officer will receive a notification on his mobile phone. Violators can redeem the letter they have confiscated directly by simply submitting proof of payment, or taking it at the place mentioned in the notification. For Ticketing that uses a manual process or still uses a red slip but the violator wants to participate in the trial, the process is the same. The E-Tilang application is integrated with the courts and prosecutors. The judge will give a verdict, and the prosecutor will execute the verdict, usually this process will take a week to two weeks (Prawitasari & Setyawan, 2023).

Obstacles to implementing CCTV-based Etilang include:

- a) There is no data integration between regions, so that if there is a violation of the license plate outside the area, a ticket cannot be carried out, only a reprimand.
- b) There is no clarity on the person in charge of the implementation of CCTV-based E-LTE between Sat Lantas and the Transportation Agency as the holder of the facilities and infrastructure
- c) Servers that still don't adequately accommodate CCTV footage as a whole

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- d) how to use the e-Tilang application through *Cameraclosed Circuit Television* (CCTV) which is still difficult to use
- e) The sharpness of CCTV has not been able to detect until the license plate of the motor vehicle police can only record the outside / license plate only, not yet to the serial number.
- f) The use of the e-Tilang application through (CCTV) is not easy to understand by the public

The ticketing mechanism itself is when the police have manually crossed (writing on the ticket ticket), then the police enter the data back into the ETilang application contained in the cellphone of the police officer who was on guard at that time and had been integrated with the E-Tilang Korlantas Polri (Mabes Polri) server in accordance with the offender's data including the ticket number, As described in Chart 1.1. The following:

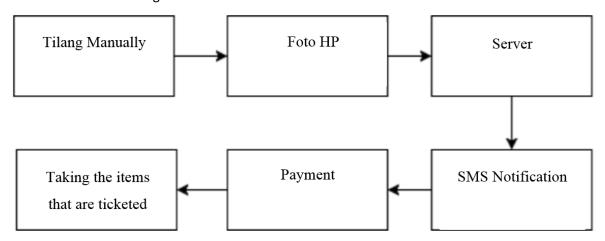


Figure 1.1: E- Ticket Mechanism

Based on the picture, the information system for every violation by motorists on the road must be the basis for the enforcement of violations in the next stage, meaning that information on violations that have been committed by everyone must always be identified by every member of the police who committed the ticket.

The advantage of the E-Tilang system itself is that it makes it easier for violators who are not domiciled in the jurisdiction of the Yogyakarta Police. If there is someone who visits Yogyakarta from outside the city, and commits a traffic violation, then the violator can choose with the E-Tilang system, because by using E-Tilang, the violator can pay the fine deposit without having to attend the trial.

C. CONCLUSION

The National Police of the Republic of Indonesia issued a new policy in enforcing traffic order called E-TLE, namely (*Electronic Traffic Law Enforcement*) is an electronic system of electronic traffic law supervision and enforcement that utilizes supporting tools, namely CCTV, in order to keep up with the times, the police must understand IT (*Information Technology*) as well as abroad implementing E-LTE (electronic ticketing).

E-LTE is a system that is believed to reduce the practice of levies (illegal levies) and bribes. This ticketing process is assisted by the installation of CCTV (*Closed Circuit Television*) cameras at each red light to monitor the condition of the road. The development of criminality or criminal acts in a modernized society includes problems related to the frequency of crimes, the quality of crimes, and the possibility of new types of crimes or criminal acts. Responding to this situation, it must be faced

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and found a way out, one of which is by using this information technology such as CCTV camera footage. CCTV recording is a medium that can be used to contain recordings of any information that can be seen, and heard with the help of CCTV recording means. CCTV footage is used as evidence whose system uses a video camera to display and record images at a certain time and place where this device is installed which means it uses a closed signal, unlike ordinary television that uses broadcast signals.

Public legal awareness of traffic order in Indonesia is considered to be far from expectations, therefore the implementation of ETLE (*Electronic Traffic Law Enforcement*) is expected to be able to increase public legal awareness in driving to comply with traffic rules for the creation of safety and mutual benefit. The higher the awareness of the community's law, the better the legal culture will be created and can change people's mindset about the law so far.

