



The role of licensed surveyors in the implementation of state land clearing permits: A comparative legal analysis

Nur Auliya Rahmatika^{1,*}, Nurlita Ayu Anggreini²

¹ Department of Administrative Law, Faculty of Law, Brawijaya University, Malang 65145, Indonesia;

² Department of Constitutional Law, Faculty of Law, Brawijaya University, Malang 65145, Indonesia.

*Correspondence: nur.auliya.rahmatika@lecture.unjani.ac.id

Received Date: December 21, 2025

Revised Date: February 4, 2026

Accepted Date: February 27, 2026

ABSTRACT

Background: The administration of land affairs, including land clearing permits, falls under regional government authority in Indonesia. One mechanism is the State Land Clearing Permit (*IMTN*), which requires land measurement by licensed surveyors. However, regulatory ambiguity persists regarding the legal status and institutional role of licensed surveyors in the *IMTN* process, particularly in Samarinda City. This lack of clarity raises concerns about legal certainty and good governance. **Methods:** This study employs normative legal research using a legislative approach. Systematic and futuristic interpretations are applied to relevant laws governing land administration and *IMTN* procedures. A comparative analysis examines Malaysia's institutional framework, focusing on the roles of *JUPEM* and the Land Surveying Institution (*LJT*), to identify regulatory improvements. **Findings:** The study reveals that Indonesian regulations do not explicitly define the scope of authority, responsibility, and accountability of licensed surveyors in *IMTN* implementation. Overlapping provisions between regional land offices and licensed surveyors create procedural inconsistencies and administrative uncertainty. The absence of detailed implementing regulations further complicates supervision, standardization of measurement results, and dispute resolution mechanisms. This ambiguity risks undermining transparency and weakening governance principles in land administration. In contrast, Malaysia's institutional framework demonstrates clearer separation of authority, professional oversight, and regulatory supervision, ensuring accountability and procedural certainty in land surveying practices. The comparative findings highlight structural gaps in Indonesia's regulatory design. **Conclusion:** Clarifying the institutional role of licensed surveyors through regulatory reform is essential to strengthen legal certainty and good governance in *IMTN* implementation. Assigning clearer responsibilities to Licensed Surveyor Services Offices (*KJSB*) would enhance accountability and procedural clarity. **Novelty/Originality of this article:** This study integrates statutory interpretation with comparative institutional analysis, offering a concrete reform pathway to improve governance in Indonesia's land clearing permit system.

KEYWORDS: legal comparison; licensed surveyor; permit to open state land.

1. Introduction

Article 18 paragraph (2) of the 1945 Constitution of the Republic of Indonesia stipulates that provincial, district and city regional governments regulate and manage their own government affairs according to the principles of autonomy and assistance tasks. And article 18 paragraph (5) then explains again that Regional governments exercise the broadest possible autonomy, except for government affairs which are determined by law as

Cite This Article:

Rahmatika, N. A. & Anggreini, N. A. (2026). The role of licensed surveyors in the implementation of state land clearing permits: A comparative legal analysis. *Lexovate: Jurnal Perkembangan Sistem Peradilan*, 3 (1), 32-47. <https://journal-iasssf.com/index.php/Lexovate/article/view/3263>

Copyright: © 202 by the authors. This article is distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).



the affairs of the Central Government. These two articles are the constitutional basis for the recognition of regional autonomy in Indonesia, namely the ability of a region to regulate and manage its own government affairs, for the benefit of its own region, as long as it does not conflict with higher laws and regulations.

Samarinda City, as one of several cities supporting the Indonesian Capital City/*Ibukota Nusantara (IKN)*, has recently received a lot of attention and is frequently visited by people for various purposes (Hidayanto, 2023). Its position as a supporting city for the *IKN* makes Samarinda City expected to be able to become one of the drivers of the Indonesian economy through the renewable energy sector (About *IKN*, 2024). Various efforts are certainly needed to realize this hope, one of which is through accelerated development in Samarinda City (Nurahman, 2022). Accelerated development is important to ensure that economic development efforts in Samarinda City are carried out according to the expected path, as well as to be able to participate in supporting the sustainability and success of the *IKN* development in Penajam Paser Utara (PPU). Accelerated development in Samarinda City should be considered as one of the priority efforts whose success must be ensured by the Samarinda City Regional Government as the main control holder. The main role of the Samarinda City Regional Government is one of the consequences of implementing the principle of decentralization, as well as a concrete manifestation of the recognition and implementation of regional autonomy in Indonesia (Sudarsono et al., 2022).

Furthermore, based on the provisions of Article 10 of Law Number 23 of 2014 concerning Regional Government (hereinafter referred to as the Regional Government Law), which are included as central government affairs or which in the law are written as absolute government affairs are affairs that include: foreign policy, defense, security, justice, national monetary and fiscal, and religion (Law Number 23 of 2014 concerning Regional Government, 2014). Therefore, in relation to the acceleration of development in Samarinda City, the Samarinda City Regional Government basically has the right to regulate and determine its own methods used in realizing the expected development goals, as long as they do not include absolute government affairs and do not conflict with the provisions of higher laws and regulations.

Spatial and regional planning is a crucial component that must be considered in efforts to accelerate development, as it can significantly impact the implementation of economic development in a region (Santo et al., 2024). Spatial and regional planning is crucial to ensure efficient land use in a region, avoiding the potential for disaster risks such as flooding or landslides, and to ensure that the region's economic growth can be supported through planned infrastructure development. Furthermore, proper spatial and regional planning can also contribute to conservation efforts, namely through the regulation of conservation areas and the wise use of natural resources (Jade et al., 2020).

The discussion on spatial and regional planning is ultimately inseparable from the discussion on land and its two functions: capital asset and social asset. As a capital asset, land is the primary model and capital in national development, while as a social asset, land serves as a binding medium for social interaction and all other activities that occur on it (Danedra & Mujiburohman, 2022). The presence of these two functions of land, as a capital asset and a social asset, significantly influences the successful acceleration of development in Samarinda City. The presence of sound spatial and land use planning will bridge the gap between sustainable economic growth. Through the integration of sound spatial and land use planning, not only economic productivity can be achieved but also the creation of a sustainable environment (Nursafingi, 2021).

In principle, almost all regions in Indonesia currently have a blueprint or design regarding the Spatial and Regional Planning/*Rencana Tata Ruang Wilayah (RTRW)* for their region. This *RTRW* will later be used as the main guideline that influences the use of spatial functions and economic sectors in the region (Lefebvre, 1992). In the context of accelerating development in Samarinda City, this *RTRW* policy will influence various steps that must be taken by the Samarinda City Regional Government in the development process and efforts to stimulate the economy according to the needs as a buffer city for the *IKN*. One of the Samarinda City Regional Government policies that is closely related to the *RTRW* is the

policy of granting land rights through the implementation of the State Land Opening Permit/*Izin Membuka Tanah Negara (IMTN)*. The main objective of this *IMTN* policy is to reduce the problem of overlapping land ownership in Samarinda City.

