

Implementation of Electronic Land Certificates at the Karawang Regency BPN Office Based on Ministerial Regulations Agrarian Affairs and Spatial Planning/Head of the National Land Agency of the Republic of Indonesia Number 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities

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ABSTRACT

This study analyzes the implementation of electronic land certificates at the Karawang Regency National Land Agency (BPN) Office based on Minister of ATR/BPN Regulation Number 3 of 2023, and examines its impact on the community and efforts to build public trust. However, empirical studies at the land office level are still relatively limited, making this research relevant. The approach used in this study is empirical-juridical with a descriptive-analytical nature. Data were collected through in-depth interviews and literature document reviews. The results show that the implementation of electronic land certificates at the Karawang BPN Office has been carried out in line with applicable regulations, from submission to issuance of electronic documents. This implementation has had a positive impact in terms of increased service efficiency, data security, and ease of access to information. However, in practice, several obstacles remain, including low digital literacy among the public, concerns about data security, and technical disruptions to the system. Efforts to increase public trust are carried out through outreach, counseling, improving service quality, and providing access to digital information. Thus, the implementation of electronic land certificates has been underway, although it still requires strengthening of the technological infrastructure so that it can run more optimally.

Keywords: Implementation, Electronic Land Certificate, BPN Karawang Regency.

INTRODUCTION

Land is a primary need for humans, functioning as a source of livelihood, a factor of production, and has significant economic value and contributes to improving the welfare

of society.¹ Therefore, a land administration system is needed to guarantee legal certainty and protect land rights, in order to prevent conflicts or disputes in the future.

The government has an important role in regulating land use through spatial planning, this is intended to ensure optimal and sustainable land use.² With the massive evolution of technology, it has changed the paradigm in society.³ This also impacts various public service sectors, including land. Land rights management and protection are no longer limited to conventional methods, but are increasingly shifting toward the use of digital technology. In this regard, the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) is striving to transform land registration services from conventional methods to an electronic system.⁴

A concrete manifestation of this digital transformation is the implementation of electronic land certificates in the land registration process. Digitizing the land certificate registration process is a national step in the agrarian sector to adapt to increasingly rapid developments. This step is taken as an effort to survive and prevent land-related issues.⁵ An electronic land certificate is a digital document containing the physical and legal data of a plot of land, which has been authenticated through an electronic signature by an authorized party. This document serves as legal proof of land ownership.⁶

National policies regarding electronic certificates Now there is a new regulation from the Ministry of ATR/BPN Regulation No. 3/2023 regarding electronic land certificates.⁷ The regulation stipulates that land services will be implemented in stages in electronic form, including the issuance of land certificates as proof of ownership rights. This regulation officially replaces the old regulation from 2021. This electronic system is expected to improve the quality of land data, speed up the service process, and guarantee certainty and protection for the community.

However, the implementation of electronic land certificates in the field is not without various challenges. On the one hand, this policy is considered a form of modernization that can improve the quality of land services. However, many people still doubt the implementation of electronic land certificates, considering it too fast and lacking adequate

¹Betty Rubiati, "Legal Certainty of Apartment Ownership by Foreigners in Indonesia Linked to the Principle of Nationality," *Journal of Environmental, Spatial Planning, and Agrarian Law* 1, no. 1 (2022): 88.

²Suyono Sanjaya, Yuniar Rahmatiar. *Fundamentals of Agrarian Law*. (Yogyakarta: 2024: K-Media). p. 3.

³Samun Ismaya, *Introduction to Agrarian Law* (Yogyakarta: Graha Ilmu, 2011)

⁴Herawza, MF, et al. (2023). "Review of the Efficiency of Using Digital Land Certificates in the National Land Registration Legal Framework." *UNES Law Review*, 6(1), 2330-2337.

⁵E. Perangin, *Indonesian Agrarian Law: A Study from the Perspective of a Legal Practitioner*, Jakarta: Raja Grafindo, 1994.

