

**OPTIMIZATION OF ROAD SAFETY PARTNERSHIP ACTION
(RSPA) IN HANDLING TRAFFIC PROBLEMS IN THE
JURISDICTION OF THE TANJUNG PRIOK PORT POLICE
STATION**

Yunita Natallia Rungkat^{1*}, Chairul Muriman Setyabudi², Basir S.³

¹⁻³ Police Science Studies, School of Strategic and Global Studies,
Universitas Indonesia - Jakarta

E-mail: ¹⁾ yrungkat@gmail.com, ²⁾ cak_iir@yahoo.co.id, ³⁾ basirsagena@gmail.com

Abstract

The Tanjung Priok Port in Indonesia faces challenges in traffic management and road safety. To address these issues, the Tanjung Priok Port Police Traffic Unit has implemented Road Safety Partnership Action (RSPA) activities. This study aims to determine the implementation of Road Safety Partnership Action (RSPA) activities carried out by the Tanjung Priok Port Police Traffic Unit in handling traffic problems in the Tanjung Priok Port area. The study incorporates various theories, including Rosen's cooperation theory, Terry's management theory (including planning, organizing, implementing, and supervising), Dr. E Mulyana's competency theory, and problem-solving theory. A qualitative approach with descriptive analysis was employed. The findings revealed suboptimal implementation of the RSPA activities by the Tanjung Priok Port Police Traffic Unit in addressing traffic and road transportation issues. Furthermore, the competence of the Satlantas Polres Pelabuhan Tanjung Priok personnel in executing the RSPA activities was also deemed suboptimal. The active system and methodology employed in the RSPA activities have not been fully maximized. Therefore, optimization measures are required, including strengthening coordination and communication capabilities, empowering budget support and improving facilities and infrastructure in RSPA activities, enhancing the enforcement of traffic violations and management of traffic accidents, fostering personnel quality in executing the RSPA activities, implementing traffic engineering measures in anticipation of increased port activities related to transportation, encouraging community participation, and utilizing advancements in information technology, particularly in traffic engineering within the Tanjung Priok Port area.

Keywords: Congestion, Road Safety Partnership Action, Traffic Problems

1. INTRODUCTION

The policy of maintaining public security and order in the traffic sector focuses on traffic safety and management, which is a joint effort of all agencies related to road construction and transportation systems. The traffic police, particularly the traffic police force, play a significant role in ensuring the security, safety, order, and smooth flow of traffic due to their direct presence on the road. This responsibility is further emphasized by the enactment of Law No. 22/2009 on Road Traffic and Transportation (LLAJ), which aims to achieve security, safety, order, and smoothness of traffic, thereby facilitating balanced and harmonious economic and regional development (Silamukti et al., 2022).

Nowadays, traffic problems are increasingly complex to address, especially in large cities like DKI Jakarta, which serves as the nation's capital and economic center (Rahardja & Wennardy, 2022). One of the most challenging issues to tackle is traffic congestion. According to data from the Tom Tom Traffic Index, DKI Jakarta experiences a daily congestion rate of 48 percent (tomtom, n.d.). Moreover, there has been a steady upward trend of 3% per year in traffic violations. This situation is also prevalent in the jurisdiction

of the Tanjung Priok Port Police, where traffic congestion disturbances frequently occur in the port area due to technical service problems, surges in the flow of goods, and concurrent activities. The Tanjung Priok Port plays a vital role in the national economy, serving not only as a hub for export and import activities but also handling 60-70 percent of the nation's logistics.

Addressing the threat of congestion in the Tanjung Priok Port area cannot be accomplished by a single party alone. Various institutions and organizations involved in traffic management in the Tanjung Priok Port area must collaborate to handle the diverse traffic issues. The Tanjung Priok Port Police, PT Pelabuhan Indonesia Regional 2 Tanjung Priok, Jakarta International Container Terminal, Indonesia Vehicle Terminal, Department of Transportation, and other stakeholders in the traffic field must implement a multi-sector partnership approach to bring about sustainable changes in road safety. The synergy among these relevant agencies is of utmost importance and priority, as recognized by the UN resolution on road safety, which states, "Solutions to the global road safety crisis can only be implemented through multisectoral collaboration and partnerships" (Mooren, 2014).