The implementation of *IMTN* in Samarinda City is based on the principles of good governance and is oriented towards improving community welfare, compliance with applicable spatial plans, environmental carrying capacity and capacity, and the physical capacity of the land itself (Samarinda City Regional Regulation Number 2 of 2019 concerning Permits to Open State Land, 2019). The authority to issue *IMTN* in Samarinda City itself lies with the Mayor, which is then delegated to the Sub-district Head and the One-Stop Integrated Service and Model Planting Service/*Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu (DPMPTSP)*, with the recommendation of the Public Works and Spatial Planning Service/*Pekerjaan Umum Penataan Ruang (PUPR)* (Samarinda City Mayor Regulation Number 14 of 2022 concerning Technical Instructions for the Implementation of Permits to Open State Land, 2022).

Referring to the provisions of the Samarinda City Mayor's Regulation Number 14 of 2022 concerning Technical Guidelines for the Implementation of State Land Clearing Permits (hereinafter referred to as the Mayor's Regulation concerning the Implementation of *IMTN*), as the implementing regulation for *IMTN* in Samarinda City, all *IMTN* applications in Samarinda City are required to have land measurements conducted by licensed surveyors from the Land Office at the expense and responsibility of the *IMTN* applicant. This obligation indirectly places licensed surveyors as one of the important elements in the implementation of *IMTN*. Although included as an important element, in fact there is no further explanation regarding what is meant by a licensed surveyor, either in the explanatory section or in other Samarinda City Regional Regulations. This condition certainly indicates legal ambiguity regarding the existence and position of licensed surveyors from the Land Office in the implementation of *IMTN* in Samarinda City. In fact, the process from application to issuance of a permit should have legal certainty, especially when it comes to the implementation of regional permits that must not conflict with higher laws and regulations (Hadiyantina et al., 2024).

Therefore, this article will conduct a further analysis of the existence of licensed surveyors in the implementation of *IMTN* in Indonesia. This research is important to conduct considering that there has been no other research that specifically analyzes the use of licensed surveyors, especially licensed surveyors who are members of the *KJSB* in the implementation of *IMTN*. Furthermore, this research also differs from previous research conducted by Zaenuri, which focused on the role of licensed surveyors in the implementation of complete systematic land registration/*Pendaftaran Tanah Sistematis Lengkap (PTSL)* (Zaenuri, 2019), and research by Ratrianto et al., which focused on how the use of licensed surveyors can accelerate the land registration process in Indonesia (Ratrianto et al., 2022). Meanwhile, the focus of the discussion in this study is on the existence and position of licensed surveyors in the implementation of *IMTN* in Indonesia.

2. Methods

The research method used in writing this article is normative juridical research. The research approach used is a legislative approach using various sources of research materials, such as laws and regulations, legal books, scientific articles, online news, and other sources related to licensed surveyors in Indonesia and Malaysia and the implementation of *IMTN* itself. In addition, a comparative legal approach is also used to compare the legal systems regarding licensed surveyors in Indonesia and Malaysia. Furthermore, the interpretation method used is a systematic interpretation method to describe the actual existence of licensed surveyors in the implementation of *IMTN* and its relationship to legislation in Indonesia. Finally, also used futuristic interpretation to form the concept of licensed surveyors in the implementation of *IMTN* in the future.

3. Results and Discussion

3.1 Existence of licensed surveyors in Indonesia

The existence of licensed surveyors in the administration of land affairs is not a new thing in Indonesia. Licensed surveyors were first referred to as licensed surveyors in the Explanation of Article 20 paragraph (4) of Government Regulation Number 24 of 1997 concerning Land Registration (Wahyono, 2017). However, the mention of this term was not followed by an explanation of what is actually meant by a licensed surveyor. The authentic definition of a licensed surveyor was first regulated through the Regulation of the Minister of State for Agrarian Affairs/Head of the National Land Agency/ *Kementerian Agraria dan Tata Ruang/Badan Pertanahan Nasional (ATR-BPN)* Number 2 of 1998 concerning Licensed Surveyors (hereinafter referred to as the Regulation of the Minister of *ATR/BPN* Number 2 of 1998). Based on this regulation, a licensed surveyor is someone who has expertise or skills in the field of cadastral measurement and mapping, who is authorized to carry out certain cadastral measurement and mapping work in the context of land registration, either as a community service business itself or as an employee of a legal entity that operates in the field of measurement and mapping. These licensed surveyors themselves include two types, namely Cadastral Surveyors and Cadastral Surveyor Assistants (Suranto & Djojomartono, 2023).

The legal basis for licensed surveyors has undergone several changes over time, with the current one still in effect being Regulation of the Minister of *ATR/BPN* Number 9 of 2021 concerning Licensed Surveyors (hereinafter referred to as Regulation of the Minister of *ATR/BPN* Number 9 of 2021), as last amended by Regulation of the Minister of *ATR/BPN* Number 8 of 2022 concerning Amendments to Regulation of the Minister of *ATR/BPN* Number 9 of 2021 concerning Licensed Surveyors. Despite these changes, the provisions regarding the types and definitions of licensed surveyors have generally not undergone significant changes. Based on Article 1 number 3 of Regulation of the Minister of *ATR/BPN* Number 9 of 2021, a licensed surveyor is defined as "a person who has expertise and/or skills in the field of Surveying and Mapping who is appointed and dismissed by the Minister." Licensed surveyors under this regulation also still include two types of surveyors, namely Cadastral Surveyors and Cadastral Surveyor Assistants, as regulated in previous regulations (Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 9 of 2021 concerning Licensed Surveyors, 2021).

Historically, the presence of licensed surveyors in Indonesia was initially driven by a lack of human resources, particularly among civil servants, who served as surveyors to conduct land boundary measurements. This lack of human resources significantly hampered the land registration process and reduced the chances of achieving the target of accelerating land registration in Indonesia (Suhattanto et al., 2024). This condition ultimately underpinned the need for third-party involvement in the land surveying process in Indonesia (Aditya et al., 2021). This involvement was realized through the granting of authority to the private sector as an external party, to carry out the duties of the Ministry of *ATR/BPN* in the field of measurement and mapping, through the privatization policy of land surveyors, who were later known as licensed surveyors (Suhattanto & Wijayanti, 2023). As previously mentioned, licensed surveyors recognized in Indonesian laws and regulations consist of Cadastral Surveyors and Cadastral Surveyor Assistants (Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 9 of 2021 concerning Licensed Surveyors, 2021).