⁶Desyifa Nurhidayah, et al. (2018). "Legal Certainty in the Transfer of Land Rights through Underhand Sale and Purchase: A Legal Analysis." *UNES Law Review*, 6(1), pp. 746-754

⁷Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency of the Republic of Indonesia Number 3

2023 concerning the Issuance of Electronic Documents in Land Registration Activities.

system preparation. This raises concerns about data security vulnerabilities and the potential for errors in the electronic system that could impact land ownership.⁸

In addition, some people believe that electronic certificates are not yet necessary to be implemented at this time, this is because there are still many issues related to land problems in Indonesia, such as land disputes, overlapping, fake certificates, and others, including carrying out comprehensive land registration as a top priority at this time. The problem with electronic certificates lies not only in their form or physical form, but also in the digitalization process in all stages of land registration from data collection, data verification, to certificate issuance. Therefore, the implementation of electronic systems in land administration needs to be studied further to determine how it is implemented in the field and its impact on the community as users of land services.⁹

Public trust is key to the successful implementation of electronic land certificates. If the public doesn't fully understand the system, it can raise doubts about the validity of electronic documents and the legal protection provided by the state. Therefore, the Land Office, as the service provider, requires various efforts to provide outreach, education, and guarantee system security to increase public trust in the use of electronic land certificates.

Several researchers have previously conducted studies on electronic land certificates with various main focuses. Bayu Aji Permana examined the issuance stages and the legal evidence strength of electronic certificates in civil disputes, based on Minister of ATR/BPN Regulation Number 3 of 2023..¹⁰ Meanwhile, Susilo Widiyantoro and his team focused more on the conditions in the field when the digital land certificate regulations began to be implemented, especially those occurring in the Magelang City and Regency areas..¹¹ Meanwhile, Amanda Aprilia Saputri examines the implementation of electronic land certification from a legal perspective, highlighting aspects of benefits, efficiency, and various issues related to regulations and data security in Indonesia..¹²

However, most of these studies tend to be oriented towards normative studies., policy challenges, and general discussions related to the implementation of electronic land certificates. Therefore, a specific review of the implementation of electronic land certificates, in accordance with Minister of ATR/BPN Regulation No. 3 of 2023, is needed. Its implementation at the land office level, along with its impact on the community, is still relatively limited and requires further study.

⁸Kurnia Rheza Randy Adinegoro, "Challenges in Implementing Electronic Land Certificates at the Ministry of Agrarian Affairs and Spatial Planning / National Land Agency of the Republic of Indonesia," *Journal of Notary Science* 4, no. 2 (2023): 129–42.

⁹Enny Agustina, 2021, *Legal Study of the Electronic Land Title Certificate Issuance Program*, vol 19, no 3, p. 345

¹⁰BA Permana, et al., "Legal Power of Electronic Certificate Evidence (Civil Study of ATR/BPN Regulation 3/2023)," *AKSES Scientific Journal* 2, no. 1 (2024): pp. 61-75.

¹¹Susilo Widiyantoro, IG Nyoman Guntur, Nur Rahmanto, and Dwi Wahyuningrum, "Challenges Towards the Implementation of Electronic Certificates in Magelang City and Regency," *Publikauma: Journal of Public Administration Science*, Vol. 10, No. 2, 2022

¹²Amanda Aprilia Saputri and Asnawi Mubarak, "Legal Review of the Implementation of Electronic Land Certification in Indonesia," *Almufi Journal of Social and Humanities*, Vol. 1, No. 2, 2024.

The novelty of this research lies in the empirical approach applied to examine how the Karawang Regency Land Office implements electronic certificates, with regulations referring to the Minister of ATR/BPN Regulation Number 3 of 2023. This study examines the impact of this system implementation on the community and the various efforts made to increase public trust in electronic-based land services. One area that has implemented this service is the Karawang Regency BPN Office. As a region experiencing rapid economic development and having quite high land dynamics, Karawang is a relevant location to study how the implementation of electronic certificates is carried out and how it impacts the community in the issuance process.