The Indonesian government has long been implementing a policy of addressing traffic problems through a multi-sector partnership approach. This was exemplified by the issuance of Government Regulation No. 37/2011 on the Road Traffic and Transportation Forum. One significant program that emerged from this forum is the Road Safety Partnership Action (RSPA). Since 2012, the RSPA program has been implemented in the jurisdiction of the Tanjung Priok Port Police. Various agencies have been working together to alleviate traffic problems in Tanjung Priok Port through initiatives such as promoting safe riding and driving, conducting socialization campaigns, organizing traffic safety campaigns, and engaging in joint patrols. However, up until 2023, this program has not yielded a substantial solution to significantly reduce traffic problems at Tanjung Priok Port. In fact, institutions and organizations involved in traffic management still struggle with a lack of integration among their systems and a lack of shared vision for addressing traffic problems. The UN resolution on safety emphasizes the need for multisectoral collaboration and partnerships to tackle the global road safety crisis (Feldman & Rosen, 1978).

Hence, concrete and comprehensive steps are necessary to revitalize the Road Safety Partnership Action (RSPA) activities in the Tanjung Priok Port area to address various traffic problems, particularly the threat of congestion that can disrupt the national economy. In light of this situation, this study delves deeper into the topic of "Optimizing the active Road Safety Partnership Action (RSPA) in handling traffic problems in the jurisdiction of the Tanjung Priok Port Police." This study contributes to the existing knowledge by providing a focused analysis of traffic problems, emphasizing the need for collaboration, and offering practical recommendations for optimizing the RSPA program in the Tanjung Priok Port area. The findings and recommendations can serve as a valuable resource for policymakers, traffic management agencies, and other relevant stakeholders involved in improving road safety and traffic management in similar contexts.

2. LITERATURE REVIEW

2.1. Cooperation Theory

According to Rosen in Keban (2008), "Theoretically, the term cooperation has long been recognized and conceptualized as a source of efficiency and service quality. Cooperation has been acknowledged as an effective way to leverage economies of scale. Joint purchasing, for example, has demonstrated such benefits, with large-scale purchases or purchases exceeding 'threshold points' being more cost-effective than small-scale purchases. Through cooperation, overhead costs can be overcome even on a smaller scale. Sharing investments, for instance, can yield satisfactory results in the provision of facilities and infrastructure. Cooperation can also enhance service quality, such as in the procurement or provision of facilities that each party cannot acquire independently. With cooperation, expensive service facilities can be jointly purchased and enjoyed, such as recreational centers, adult education, transportation, and more."

2.2. Management Theory

Fundamentally, management is a framework or process that involves guiding and directing an organization towards its goals or objectives. George Terry & Rue (2016) mention that management seeks to achieve specific results that are usually referred to as "objectives" or tangible outcomes. Meanwhile, management itself has certain intangible goals. Terry and Mainduh (in Sriyono 2020) identify four basic functions of management, which include:

- a. Planning: Comprehensive and well-developed planning plays a critical role in determining the efficiency and effectiveness of an organization in achieving its goals.
- b. Organizing: The process of organizing involves distributing work and tasks and coordinating them to achieve organizational goals.
- c. Implementation (actuating): Implementation aims to foster a work environment where individuals within an organization are motivated and willing to complete their tasks to achieve organizational goals.
- d. Supervision (controlling): Supervision entails assessing and correcting ongoing work processes.

2.3. Competency Theory

According to Dr. E. Mulyasa (2021), several aspects or domains are encompassed within the concept of competence, namely:

- a. Knowledge: Awareness in the cognitive field.
- b. Understanding: Cognitive and affective depth possessed by individuals.
- c. Ability (skill): Proficiency in performing assigned tasks.
- d. Value: Standard of behavior that is believed in and has become psychologically integrated into a person.
- e. Attitude: Feelings of pleasure or displeasure, like or dislike, or reactions to external stimuli.
- f. Interest: A person's inclination or tendency towards making changes.

2.4. Problem Solving Theory

Problem-solving strategy is a learning approach based on authentic investigations that require real resolution of actual problems (David, 2002). In other words, problem-solving strategy is a process that utilizes specific strategies, methods, or techniques to address new situations, enabling desired outcomes to be achieved. Thus, problem-solving is a learning strategy that activates or trains students to face and solve problems effectively.