Based on Article 1 number 5 of the Regulation of the Minister of *ATR/BPN* Number 9 of 2021, a Cadastral Surveyor is a person who has expertise and skills in conducting survey and mapping processes and is absolutely responsible before the law for the survey and mapping data they produce. Then based on Article 1 number 6 of the regulation, a Cadastral Surveyor Assistant is a person who has expertise in conducting survey and mapping processes under the supervision of a Cadastral Surveyor or authorized official and is absolutely responsible before the law for the survey and mapping data they produce. Based on this description, it can be seen that both Cadastral Surveyors and Cadastral Surveyor

Assistants both have similar skills and responsibilities in conducting surveys and mapping. The main difference between the two lies only in the presence of supervision from another party for the Cadastral Surveyor Assistant and the term of office, namely until the age of 65 years for the Cadastral Surveyor and the age of 60 years for the Cadastral Surveyor Assistant (Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 9 of 2021 concerning Licensed Surveyors, 2021).

Article 7 of the Regulation of the Minister of *ATR/BPN* Number 9 of 2021 requires every licensed surveyor to establish or join a Licensed Surveyor Services Office/*Kantor Jasa Surveyor Berlisensi (KJSB)* that has obtained a work permit from the Minister, before carrying out work in the field of surveying and mapping according to their skills. The *KJSB* itself can be an Individual *KJSB* consisting of at least one Cadastral Surveyor who also acts as a leader and one Assistant Cadastral Surveyor as a member, as well as a Partnership or Firm *KJSB* consisting of at least two Cadastral Surveyors and two Assistant Cadastral Surveyors. Survey and mapping work carried out by licensed surveyors is carried out for several purposes, including: initial land registration, maintenance of land registration data, land acquisition, and services and activities in the land and other spatial fields. There are two mechanisms that allow licensed surveyors to obtain work: first through the Ministry, Regional Office, or Land Office, and second through direct applications from the public. With regard to work obtained through direct applications from the public, licensed surveyors through *KJSB* are obliged to first coordinate with the Ministry, Regional Office or Land Office to obtain approval as stipulated in Article 13 paragraph (2) of the Regulation of the Minister of *ATR/BPN* Number 9 of 2021.

3.2 Implementation of permits to open state land

The recognition of regional autonomy in Indonesia has given regional governments the authority to regulate and manage their own government affairs, for the benefit of their own regions (Kurosaki et al., 2024). This authority is held by regions as long as it is not included in the affairs determined as central government affairs and does not conflict with higher laws and regulations. One of the affairs included in the authority of this regional government is the administration of affairs in the land sector (Oktavia et al., 2024). The implementation of land affairs carried out by the Samarinda City Regional Government is carried out, one of which is through the implementation of the *IMTN* letter policy as one of the requirements for registering land rights in Samarinda City. Referring to the provisions of Appendix J of the Regional Government Law, the authority to issue land clearing permits is the sole authority of the Regency/City Regional Government. Therefore, regarding the implementation of *IMTN*, the Samarinda City Regional Government has the right to regulate everything itself as long as it does not conflict with higher laws and regulations.

The legal basis for the implementation of *IMTN* in Samarinda City is Samarinda City Regional Regulation Number 2 of 2019 concerning Permits to Open State Land (hereinafter referred to as the Regional Regulation on *IMTN*). Based on Article 1 number 13 of the regulation, what is meant by *IMTN* is a permit granted by the Mayor or appointed official to an individual or legal entity to open and/or take advantage of and use land controlled by the state. The main objective of implementing *IMTN* is to address the problem of overlapping land ownership in Samarinda City, in order to be able to support the growth of the investment climate while still siding with the welfare of the community and maintaining the sustainability of environmental functions. Therefore, the implementation of *IMTN* must be carried out based on the principles of good governance and oriented towards improving the welfare of the community, in accordance with applicable spatial plans, carrying capacity and environmental capacity, and the physical capacity of the land itself (Samarinda City Regional Regulation Number 2 of 2019 concerning Permits to Open State Land, 2019).

The implementation mechanism and technical aspects of *IMTN* in Samarinda City are then regulated in more detail through Samarinda City Mayor Regulation Number 14 of 2022 concerning Technical Guidelines for the Implementation of *IMTN* (hereinafter referred to as the Mayor's Regulation on the Implementation of *IMTN*). Based on the provisions of Article

15 of the mayor's regulation, all land measurement processes for *IMTN* purposes must be carried out by surveyors licensed by the Samarinda City Land Office at the expense and responsibility of the *IMTN* applicant. The land measurement process is the process of determining the location and boundaries of a plot of land (Suhadi & Sastroatmodjo, 2022). The obligation to use licensed surveyors in the land measurement process for *IMTN* applications emphasizes the importance of licensed surveyors' role in the implementation of *IMTN* in Indonesia. Although their role is considered important, to date, there has been no legislation that rigidly regulates the authority and classification of licensed surveyors in the implementation of *IMTN* in Indonesia.

The lack of more detailed regulations regarding the provisions and roles of licensed surveyors in *IMTN* land surveying indirectly contradicts the principles of the *IMTN* itself. The considerations of the Regional Regulation on *IMTN* state that the implementation of *IMTN* must be based on good governance. Good governance is a value used to guide the government to achieve better performance in carrying out its primary duty of serving citizens (Wicaksono et al., 2025). Therefore, good governance is also considered a norm for the government and a right for citizens, which is used to encourage the government towards better performance in carrying out its duties (Wibowo, 2022).

Referring to the United Nations (UN) guidelines, there are eight main components of good governance, namely: participation; consensus orientation; accountability; transparency; responsiveness; effectiveness and essence; equality in the context of justice and inclusiveness; and submission to the rule of law (Maekawa, 2024). Furthermore, the implementation of good governance in Indonesia is realized through the application of the General Principles of Good Governance/*Asas-Asas Umum Pemerintahan yang Baik (AUPB)*. The application of *AUPB* in governance is important because it has several benefits, such as: (1) Can be used as an interpretation and determination in unclear provisions of laws and regulations, (2) Can be used as a basis for society in seeking justice against the actions of state administrative officials which are considered detrimental, (3) It can be used as a judge's analytical tool in testing or deciding a case, especially in State Administrative Courts (Solechan, 2019). In the context of the *IMTN* policy, the considerations of the Regional Regulation on *IMTN* have explicitly stated that the implementation of *IMTN* in Samarinda City must be carried out based on the *AUPB*. Based on the provisions of Article 10 paragraph (1) of Law Number 30 of 2014 concerning Government Administration (hereinafter referred to as the Government Administration Law), the *AUPB* consists of 8 principles, namely: The principle of utility, The principle of impartiality, The principle of accuracy, The principle of not abusing authority, The principle of openness, The principle of public interest, & Principles of good service.

Based on the description above, the components of good governance, based on the PBB guidelines and the *AUPB* in the State Administration Law, share similarities in the elements of compliance and legal certainty. The absence of concrete regulations regarding the position of licensed surveyors in the implementation of *IMTN* represents a form of normative ambiguity that contradicts these elements of compliance and legal certainty. This situation creates legal uncertainty in the implementation of *IMTN* in Indonesia, especially in regions that require *IMTN* documents as a requirement for land registration, such as Samarinda City.