RESEARCH METHODS

This study applies an empirical juridical method, namely by examining the conformity between applicable legal regulations and their implementation in the field. The research is descriptive-analytical, intended to describe and analyze the implementation of electronic land certificates at the Karawang Regency National Land Agency (BPN) Office and its impact on the community. This study utilizes two types of data: primary and secondary. This primary data was obtained from interviews with officials at the Karawang Regency BPN Office, while secondary data includes primary legal materials such as laws and regulations, secondary legal materials such as literature, scientific journals, and relevant previous research results, and tertiary legal materials in the form of dictionaries and other supporting sources. Data were collected using literature studies and interviews. The data were then processed qualitatively by comparing actual field conditions with existing legal provisions. Through this approach, it is hoped that a deeper understanding of the implementation of electronic land certificates, their impact on the community, and the steps taken by the Karawang Regency BPN Office in building public trust in the electronic land system will emerge.

RESULTS AND DISCUSSION

Implementation of electronic land certificates and the impact on society in the issuance process

Technological transformation and socio-economic changes in society will be determining factors for land registration.¹³ One way the government is adapting to changing times is by implementing electronic land certificates through the Ministry of ATR/BPN. This policy is expected to increase service speed, minimize the potential for fraud, and provide certainty..¹⁴ The change from a conventional certificate system to an electronic form also

¹³Waskito, et al., 2019, Implementation of Land Registration in Indonesia, Jakarta: Kencana, p. 48

¹⁴Ministry of ATR/BPN, Guidelines for the Implementation of Electronic Certificates (Jakarta: Ministry of ATR/BPN, 2021)

aims to reduce the potential for disputes, conflicts and legal problems related to land..¹⁵ In addition, through this digital system, the government can more easily carry out supervision, especially in detecting data misuse or changes in information related to land ownership..¹⁶

Normatively, the policy regarding the issuance of electronic certificates was previously regulated in the Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 1 of 2021 concerning Electronic Certificates.¹⁷ However, this provision was later replaced by Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 3 of 2023 which regulates the Issuance of Electronic Documents in Land Registration Activities.¹⁸ This change reflects efforts to adjust policies to align with technological developments and demands for improved service standards.

In its implementation at the regional or district level, of course there are differences and challenges that are more complex compared to urban areas..¹⁹ Residents from urban areas in Karawang Regency believe that the implementation of electronic land certificates has facilitated land services. Urban residents tend to be more familiar with digital services because they are accustomed to using technology in their daily activities. Electronic certificates are considered more practical because land ownership data can be accessed through digital applications and are considered more secure from the risk of loss or damage to physical certificates. Furthermore, the service process is considered faster than the previous conventional system. Meanwhile, some residents from rural areas in Karawang Regency still experience difficulties in understanding the use of electronic land certificates. Low digital literacy and limited understanding of electronic systems have led rural residents to tend to trust physical certificates more, while remaining concerned about data security and fearing system disruptions that could complicate access to land ownership documents.

Based on research findings at the Karawang Regency National Land Agency (BPN) Office, the implementation of electronic land registration began on June 10, 2024, in accordance with Circular Letter Number UP.04.05/766-32.15/VI/2024, for registration that came into effect on June 10, 2024, the certificate product issued was an electronic certificate. Several types of land services that implement electronic certificates include land registration for

¹⁵Mudakir Iskandar Syah, *Guide to Managing Certificates and Resolving Land Disputes*, (Jakarta: Bhuana Ilmu Populer, 2019), p. 30.

¹⁶ Sudarto Sudarto, "Analysis of Legal Certainty for Landowners After the Implementation of Electronic Certificate Registration," *Journal of Social, Political and Humanities Research Cluster 1*, no. 2 (2022), <https://doi.org/10.55606/jurrih.v1i2.1286>.

¹⁷Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency of the Republic of Indonesia Number 1 of 2021 concerning Electronic Certificates.

¹⁸Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency of the Republic of Indonesia Number 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities.