3. RESEARCH METHODS

The research method employed descriptive analysis. The objective was to describe the existing traffic problems in the Tanjung Priok Port Police jurisdiction by analyzing relevant concepts and theories. Data collection encompassed interviews, surveys, observations, and document analysis. These methods facilitated gathering information regarding the traffic issues, such as congestion, traffic violations, and their impact on the national economy.

The collected data was then subjected to thorough analysis using descriptive analysis techniques. The researcher examined and interpreted the data to identify patterns, trends, and key issues associated with the traffic problems. This analysis involved applying concepts and theories from the literature review, providing a comprehensive understanding of the situation. Based on the data analysis, the findings were presented and comprehensively interpreted. This step involved identifying the root causes of the traffic problems, evaluating the effectiveness of the existing RSPA program, and highlighting the challenges faced by the stakeholders involved.

4. RESULTS AND DISCUSSION

The Road Safety Partnership Action (RSPA) is a program launched by the WHO with the aim of improving safety standards and reducing the fatality rate of traffic accident victims (WHO, 2006). It focuses on realizing the five pillars of road safety, which include road safety management, safer roads, safer vehicles, safer people, and post-crash handling (Pignataro et al., 1973). Through this program, the Police can establish partnerships with relevant stakeholders to enhance safety measures, improve the quality of safety, and reduce the fatality rate of traffic accidents. This initiative also aims to cultivate a disciplined traffic culture, evident through excellent service in the field of road safety, specifically through RSPA programs such as education, infrastructure development, support systems, safety education systems, driver license (SIM) test systems, and manual, online, and electronic capacity building.

Law no. 22 of 2009, Article 1, defines Road Traffic and Transportation Safety as the condition that prevents individuals from the risks of accidents caused by humans, vehicles, roads, and/or the environment. This implies that traffic safety involves the prevention of accidents. Traffic accidents, on the other hand, refer to events resulting in casualties, often preceded by traffic violations. Hence, ensuring road safety entails reducing the number of accidents and traffic violations.

To realize these efforts, the National Police, in collaboration with relevant stakeholders, has developed the Road Safety Partnership Action (RSPA) Program. The program emphasizes the coordination of stakeholders in addressing road safety issues,

ranging from planning and operationalization to evaluation and policy determination. It is essential to highlight that RSPA activities focus on coordination efforts among stakeholders throughout the entire process.

The RSPA Action Plan consists of four sub-action plans, including:

1. Implementing cooperation in traffic accident prevention
2. Carrying out cooperation in handling traffic accidents
3. Carrying out post-traffic accident cooperation
4. Carrying out cooperation to conduct strategic studies of traffic safety

In accordance with Article 7, paragraph (2), letter e of Law 22/2009, the Traffic Police, particularly the Tanjung Priok Port Police Traffic Unit, play a vital role. The Police have the duty and function of government affairs concerning the Registration and Identification of Motorized Vehicles, Drivers, and Law Enforcement. Ideally, the implementation of RSPA activities by the Satlantas Polres Pelabuhan Tanjung Priok can contribute to the reduction of accidents, violations, and traffic congestion.

4.1. Implementation of the Road Safety Partnership Action (RSPA) activity of Tanjung Priok Port Police in handling traffic problems

The high intensity of Tanjung Priok port activities which is not followed by additional road facilities will result in a lot of congestion and traffic violations and the potential for traffic accidents. If this is not immediately anticipated, it will potentially disrupt Tanjung Priok port activities. This traffic problem cannot be done by one agency alone, it requires the collaboration of all stakeholders in the traffic sector. When collaboration and synergy between stakeholders in the traffic sector goes well, traffic disturbances both from human error factors, vehicles, roads and the environment will be reduced.

The implementation of Road safety Partnership Action (RSPA) activities in the Tanjung Priok port area is still not optimal. Some of the indicators that underlie this Road safety Partnership Action (RSPA) activity are the high number of traffic violations and accidents and frequent traffic jams in the Tanjung Priok port area.

a) Traffic Violations

Table 1. Data of Traffic Violations in the Legal Area of Tanjung Priok Port Police Station

Year	Evidence Seized		
	Enforcement of Violations	Driver License	Vehicle Registration Certificate
2019	1.769	230	1.539
2020	741	116	625
2021	874	138	736
2022	1.126	187	939

Source: Tanjung Priok Port Police Traffic Unit

The data above shows that the number of traffic violations in the jurisdiction of Tanjung Priok Port Police is still relatively high. In 2020 there was indeed a decrease, this

was due to covid-19. Meanwhile, in 2022 it is still quite high, despite the ban on ticketing for almost four months by the National Police Chief. Meanwhile, the majority of traffic violations are dominated by four or more wheeled vehicles (trucks and containers). Meanwhile, the types of violations include cargo, vehicle equipment, letters, safety belts and markings and signs. That means, the programs carried out in the Road Safety Partnership Action (RSPA) are not optimal.

b) Traffic Accidents

The number of traffic accidents in the jurisdiction of Tanjung Priok Port Police is not so high. However, these traffic accidents cause tremendous congestion, because they involve large vehicles.