As previously described, the Mayor's Regulation on the Implementation of *IMTN* requires land plot measurements by licensed surveyors during the *IMTN* application process, but there is no further explanation or regulation regarding the position of these licensed surveyors in the implementation of *IMTN* in Samarinda City. However, there is at least Regulation of the Minister of ATR/BPN Number 9 of 2021, as last amended by Regulation of the Minister of ATR/BPN Number 8 of 2022, which can be used as a reference. Based on this regulation, it can be understood that there are two types of licensed surveyors: Cadastral Surveyors and Cadastral Surveyor Assistants, as well as a description of the differences in the survey and mapping application mechanisms between those submitted by the Ministry, Regional Offices, or Land Offices, and applications submitted by the general public.

Before discussing further regarding licensed surveyors in the implementation of *IMTN* in Samarinda City, it is important to first review the provisions related to the authority to issue *IMTN* as regulated in Article 6 of the Mayor's Regulation concerning the Implementation of *IMTN*. Based on this article, there are two main agencies that have the authority in the process of issuing *IMTN* letters, namely: First, the Samarinda City Sub-district Head, who is authorized to issue *IMTN* letters for land with a land title of up to one hectare and without a land title of up to five thousand square meters; and Second, the Samarinda City One-Stop Integrated Investment and Licensing Service (*DPMPTSP*), which is authorized to issue *IMTN* letters for areas other than those held by the Sub-district Head with the approval of the Samarinda City Public Works and Public Housing Service (*PUPR*) (Samarinda City Mayor Regulation Number 14 of 2022 Concerning Technical Instructions for the Implementation of Permits to Open State Land, 2022).

The authority to issue *IMTNs* is essentially vested in the mayor, as stipulated in Appendix J of the Regional Government Law. However, this authority is then delegated to the sub-district head and the *DPMPTSP*. Therefore, the primary authority for the implementation of *IMTNs* in Samarinda City rests with the Mayor. Article 15 of the Mayor's Regulation on *IMTNs* stipulates that "All *IMTN* applications must be measured by a licensed surveyor from the Land Office at the expense and responsibility of the *IMTN* applicant." The provisions of this article are quite questionable, considering that the Land Office is not an agency under the control of the Mayor of Samarinda City. This is based on the provisions of Article 19 paragraph (1) of the Regulation of the Minister of *ATR/BPN* Number 17 of 2020 concerning the Organization and Work Procedures of the Regional Office of the National Land Agency and the Land Office which reads "The Land Office of the Ministry of Agrarian Affairs is and agency of Spatial Planning/National Land Agency in the district/city which is under and responsible to the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency through the Head of the Regional Office of the National Land Agency".

Furthermore, based on the theory of authority, the types of authority can be divided into 3 (three) based on the source of obtaining the authority (Hadjon, 2011), namely: a) Attribution whose source of authority is regulated directly by statutory regulations to government organs, b) Delegation is a source of authority given by a higher government organ to a lower one, so that the responsibility also changes, c) A mandate to do something on behalf of the person giving the authority, so that the final responsibility remains with the person giving the mandate. In the context of the implementation of *IMTN*, the authority held by the Mayor of Samarinda is attributive authority obtained from the Regional Government Law. This authority has specifically provided control to regulate and manage concurrent government affairs that have been transferred from the central government to the autonomous region. Meanwhile, the authority held by the Land Office is delegated authority obtained from the Minister of *ATR/BPN* or can also be a mandate depending on the task being handled. Therefore, the line of instruction and accountability it has is hierarchical-vertical from the Land Office - Regional Office of the National Land Agency - Minister of *ATR/BPN*. The action of the Mayor of Samarinda City to require the use of licensed surveyors in the implementation of *IMTN* can therefore be said to be carried out without authority, because he does not have the capacity as a superior in the chain of delegation or mandate to the Land Office.

This situation ultimately raises the question of whether licensed surveyors at the Land Office will receive an assignment letter from the Land Office or from the *DPMPTS* and/or the Samarinda City Sub-district Head to conduct land surveys for *IMTN* applications. This is important to further confirm, considering that the number of licensed surveyors required in each city in Indonesia has been adjusted from the outset by the Minister of *ATR/BPN*. This is especially true considering that land surveys for *IMTN* applications in Samarinda City are actually outside the responsibility of licensed surveyors at the Land Office. This situation will certainly increase the workload of licensed surveyors at the Land Office and has the potential to significantly impact their primary duties, which are directly responsible to the Head of the Land Office, who is under the organizational structure of the Minister of *ATR/BPN*.

This issue further highlights the need for further regulation regarding licensed surveyors in the implementation of *IMTN* in Samarinda City. This regulation is crucial to ensure that the implementation of *IMTN* in Samarinda City is carried out in accordance with the principles of good governance, namely through the realization of compliance and legal certainty. Although the general provisions regarding licensed surveyors are basically regulated in the Regulation of the Minister of *ATR/BPN*, this regulation emphasizes the context of land registration and not the implementation of *IMTN* applications, which are entirely the authority of the district/city government. Therefore, further regulation regarding the involvement of licensed surveyors in the implementation of *IMTN* is urgently needed to ensure legal certainty for the people of Samarinda City.

3.3. Licensed surveyors: Comparison of Indonesia and Malaysia

Licensed surveyors consisting of Cadastral Surveyors and Assistant Cadastral Surveyors are individuals who have expertise and/or skills in the field of cadastral measurement and mapping. Based on the provisions of Article 1 number 7 of the Regulation of the Minister of *ATR/BPN* concerning Licensed Surveyors, the license held by a licensed surveyor is a form of delegation of authority granted by the Minister of *ATR/BPN* to the licensed surveyor to assist the ministry in conducting land and spatial surveys and mapping. As recipients of delegations from the Minister to carry out measurement tasks, licensed surveyors can be said to be responsible to the Minister through the *KJSB* (Regulation of the Minister of Agrarian Affairs and Spatial Planning / Head of the National Land Agency Number 9 of 2021 concerning Licensed Surveyors, 2021).

The *KJSB* can obtain survey and mapping work for land and space activities, as well as other geospatial information activities, through two mechanisms. First, through the procurement of goods and services from the Ministry, Regional Office, or Land Office in accordance with statutory provisions. Second, through direct requests from the public. For work originating from direct requests from the public, the *KJSB* must first coordinate with the Ministry, Regional Office, or Land Office in accordance with the provisions of Attachment 1 of the Minister of *ATR/BPN* Regulation Number 9 of 2021 for approval. The results of surveys and mapping conducted by licensed surveyors and the *KJSB* will then be controlled and supervised by authorized high-ranking officials, the Head of the Regional Office, the Head of the Land Office, or by designated officials. This description indicates that licensed surveyors in carrying out their work are under the control and supervision of the Ministry of *ATR/BPN* and its extension agencies. The obligation for licensed surveyors to establish or join the *KJSB* is essentially intended to facilitate these control and supervision efforts.