Bibliography

- 1) Aina, M. (2019). Penegakan Hukum Terhadap Pelanggaran lalu Lintas oleh anak dibawah Umur Mengakibatkan Orang Lain Meninggal Dunia (Studi Kasus di Polresta Surakarta). *Jurnal Hukum Universitas Muhammadiyah Surakarta*, 1(1).
- 2) AK, R. I. dan D. (2011). Program Aplikasi Berbasis Web Untuk Peningkatan Akuntabilitas Sistem Tilang Pelanggaran Tata Tertib Lalu Lintas di Wilayah Polres Majalengka. *Jurnal Online ICT-STMIK IKMI*, 1(1), 43.
- 3) Andasia, A. A. (2015). Pertanggungjawaban Terhadap Kecelakaan Lalu Lintas yang Dilakukan oleh Anak Dibawah Umur Ditinjau dari UU No. 23 Tahun 2002. *Jurnal Lex Crimen, IV*(3), 22–43.
- 4) Arifin, Z. (2016). Konsep Diversi dalam Perkara pelanggaran lalu Lintas dengan Pelaku Anak. *Program Pascasajrana Magister Hukum Universitas Islam Indonesia*, 41(1).
- 5) Azis Abdullah, F., & Windiyastuti, F. (2022). Electronic Traffic Law Enforcement (ETLE) Sebagai Digitalisasi Proses Tilang. *Jurnal Kewarganegaraan*, *6*(2).
- 6) Bahri, S. (2018). Peran Polri Dalam Penanganan Kasus Kecelakaan Lalu Lintas Pada Anak Di Bawah Umur (Diversi) di wilayah Hukum Polres Labuhan Batu. *Program Pascasarjana Magister Ilmu Hukum Universitas Medan Area*, 1(1).
- 7) Budiarto, A., & Mahmudal. (2007). Rekayasa Lalu Lintas. UNS Press.
- 8) Chusminah, S., Haryati, R. A., & Kristiani, D. (2018). Efektivitas Implementasi E-Tilang Kendaraan Bermotor Dalam Rangka Tertip Berlalu Lintas Pada Korps Lalu Lintas Polri. *Jurnal Sekretari Dan Manajemen*, 2(2), 217-224.
- 9) Dessi Perdani Yuris Puspita Sari, R. H. (2018). Penerapan E-Tilang Berbasis Cctv (Closed Circuit Television)
 Di Kabupaten Banyumas", Prosiding Seminar Nasional dan Call for Papers "Pengembangan Sumber Daya
 Perdesaan dan Kearifan Lokal Berkelanjutan VIII.
- 10) Dewanto, R. S. (2019). Citation: Rezkhy Satya Dewanto, Applying Information Technology In Realizing An Orderly Traffic Community (A Case Study On Electronic Traffic Law Enforcement Program Conducted By Traffic Directorate Of Jakarta Metropolitan Police Region In. Management Technology and Security International Journal, 243–259. https://doi.org/10.47490/mtsij.v2.i3.243259
- 11) Fadli, A., Razak, A. R., & Tahir, M. (2021). Kinerja Polisi Lalu Lintas Dalam Sosialisasi E-Tilang Di Kota Makassar. *Kajian Ilmiah Mahasiswa Administrasi Publik (KIMAP)*, 2(2), 742–755.
- 12) Fauzi, R. (2020). Penegakan Hukum Terhadap Pelanggaran Lalu Lintas oleh Anak Sebagai Pengendara Sepeda Motor di Wilayah Hukum Polres Bukittinggi. *Pagaruyuang Law Journal*, *3*(2), 148–163. https://jurnal.umsb.ac.id/index.php/pagaruyuang/article/download/1803/1517
- 13) Hadirman. (2004). Menuju Tertib Lalu Lintas. PT. Gandesa Puramas.