**Table 2. Traffic Accident Data in the Legal Area of
Tanjung Priok Port Police Station**

No	Period	Number of Accident	Victim			Disadvantages
			Died	Seriously Injured	Minor Injured	
1.	2019	18	1	0	16	Rp.75.500.000,-
2.	2020	14	1	0	9	Rp 68.950.000,-
3.	2021	7	1	0	5	Rp.23.000.000,-
4.	2022	11	1	1	10	Rp.46.000.000,-

Source: Tanjung Priok Port Police Traffic Unit.

Traffic accidents are quantitatively recorded with a fluctuating trend. This shows that efforts to prevent accidents and improve the quality of safety have not been optimal. The high number of accidents and the severity of congestion and the absence of an orderly culture in traffic are homework for the Traffic Police and related agencies to overcome this.

c) Traffic Congestion

Traffic congestion is the most frightening specter in the Tanjung Priok port area. Because, when congestion occurs it will cause high economic losses. For example, when the port activity service system is disrupted, it will cause long queues at the port to eventually cause congestion. The following are areas prone to congestion in the Tanjung Priok port area.

For example, it happened in November 2022. Congestion almost occurs every day due to increased activity at the port. Especially since the easing of PSBB in the country and a number of countries due to the pandemic and encouraging export-import activities. In addition, mining trade activities have been revived. At that time, the turnaround time for trucks with a radius of 25 km from the port normally took 8 hours. However, due to traffic jams, it eventually took 26 to 18 hours which disrupted economic activities.



Figure 1. Congestion-prone areas in the jurisdiction of Tanjung Priok Port Police Station

Source: Tanjung Priok Port Police Traffic Unit

Therefore, collaborative efforts between agencies are needed so that cases of traffic congestion in the Tanjung Priok port area do not recur. There needs to be an increase in Road safety Partnership Action activities involving all parties to anticipate various congestion disturbances in the jurisdiction of the Tanjung Priok Port Police.

4.2. The competence of Tanjung Priok Port Police personnel in the Road Safety Partnership Action (RSPA) activity to handle traffic problems.

In seeing the readiness of the implementation of the Road Safety Partnership Action (RSPA) activity, in this study the authors describe the competency conditions in the Tanjung Priok Port Police Traffic Unit, as below:

a) Quantity of Personnel

Table 3. Personnel Data of Tanjung Priok Port Police Traffic Unit

No	Position	List of Personnel Composition (DSP)	Real	D
1	First Officer (Pama)	10	6	-4
2	Noncommissioned officers (Ba)	34	22	-12
3	Civil Servant (PNS)	2	0	-2
Total		46	28	-18

Source: Tanjung Priok Port Police Traffic Unit.

Based on the table above, it shows that in real terms the number of human resources has not met the List of Personnel Composition (DSP). For the DSP, the personnel of the Tanjung Priok Port Police Traffic Unit amounted to 46 personnel while in real terms there were only 28 personnel. This shortage of 18 personnel will certainly interfere with the

performance of the Road Safety Partnership Action (RSPA), especially for shortages in the NCO sector.

b) Personnel quality

The composition of the personnel of the Tanjung Priok Port Police Traffic Unit seen from the educational background of specialization development can be described as follows:

Table 4. HR Competency

No	Position	Formal Education			Traffic Education and Training (<i>Dikjur Lantas</i>)
		Senior High School	Diploma (D3)	Bachelor/Doctor (S1/S3)	
1	Pama	4		2	5
2	Ba	18		4	12
3	PNS				
Total		22	0	6	17

Source: Tanjung Priok Port Police Traffic Unit.