As previously described, the presence of licensed surveyors in Indonesia is partly due to the shortage of civil servant surveyors (Ratrianto et al., 2022). Therefore, it can be said that land measurement authority in Indonesia is generally held by civil servant surveyors based at the Land Office and licensed surveyors who are members of the *KJSB*. Civil servant surveyors at the Land Office are hierarchically directly responsible to the Minister of *ATR/BPN*. Meanwhile, although licensed surveyors also hold delegations from the Ministry of *ATR/BPN*, their accountability is carried out through the *KJSB*, which then reports to the Regional Office as an extension of the Ministry of *ATR/BPN* at the provincial level.

For comparison, Malaysia also has 2 (two) institutions whose authority is related to land measurement. The two institutions are *Jabatan Ukuran dan Pemetaan Malaysia* (hereinafter referred to as *JUPEM*) and *Lembaga Juruukur Tanah* (hereinafter referred to as *LJT*) (Zain & Hasan, 2020). *JUPEM* is a government institution that has the authority on mapping and measuring the country (*Jabatan Ukur dan Pemetaan Malaysia*, 2025). Meanwhile, *LJT* is an institution that has the authority to regulate, supervise, and license land surveyors in Malaysia (*Lembaga Juruukur Tanah*, 2025). Although they have different main tasks, both *JUPEM* and *LJT* both have authority related to land measurement and are responsible to the Ministry of Natural Resources and Environmental Sustainability of Malaysia. When depicted in diagram form, the position of *JUPEM* and *LJT* is as shown in Figure 1.

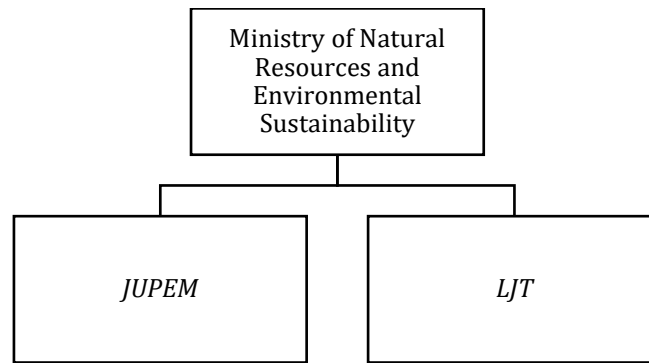


Fig. 1. Licensed surveyor agencies in Malaysia

When compared to institutions in Indonesia, it can be said that *JUPEM* is an institution that is in line with the Land Office. As previously explained, *JUPEM* is a government institution that has the authority to survey land and is directly responsible to the Ministry of Natural Resources and Environmental Sustainability. The Land Office, on the other hand, is a government institution at the Regency/City level that also has the authority to conduct land mapping and measurement, through state civil servant surveyors, and is directly responsible to the Minister of *ATR/BPN*. Meanwhile, regarding *LJT* itself, there is no institution similar to *LJT* in Indonesia. This is because the authority to regulate, supervise, and grant licenses to licensed surveyors in Indonesia is principally held by the Ministry of *ATR/BPN* itself. However, in its implementation, the Ministry of *ATR/BPN* is assisted by Regional Offices at the provincial level and Land Offices at the district/city level as its representatives in the regions, considering that Indonesia is an archipelagic country.

Despite not having an institution similar to the *LJT* in Malaysia, in addition to utilizing civil servant surveyors, the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (*KJSB*) also delegates its authority in land surveying to licensed surveyors who are members of the *KJSB*. The *KJSB* is a business entity that has obtained a work permit from the Minister of *ATR/BPN* as a forum for licensed surveyors to provide their services. Regarding this function, *KJSB* acts as an external working partner of the Ministry of *ATR/BPN*, its presence is used as a forum for coaching, monitoring and evaluation, and improving the quality of licensed surveyors in Indonesia. Therefore, *KJSB* is obliged to conduct performance evaluations for licensed surveyors who are members, and submit monthly reports electronically to the Head of the Regional Office, which is then distributed to the high-ranking official in charge of licensed surveyors. (Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 9 of 2021 concerning Licensed Surveyors, 2021). Although it cannot be directly compared to the *LJT* institution in Malaysia, structurally, the *KJSB* is in a similar position to the *LJT* because both are accountable to the Minister. If illustrated with a diagram, the position of civil servant land surveyors at the Land Office and licensed surveyors at the *KJSB* is as shown in Fig. 2.

Based on Figure 1., it can be seen that both the Land Office and the *KJSB* are essentially accountable to the Minister of *ATR/BPN*, through the Regional Office at the provincial level. The main difference between the two is that the Land Office is structurally an extension of the Ministry of *ATR/BPN* to facilitate the implementation of the ministry's duties and functions at the district/city level. Meanwhile, the *KJSB* is a business entity that serves as a forum for licensed surveyors to offer their services. Although it is an external institution, the *KJSB* can be said to still be closely tied to the structure of the Ministry of *ATR/BPN* considering that they are also required to submit reports to the ministry through the Regional Office, and must first coordinate and obtain approval from the Land Office, the Regional Office, or the Ministry of *ATR/BPN* if they receive work originating from community requests.

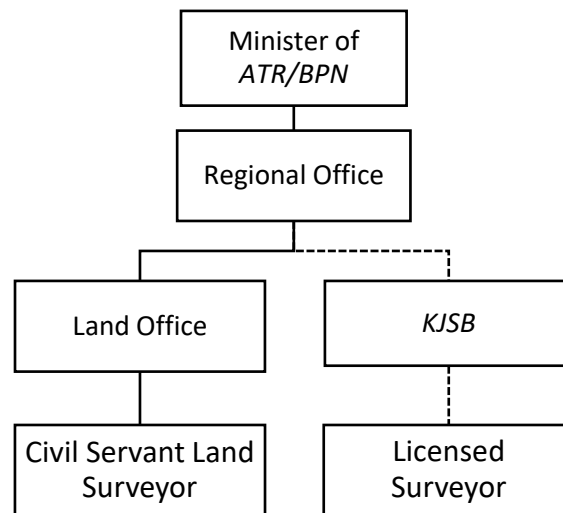


Fig. 2. Institutions related to licensed surveyors in Indonesia

Furthermore, Malaysia has several regulations governing land surveyors. These include: The Land Surveyor Act 1958, The Quantity Surveyors Act 1967, and The Valuers, Appraisers, Estate Agents, and Property Managers Act 1981 (Abdul-Aziz et al., 2020). There are also regulations specifically addressing licensed surveyors, such as the Licensed Land Surveyor Regulations 2011, the Licensed Land Surveyor Regulations (Amendment) 2019, and the Licensed Land Surveyor (Amendment) Regulations 2024 (Lembaga Juru Ukur Tanah, 2025). Based on the Licensed Land Surveyor (Amendment) Regulations 2024, in the replacement of regulation 3 of the Act (1) it is stated that: "Every person who is eligible to be registered under subsection 9(1) of the Act should apply to the Institution for boring as specified in the First Schedule together with payment of fi as specified in the Second Schedule," (Licensed Land Surveyor (Pindaan) Regulations 2024, 2024).