DOI: 10.5281/zenodo.10122004

Vol: 60 | Issue: 11 | 2023

- 14) Irsan, K. (1998). Polisi, dan Polisi dan Masyarakat Dalam Era Reformasi. FHUI.
- 15) Irsan, Y. M. (2018). *Perspektif Penerapan E-Tilang Dengan Menggunakan Rekaman CCTV (Closed Circuit Television*). Universitas Lampung.
- 16) Kurniawan, B., & Suwandi, M. (2021). Empowerment of Police Personnel in Supporting the Implementation of Electronic Traffic Law Enforcement (ETLE) At the Traffic Directorate of Polda Metro Jaya. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(4). https://doi.org/10.33258/BIRCI.V4I4.3511
- 17) Mertokusumo, S. (2008). Mengenal Hukum Suatu Pengantar. Liberty Press.
- 18) Nasali, E. (2021). The Breakthrough In Enforcing The Traffic Law Through E-ticket. *Proceedings from the 1st International Conference on Law and Human Rights, ICLHR 14-15 April 2021, Jakarta, Indonesia*. https://doi.org/10.4108/EAI.14-4-2021.2312300
- 19) Noor Al-Azam, M., Darujati, C., & Wiwoho Mudjanarko, S. (2021). Traffic Light Status Detection using APV Method. *Proceedings of the International Conference on Industrial Engineering and Operations Management Monterrey, Mexico, November 3-5.*
- 20) Nugraha, D. (2023). Toll Road Infrastructure Development Towards Interregional Connectivity and The National Economy. *SCIENTIA: Social Sciences & Humanities*, 2(1), 175–179. https://doi.org/10.51773/SSSH.V2I1.149
- 21) Nugroho, Y., & Pujiyono. (2022). Penegakan Hukum Pelanggaran Lalu Lintas oleh Anak: Analisis Kepastian dan Penghambat. *Jurnal Pembangunan Hukum Indonesia, Magister Ilmu Hukum Universitas Diponegoro*, *4*(1), 49–60.
- 22) Prawitasari, N. Y., & Setyawan, A. A. (2023). Implementation of Violation of E-Tilang Regulations in the Analysis of Human Resources and Criminal Law Perspectives in Indonesia. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 6(1), 56–66. https://doi.org/10.33258/BIRCI.V6I1.7434
- 23) Pribadi, S. (2020). Polisi Hadir, Negara Hadir, Kertha Bhayangkara, 14(1).
- 24) Putranto, L. S. (2013). Rekayasa Lalu Lintas Edisi 2. Permata Puri Media.
- 25) Rahmadany, E. K., & Windiyastuti, F. (2022). Assessment of Electronic Ticket Law (ETLE) Against Four-Wheeled Road Users in the Area of the Traffic Directorate of Polda Metro Jaya. *LEGAL BRIEF*, 11(2), 1157–1166. http://www.legal.isha.or.id/index.php/legal/article/view/237
- 26) Rahmadhan, D., Fadhilah, I. U., Kusuma, M. A., & Arum, R. (2020). Perlindungan hukum terhadap anak pelaku kecelakaan lalu lintas. *Seminar Nasional & Call Paper Hubisntek 2020*, 1(1), 106–112.
- 27) Rakhmadani, S. (2017). Analisis Penerapan E-Tilang Dalam Mewujudkan Good Governance di Indonesia. *Universitas Islam Bandung (UNISBA)*, 7(3), 665.
- 28) Redaksi, T. (2022). Polisi: Pelanggar Lalu Lintas Paling Banyak Ditemukan di Jawa Tengah. *Harian Jogja*. https://news.harianjogja.com/read/2022/01/16/500/1093475/polisi-pelanggar-lalu-lintas-paling-banyak-ditemukan-di-jawa-tengah
- 29) Santalova, I., Susanto, W., Egitha, V., Aini, Q., Luthfitarisqi, K., Khandari, M. A., & Kurniawan, A. (2022). Effectiveness of Implementing the Etle Program in Following Traffic Violations. *International Journal of Latest Research in Humanities and Social Science*, 05(12). www.ijlrhss.com
- 30) Sianturi, J. F. D. (2018). Pertanggungjawaban Tindak Pidana Kelalaian Lalu Lintas Oleh Anak Yang Menyebabkan Orang Lain Meninggal Dunia (Studi Putusan Pengadilan Negeri No.212/Pid.B/2013/Pn-Pms). *USU Law Journal*, 7(2), 132–137.
- 31) Suryanto, A., & Adhitia, S. (2022). Privatization The Implementation Of Electronic-Based Law Enforcement Responsibility In The Police Traffic Corps Of The Republic Of Indonesia. In *Journal of Public Policy and Applied Administration* (Vol. 4, p. 63). https://jurnal.stialan.ac.id/index.php/jplan/article/view/568

DOI: 10.5281/zenodo.10122004

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- 32) Syamsuddin, A. (2008). *Integritas penegak hukum: hakim, jaksa, polisi, dan pengacara*. Penerbit Buku Kompas.
- 33) Triono, A. Y. (2022). Law Enforcement Against Traffic Violations And Electronic-Based Road Transport Through Electronic Traffic Law Enforcement. *Jurnal Hukum Khaira Ummah*, *16*(4), 225–238. http://jurnal.unissula.ac.id/index.php/jhku/article/view/19322
- 34) Wibowo, N. W., Aminanto, M. E., & Yola, L. (2022). Evaluation of the Implementation of E-Policing in the Electronic Traffic Law Enforcement (Etle) on Jalan Margonda Raya, Depok City. *FOCUS*, *3*(2), 164–172. https://doi.org/10.37010/FCS.V3I2.970
- 35) Yu, D., Dewi, A. A., Wijaya, S. N., & Gunawan, A. A. S. (2021). Utilization Big Data and GPS to Help E-TLE System in the Cities of Indonesia. *Proceedings of 2021 1st International Conference on Computer Science and Artificial Intelligence, ICCSAI 2021*, 236–242. https://doi.org/10.1109/ICCSAI53272.2021.9609741
- 36) Yuliantoro, Y., & Sulchan, A. (2021). The Effectiveness against Traffic Violations with Electronic Traffic Law Enforcement (ETLE). *Law Development Journal*, *3*(4), 736–742. https://doi.org/10.30659/LDJ.3.4.736-742