Based on the table above, it is evident that only 17 members of the Tanjung Priok Port Police Traffic Unit have received vocational training in the field of traffic. Additionally, there are 22 high school graduates working as press personnel. This situation poses a problem for the effective performance of the Tanjung Priok Port Police Traffic Unit, particularly in relation to the Road Safety Partnership Action (RSPA), which requires collaboration with other agencies.

1. Knowledge:
 - a. Some personnel of the Satlantas Polres Pelabuhan Tanjung Priok still lack a comprehensive understanding of the legal instruments and software relevant to the implementation mechanism of the RSPA.
 - b. The knowledge of Satlantas Polres Pelabuhan Tanjung Priok personnel regarding the actual problems on the road is still insufficient.
2. Skills:
 - a. There is a deficiency in personnel skills related to communication and coordination with stakeholders in the traffic sector.
 - b. The personnel also lack the ability to effectively collaborate in traffic and road transportation forums.
3. Attitude and Behavior:
 - a. Some members of the Tanjung Priok Port Police Traffic Unit appear to be less responsive and proactive in addressing field-related issues.
 - b. Furthermore, there are still personnel who fail to exhibit the principles of smiling, greeting, and engaging in RSPA activities.

These identified issues present significant challenges to the effective functioning of the Tanjung Priok Port Police Traffic Unit, particularly in their cooperation with other agencies during the implementation of the RSPA. It is crucial to address these concerns in order to enhance the unit's effectiveness and ensure road safety within the area.

4.3. System and Method of Active Road Safety Partnership Action (RSPA) by the Tanjung Priok Port Police in Handling Traffic Problems.

The Tanjung Priok Port Police Traffic Unit has undertaken various planning, organizing, implementing, and controlling activities in the execution of Road Safety Partnership Action (RSPA). However, the implementation is not yet optimal. The following description outlines the systems and methods employed by the Tanjung Priok Port Police Traffic Unit in executing RSPA activities:

1. Planning:
 - a. There is no planning or discussion in the form of a Memorandum of Understanding (MoU) for each action activity aimed at addressing traffic and road transportation issues.
 - b. Insufficient preparation of various requirements for supporting elements in the implementation of RSPA, including both software and hardware.
2. Organizing:
 - a. The involvement of members in each activity is not based on their respective competence.
 - b. Task allocation for personnel is also generalized, lacking detailed instructions for each activity to be carried out.
3. Implementation:
 - a. Cooperation is primarily understood at the leadership level, with insufficient elaboration for implementation at lower levels.
 - b. Responsibility shifts between agencies concerning budget, facilities, and infrastructure remain unresolved.
4. Control:
 - a. Analysis and evaluation are conducted independently, lacking integration between agencies.
 - b. Report preparation is still conducted separately by individual agencies, lacking an integrated approach.

These identified issues indicate areas for improvement in the Tanjung Priok Port Police Traffic Unit's system and method of executing the Road Safety Partnership Action (RSPA) activities. Addressing these concerns will contribute to optimizing the unit's performance and enhancing the effectiveness of RSPA in tackling traffic problems.

Efforts that can be undertaken by the Tanjung Priok Port Police Traffic Unit to optimize the Road Safety Partnership Action (RSPA) activities in handling traffic problems within their jurisdiction include:

1. Short-term strategy:
 - a. Strengthening coordination and communication skills at all levels of the Tanjung Priok Port Police Traffic Unit to facilitate effective collaboration with stakeholders in the traffic sector.
 - b. Comprehensive empowerment of budget support, facilities, and infrastructure for RSPA activities in each operation.

- c. Enhancing the enforcement of traffic regulations and the handling of traffic accidents in accordance with Law No. 22 of 2009.
2. Medium-term strategy:
 - a. Developing the quality of personnel involved in the implementation of Road Safety Partnership Action (RSPA) activities.
 - b. Conducting traffic engineering measures to anticipate the increased port activities associated with transportation.
 - c. Empowering public and community participation in the Tanjung Priok Port area to promote and ensure traffic safety.
3. Long-term strategy:
 - a. Supporting global road safety initiatives, such as the Decade of Action for Road Safety (2011-2020).
 - b. Utilizing advancements in information technology for RSPA activities, particularly in traffic engineering within the Tanjung Priok Port area.

By implementing these short-term, medium-term, and long-term strategies, the Tanjung Priok Port Police Traffic Unit can enhance the effectiveness of the Road Safety Partnership Action (RSPA) and effectively address traffic problems within their jurisdiction.