Based on these provisions, anyone who has knowledge or expertise in land surveying (surveyor) in Malaysia, can first register themselves with LJ/T to become a licensed surveyor. These regulations are basically similar to the provisions in force in Indonesia. Based on Article 4 paragraph (1) of the Regulation of the Minister of ATR/BPN Number 9 of 2021, which reads "To become a Licensed Surveyor as referred to in Article 2, every prospective Licensed Surveyor is required to take the Licensing exam organized by the Ministry," the article stipulates that to become a licensed surveyor, anyone who has knowledge or expertise must first take the licensing exam before being granted a license by the Minister of ATR/BPN (Siahaan et al., 2024). A brief comparison of regulations related to licensed surveyors in Indonesia and Malaysia is as shown in the following table 1.

Based on the explanation above, it can be seen that both *JUPEM* and *LJT* as implementing agencies for measurement tasks can work hand in hand and support each other. A similar condition should also apply between the Land Office as an extension of the Ministry of ATR/BPN in the region with *KJSB* as its external partner. In relation to the implementation of *IMTN* in Samarinda City, the Samarinda City Regional Government can consider using the services of licensed surveyors from *KJSB* rather than licensed surveyors from the Land Office who are in fact internal officers of the Land Office. This is possible considering that both licensed surveyors from the Land Office and licensed surveyors who are members of *KJSB* both obtain licenses from the Minister of ATR/BPN so that they have the same knowledge and expertise and meet the predetermined standards (Yulianto & Farid, 2020).

The use of licensed surveyors affiliated with the *KJSB* is also considered more appropriate when considering the workload of licensed surveyors at the Land Office, whose primary duties and responsibilities are land measurement related to the issuance of land certificates. The provisions of Article 15 of the Mayor's Regulation concerning the Implementation of *IMTN*, which requires all *IMTN* applicants to have their land surveyed

through licensed surveyors at the Land Office, will certainly increase and even disrupt the workload of licensed surveyors at the Land Office, who are directly responsible to the Ministry of *ATR/BPN*. In fact, both survey and mapping results conducted by licensed surveyors at the Land Office and licensed surveyors affiliated with the *KJSB* will still receive quality control and supervision from the Ministry of *ATR/BPN*.

Table 1. Comparison of licensed surveyors in Indonesia and Malaysia

Information	Malaysia	Indonesia
Term	Licensed Surveyor	Licensed Surveyor
Legal basis	1. Licensed Land Surveyors Act 1958 2. Licensed Land Surveyors Regulations 2011 3. Licensed Land Surveyors Regulations (amendment) 2019 4. Licensed Land Surveyors (amendment) Regulations 2024	1. Government Regulation Number 24 of 1997 concerning Land Registration as amended by Government Regulation Number 18 of 2021 concerning Management Rights, Land Rights, Apartment Units, and Land Registration 2. Regulation of the Minister of <i>ATR/BPN</i> Number 9 of 2021 concerning Licensed Surveyors as amended by Regulation of the Minister of <i>ATR/BPN</i> Number 8 of 2022 concerning Amendments to Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 9 of 2021 concerning Licensed Surveyors
Institution	1. Ministry of Natural Resources and Environmental Sustainability 2. <i>JUPEM</i> 3. <i>LJT</i>	1. Minister of <i>ATR/BPN</i> 2. <i>BPN</i> Regional Office 3. Land Office 4. <i>KJSB</i>
Supervision	by the Ministry of <i>ATR/BPN</i>	by the <i>LJT</i> institution
License	5 years	The first license is for 2 years and can be extended for a duration of 3 years.
Validity		
Period		

Referring to the provisions of Article 15 paragraph (3) of the Regulation of the Minister of *ATR/BPN* concerning Licensed Surveyors, it is stated that the results of surveys and mapping by licensed surveyors and *KJSB* are subject to quality control and supervision by authorized high-ranking officials, Heads of Regional Offices, Heads of Land Offices, or designated officials. This article has expressly shown that the results of measurements carried out by licensed surveyors who are members of *KJSB* will ultimately still receive the same treatment as the results of measurements by licensed surveyors at the Land Office. In addition, the use of the services of licensed surveyors who are members of *KJSB* also brings other benefits, considering that the results of their measurements are still recognized and have complied with the standards of the Ministry of *ATR/BPN* and its subsidiary institutions. The results of measurements by *KJSB* licensed surveyors in *IMTN* applications that have complied with these standards can basically also be used in the land registration process. Through this method, bureaucratic efficiency can be increased in the land registration process in Samarinda City which requires an *IMTN* letter as a condition for land registration.

The use of *KJSB* licensed surveyors will make *IMTN* applicants for land registration purposes not need to carry out repeated land plot measurements, because the licensed surveyor's measurement results have been recognized by the Land Office. This method will reduce costs and also save time required by the people of Samarinda City to register their land. The implementation of this method is also expected to prevent situations where the *IMTN* policy, which was originally intended to provide legal certainty in land administration, actually ends up being the main obstacle for the community to register their land plots (Rahmatika et al., 2024). Therefore, the researcher believes that it would be better if an

amendment was made to Article 15 of the Mayor's Regulation concerning the Implementation of *IMTN* to read "All *IMTN* applications must be measured by licensed surveyors from the Licensed Surveyor Services Office at the expense and responsibility of the *IMTN* applicant."

Using licensed surveyors within the *KJSB* will be more bureaucratically effective and simplify the process for the public. Land measurement results by licensed surveyors from the *KJSB*, which can be used in the land rights registration process due to their recognized legitimacy and regular supervision and evaluation by the Ministry of *ATR/BPN*, will also support the one map policy program in Indonesia. This is because all land measurement data integrated within the Ministry of *ATR/BPN* system can be used to determine land area estimates within a region and support the fulfillment of data for the formation of Thematic Geospatial Information (IGT) as a manifestation of the realization of the one map policy. Furthermore, land measurement results by licensed surveyors that reach the cadastral scale will also increase the accuracy of IGT data formation (Amrin, 2021).

Through this approach, the Samarinda City Government can play an active role in realizing the one map policy by providing measurement data at the cadastral level, as is done by *JUPM* in supporting the MyGDI (Malaysia Geospatial Data Infrastructure) policy in Malaysia. In addition to significantly improving the accuracy and transparency of land data management, this approach will also reduce the risk of overlapping land ownership in the future. Thus, this step not only supports administrative efficiency but also contributes to the creation of legal certainty and better land resource management in Indonesia.