5. CONCLUSION

In conclusion, the study reveals several important findings. Firstly, the implementation of the Road Safety Partnership Action (RSPA) by the Tanjung Priok Port Police Traffic Unit in handling traffic and road transportation problems is not optimal. This is evident from the high number of traffic violations, potential accidents, and congestion that disrupt the activities at Tanjung Priok port. To address this, it is crucial to focus on improving the quality of personnel, enhancing coordination and communication among stakeholders, securing sufficient budget support, upgrading facilities and infrastructure, and leveraging advancements in information technology for RSPA activities.

Secondly, the competence of the personnel in the Tanjung Priok Port Police Traffic Unit regarding the RSPA is not at an optimal level. To tackle this issue, it is recommended to invest in personnel development through training, seminars, workshops, vocational education in traffic-related fields, and implementing a system of rewards and punishments.

Thirdly, the system and methods employed in the active RSPA of the Tanjung Priok Port Police Traffic Unit for handling traffic and road transportation problems are not fully efficient. To address this, it is important to take proactive measures such as conducting a comprehensive inventory of budget needs and infrastructure for RSPA activities in the coming year, mapping and analyzing trouble spots and black spot areas, providing recommendations to the Traffic and Road Transport Forum for solving traffic problems, especially in trouble spots and black spot areas, and making effective use of information technology in RSPA activities.

In light of these conclusions, several recommendations are put forth. Firstly, it is recommended that the Chief of Police establish a Memorandum of Understanding (MoU) with relevant agencies within the Road Traffic and Transport Forum in the Tanjung Priok

Port area. This collaborative effort would enable joint responsibility in developing innovative programs and implementing the RSPA. Secondly, the Chief of Police should develop a comprehensive Standard Operating Procedure (SOP) that includes detailed budget guidelines and infrastructure standards to ensure the continuous and effective implementation of the RSPA. Lastly, the Chief of Police should create an operational manual that provides clear instructions for the use of electronic devices and applications related to the implementation of the RSPA.

REFERENCES

- David, F. R. (2002). *Manajemen Strategis: Konsep, Prenhallindo*. Jakarta.
- Feldman, R. S., & Rosen, F. P. (1978). Diffusion of responsibility in crime, punishment, and other adversity. *Law and Human Behavior*, 2(4), 313–322.
- George Terry, R., & Rue, L. W. R. (2016). *Management Fundamentals*. Bumi Aksara.
- Keban, Y. T. (2008). *Enam Dimensi Strategis Administrasi Publik (Concept, Theory and Issue-)*. Gava Media.
- Mooren, L. (2014). United Nations Road Safety Collaboration (UNRSC). *Journal of the Australasian College of Road Safety*, 25(3), 49–51.
- Mulyasa, H. E. (2021). *Implementasi kurikulum 2013 revisi: dalam era industri 4.0*. Bumi Aksara.
- Pignataro, L. J., Cantilli, E. J., Falcocchio, J. C., Crowley, K. W., McShane, W. R., Roess, R. P., & Lee, B. (1973). *Traffic engineering: theory and practice*.
- Rahardja, S., & Wennardy, C. (2022). Kuantifikasi Parameter Lalu Lintas Kendaraan Bermotor di Jalan Jenderal Sudirman Jakarta Pusat [Quantification of the Parameters for Motorized Vehicle Traffic at Jalan Jenderal Sudirman Central Jakarta]. *FaST-Jurnal Sains Dan Teknologi (Journal of Science and Technology)*, 6(1), 92–102.
- Silamukti, A. A., Mayastinasari, V., & Aminanto, E. (2022). The Implementation of The National Digital Samsat (Signal) Program in Polda Metro Jaya Jurisdiction from A Systemic Perspective. *Policy, Law, Notary and Regulatory Issues (Polri)*, 1(3), 59–68. <https://doi.org/10.55047/polri.v1i3.253>
- Sriyono, S. (2020). A Nexus among Strategy Type, Market Orientation, Strategic Costing and Performance of Financial Sector of Private University in Indonesia. *Journal of Asian Finance, Economics and Business*, 7(10), 1035–1046.
- tomtom. (n.d.). *Jakarta traffic - Indonesia*. <https://www.tomtom.com/traffic-index/jakarta-traffic/>
- WHO. (2006). *Helmets: a road safety manual for decision-makers and practitioners*. World Health Organization.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).