4. Conclusions

The existence of licensed surveyors is not new in the process of land measurement in Indonesia, considering that regulations related to this right have been in place since 1999. However, land measurement by licensed surveyors has generally only been carried out for land registration purposes, their use in *IMTN* applications has not been widely implemented. However, the existence and competence of licensed surveyors have been recognized by the Ministry of *ATR/BPN* so that they are permitted to be involved in the process of land measurement for purposes other than land registration, one of which is in the implementation of *IMTN*, according to requests from individuals and/or legal entities by first coordinating with the Land Office, Regional Office, or the Ministry of *ATR/BPN*. Therefore, further regulations are needed, either in the form of amendments or the creation of implementing regulations to clarify the position and role of these licensed surveyors in the implementation of *IMTN*. These regulations must be carefully formulated while still being guided by the Regulation of the Minister of *ATR/BPN* concerning Licensed Surveyors as its foundation.

The use of licensed surveyors from the *KJSB* rather than licensed surveyors from the Land Office in the implementation of *IMTN* is also considered more effective, considering that each *KJSB*-licensed surveyor is essentially supervised and evaluated by the Ministry of *ATR/BPN*. The position of *KJSB* as an external partner of the Ministry of *ATR/BPN* in implementing land measurement authority is basically in line with the land measurement practices carried out by *JUPM* and *LJT* in Malaysia. Through this method, overlapping implementation of measurement tasks for land registration purposes and *IMTN* applications by licensed surveyors from the Land Office can be avoided. Measurement results by *KJSB*-licensed surveyors that have met standards, and must be routinely reported to the Ministry of *ATR/BPN* can also contribute to *the one map policy* in Indonesia. Through this method, land measurement data in *IMTN* applications can remain integrated within the Ministry of *ATR/BPN* system, and can be used to support the creation of Thematic Geospatial Information (IGT) as a manifestation of the realization of *the one map policy*, through careful measurements at the cadastral level.

Acknowledgement

I would like to thank all parties who have helped and supported this research, especially the Social Environment, Community Empowerment and Environmental Economics Research Cluster, University of Indonesia.

Author Contribution

Each author contributed to every part of this research

Funding

Social Environment, Community Empowerment and Environmental Economics Research Cluster, University of Indonesia

Ethical Review Board Statement

Not available

Informed Consent Statement

Not available

Data Availability Statement

Not available

Conflicts of Interest

The author declares no conflict of interest.

Declaration of Generative AI Use

During this writing the Author did not use AI.

Open Access

©2026. The authors. This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provides a link to the Creative Commons license, and indicates if changes were made. The images or other third-party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit: <http://creativecommons.org/licenses/by/4.0/>

References

- Abdul-Aziz, A.-R., Suresh, S., & Renukappa, S. (2020). The conundrum of professionalizing building surveying in Malaysia. *International Journal of Building Pathology and Adaptation*, 38(5), 621–634. <https://doi.org/10.1108/IJBPA-10-2019-0086>
- Aditya, T., Sucaya, IKGA, & Nugroho Adi, F. (2021). LADM-compliant field data collector for cadastral surveyors. *Land Use Policy*, 104, 105356. <https://doi.org/10.1016/j.landusepol.2021.105356>
- Amrin, R. N. (2021). *Implementation of the complete systematic land registration program (ptsl) in Hulu Sungai Tengah Regency in support of the one map policy*. National Geomatics Seminar. <https://www.semanticscholar.org/paper/PELAKSANAAN-PROGRAM-PENDAFTARAN-TANAH-SISTEMATIS-DI-Amrin/332408d365c3465574a8838acc0561ba2c8b9368#citing-papers>
- Danendra, M. R., & Mujiburohman, D. A. (2022). Establishment of a Land Bank: Planning land availability to accelerate development in Indonesia. *Widya Bhumi Journal*, 2(1). <https://doi.org/10.31292/wb.v2i1.18>
- Department of Measuring and Mapping Malaysia. (nd). *Duties & roles of JUPEM [Official*

- Website]. Department of Measuring and Mapping Malaysia. <https://www.jupem.gov.my/ms/tas-peranan>
- Government of Malaysia. (2024). *Licensed Land Surveyors (Amendment) Regulations 2024* (P.U. (A) 309/2024). Federal Government Gazette.
- Government of the Republic of Indonesia. (1945). The 1945 Constitution of the Republic of Indonesia (Undang-Undang Dasar Negara Republik Indonesia Tahun 1945). <https://www.dpr.go.id/jdih/uu1945>
- Government of the Republic of Indonesia. (2014). *Law Number 23 of 2014 concerning regional government* (State Gazette of the Republic of Indonesia Year 2014 Number 244, Supplement to the State Gazette Number 5587)
- Hadiyantina, S., Cahyandari, D., Sudjati, X. Q. D., & Rahmatika, N. A. (2024). *Licensing law*. Sinar Grafika.
- Hadjon, P. M. (2011). *Introduction to Indonesian administrative law (Eleventh Edition)*. Gadjah Mada University Press.
- Hidayanto, A. F. (2023). Samarinda's local identity in traditional food packaging as a regional identity. *SERENADE: Seminar on Research and Innovation of Art and Design*, 2(1), 367–380. <https://serenade.ukdw.ac.id/index.php/serenade/article/view/89>
- Institute of Land Surveyors. (2025). *Overview*. Malaysian Land Surveyor Institute. <http://www.ljt.org.my/content/overview>
- Jade, A. P., Putri, D. N., & Al-Fatih, S. (2020). Licensing for opening state land in Balikpapan City. *Rule of Law: Journal of Legal Research*, S29(2), 102–130. <https://doi.org/10.33369/jsh.29.2.102-130>
- Kurosaki, T., Paul, S., & Witoelar, F. (2024). In pursuit of power: Land tenancy contracts and local political business cycles in Indonesia. *Journal of Economic Behavior & Organization*, 227, 106764. <https://doi.org/10.1016/j.jebo.2024.106764>
- Land Surveyors Institute. (2025). *Licensed land surveyors regulations 2011*. Lembaga Jurukur. <http://www.ljt.org.my/content/licensed-land-surveyors-regulations-2011>
- Lefebvre, H. (1992). *The Production of Space*. Wiley.
- Maekawa, W. (2024). United Nations peacekeeping operations and multilateral foreign aid: Credibility of good governance. *World Development*, 176, 106531. <https://doi.org/10.1016/j.worlddev.2024.106531>
- Ministry of Agrarian Affairs and Spatial Planning/National Land Agency. (2021). *Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 9 of 2021 concerning licensed surveyors*. State Gazette of the Republic of Indonesia Number 55 of 2021.
- Nurahman, A. (2022). The role of law in development: A study of development inequality in the Southern Region of West Java. *Padjajaran Law Review & Debate Society*, 10(1). <https://jurnal.fh.unpad.ac.id/index.php/plr/article/view/840/484>
- Nursafingi, A. (2021). Participatory land-use planning for strengthening the village land resources management: A case study of Gorontalo, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 917(1), 012007. <https://doi.org/10.1088/1755-1315/917/1/012007>
- Oktavia, D., Pratiwi, S. D., Kamaludin, N. N., Widiawaty, M. A., & Dede, M. (2024). Dynamics of land use and land cover in the Belitung Island, Indonesia. *Heliyon*, 10(12), e33291. <https://doi.org/10.1016/j.heliyon.2024.e33291>
- Otorita Ibu Kota Nusantara. (2024). *About the IKN*. IKN Official Website. <https://www.ikn.go.id/tentang-ikn>
- Rahmatika, N. A., Safa'at, M. A., & Hadiyantina, S. (2024). The urgency of amending the Balikpapan city regulation on license to open state land. *Pandecta Research Law Journal*, 19(2), 397–420. <https://doi.org/10.15294/pandecta.v19i2.4599>
- Ratrianto, R., Murdapa, F., & Widyawati, R. (2022). The Role of licensed surveyors in accelerating land registration in Indonesia. *Lampung Engineering Journal*, 1(1). <https://doi.org/10.23960/jrl.v1i1.4>
- Samarinda City Government. (2019). *Samarinda City Regional Regulation Number 2 of 2019 concerning permits to open state land* (Samarinda City Regional Gazette 2019 Number

- 2).
- Samarinda City Government. (2022). *Samarinda Mayor Regulation Number 14 of 2022 concerning technical instructions for the implementation of permits to open state land* (Samarinda City Regional Gazette 2022 Number 321).
- Santo, D., Achsani, NA, Rustiadi, E., & Buono, A. (2024). Optimization of participatory and collaborative planning methods for accelerating the preparation of detailed spatial plans. *BHUMI: Agrarian and Land Journal*, 9(1), 63–82. <https://doi.org/10.31292/bhumi.v9i1.767>
- Siahaan, F., Rahayu, M. I. F., & Gunadi, A. (2024). Role of Quantity Surveyor. *Journal of Law and Sustainable*, 12(1), e2485. <https://doi.org/10.55908/sdgs.v12i1.2485>
- Solechan, S. (2019). General Principles of Good Governance in Public Services. *Administrative Law and Governance Journal*, 2(3), 541–557. <https://doi.org/10.14710/alj.v2i3.541-557>
- Sudarsono, S., Cahyandari, D., Hadiyantina, S., & Hadi, S. (2022). The urgency of decentralization of regional regulations position in the perspective of the unitary state of the Republic of Indonesia. *Journal of Legal, Ethical and Regulatory Issues*, 25(3), 1–9. <https://www.abacademies.org/articles/the-urgency-of-decentralization-of-regional-regulations-position-in-the-perspective-of-the-unitary-state-of-the-republic-of-indone-14403.html>
- Suhadi, & Sastroatmodjo, S. (2022). The meaning of strengthening licensed surveyor in the Regulation Ministry of Agrarian Affairs and Spatial Planning Number 9 of 2021. Proceedings of the 4th International Conference on Indonesian Legal Studies . *International Conference on Indonesian Legal Studies (ICILS) 2021*, Semarang. <https://doi.org/10.4108/eai.8-6-2021.2314364>
- Suhattanto, M. A., & Wijayanti, T. I. (2023). Implementation of community-based surveying and mapping of land parcels through field work practice to support complete systematic land registration (PTSL). *IOP Conference Series: Earth and Environmental Science*, 1276(1), 012004. <https://doi.org/10.1088/1755-1315/1276/1/012004>
- Suhattanto, M. A., Dewi, A. R., & Sudirman, S. (2024). Land parcel-based land valuation system development strategy in Indonesia with the concept of multi-purpose cadastre. *IOP Conference Series: Earth and Environmental Science*, 1418(1), 012016. <https://doi.org/10.1088/1755-1315/1418/1/012016>
- Suranto, & Djojmartono, P. N. (2023). Licensed surveyor role analysis for achieving indonesia complete systematic land registration (PTSL) in 2024. *IOP Conference Series: Earth and Environmental Science*, 1127(1), 012037. <https://doi.org/10.1088/1755-1315/1127/1/012037>
- Wibowo, R. A. (2022). *Good Governance and Government Procurement of Goods and Services: A Comparative Legal Approach*. UGM Press.
- Wicaksono, A., Andari, R. N., Azni, U. S., Prayoga, R. A., Putri, I. H. S., Wahyono, E., Andini, P., Nurlika, R., Nabila, N. M., Wijaya, G., Sidipurwenty, E., & Susantyo, B. (2025). Actor collaboration in the implementation of business licensing integrated with the land use framework: Indonesian case study. *Urban Governance*, S2664328625000907. <https://doi.org/10.1016/j.ugj.2025.10.003>
- Yulianto, ES, & Farid, AH (2020). Study of the accuracy of land measurement and mapping of licensed surveyor service office products (Study at the land offices of Kediri and Tulungagung Regencies). *Tunas Agraria*, 3(2), 140–156. <https://doi.org/10.31292/jta.v3i2.113>
- Zaenuri, A. (2019). The Role of Licensed Cadastral Surveyor Services Offices (KJSKB) in the Implementation of Complete Systematic Land Registration (Case Study at the Karanganyar Regency Land Office). *Legal Dynamics*, 10(1). https://ejurnal.unisri.ac.id/index.php/Dinamika_Hukum/article/view/4320
- Zain, S. Z. A. M., & Hasan, H. (2020). 4th industrial revolution (IR4.0) and its impact on the measuring and mapping profession. In GIS & Geomatics Bulletin: State Mapping and Spatial Data Committee. <https://www.jupem.gov.my/storage/upload/gis/a7e8a-buletin-gis-230621-.pdf>

Biographies of Authors

Nur Auliya Rahmatika, Faculty of Law, Brawijaya University. A Master of Laws graduate specializing in state administrative law, state administrative justice, and licensing law, particularly regarding Permits to Open State Land.

- Email: nur.auliya.rahmatika@lecture.unjani.ac.id
- ORCID: <https://orcid.org/0009-0006-5243-112X>
- Web of Science ResearcherID: N/A
- Scopus Author ID: N/A
- Homepage: <https://scholar.google.com/citations?user=E4lF2CkAAAAJ&hl=id&oi=ao>

Nurlita Ayu Anggreini, Faculty of Law, Brawijaya University. Master of Law student specializing in constitutional law and human rights, particularly in the realm of defense and security.

- Email: nurlitaayua2@student.ub.ac.id
- ORCID: <https://orcid.org/0009-0009-5916-859X>
- Web of Science ResearcherID: N/A
- Scopus Author ID: N/A
- Homepage: N/A