¹⁹Soerjono Soekanto, *Factors Influencing Law Enforcement* (Jakarta: PT. Raja Grafindo Persada, 2008)

the initial stage, transfer of rights, division and merger of land parcels, and changes to data on certificates.²⁰

The issuance of electronic land certificates at the Karawang National Land Agency (BPN) Office involves several main stages. The process begins with the applicant submitting an application, followed by an administrative review. Next, officers perform a media transfer and validate the physical data with the legal data relating to the land parcel.²¹ This validation is performed by comparing the physical condition of the land in the field with data stored at the land office (warkah). The certificate is then issued as a digital document, authenticated by an authorized official with an electronic signature. This document is stored digitally and can be viewed using the Sentuh Tanahku app.

The implementation of this system is expected to increase public trust in the government. This trust plays a crucial role in public services, influencing the level of public participation in various government programs. The higher the trust, the more active the public will be in existing programs. These findings indicate that the use of electronic certificates has had a positive impact, particularly in improving the effectiveness of public services in the land sector.

Based on the results of an interview with Mrs. Cilvia, A.Ptnh., MH, as Head of the Rights Determination and Registration Section of the Karawang Regency BPN Office, dated March 27, 2026, it was discovered that the implementation of electronic certificates at the Karawang Regency BPN Office had been carried out in stages, the implementation of which had a positive impact on the community. First, land services became faster because some administrative processes were carried out through an electronic system. Second, storing certificates in digital format can avoid the risk of loss, damage, or forgery of land certificates. Third, the public can easily access land data information through the electronic system.²²

Based on this explanation, it can be concluded that the implementation of electronic land certificates at the Karawang Regency BPN Office has been carried out in accordance with the provisions of the Minister of ATR/BPN Regulation Number 3 of 2023. The implementation of this system has been beneficial to the public, particularly in terms of improving the efficiency of land services and protecting land ownership data. However, its implementation still faces several challenges related to the public's understanding of digital systems and their trust in electronic documents.

Currently, the use of electronic certificates in Karawang Regency continues to increase in line with the gradual digitalization of land services. All land services have essentially been

²⁰The results of the interview with Mrs. Cilvia, A.Ptnh. MH as Head of Rights Determination and Registration Section, at the Karawang Regency BPN Office on March 27, 2026

²¹Raden Ayu Rani Mutiara Dewi and Catherine Susantio, "Use of Electronic Certificates to Improve Land Registration Efficiency in an Effort to Prevent Land Mafia," *Jurnal Syntax Admiration* 5, no. 9 (2024): 3382–92, <https://doi.org/10.46799/jsa.v5i9.1441>.

²²The results of the interview with Mrs. Cilvia, A.Ptnh. MH as Head of Rights Determination and Registration Section, at the Karawang Regency BPN Office on March 27, 2026

directed towards using electronic systems, while conventional certificates are gradually being converted to electronic certificates as needed.

This shows that the implementation of the electronic land certificate policy has been carried out systematically and sustainably. Even though normatively the implementation has been appropriate, empirically there is still a dependency on the readiness of the technological system which is not yet completely stable and still requires support to increase the digital literacy of the community and strengthen trust in electronic systems so that they can run optimally.

Efforts by the Karawang Regency BPN Office to increase public trust in the use of electronic land certificates

In an effort to increase public trust in the use of electronic certificates, socialization activities have a crucial role as a forum for building understanding and reducing resistance to the transformation of land administration towards digital..²³ The Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) is the government institution with full authority over the implementation of this socialization program. The key to successful socialization is effective dialogue between the government and the public. Therefore, information regarding the benefits, mechanisms, and security guarantees of electronic certificates must be delivered clearly, systematically, and easily understood to encourage public acceptance and support of this innovation.

In practice, the transition from conventional land certificates to electronic systems still faces a number of obstacles. These challenges include limited technological facilities and infrastructure, uneven human resource readiness, risks related to cybersecurity, personal data protection, and the relatively low level of digital literacy in the community..²⁴ Although conventional and electronic land certificates basically have similar functions, the difference lies in the greater convenience and efficiency offered by the electronic system for land owners.

From a legal protection perspective, electronic certificates offer a higher level of security thanks to the use of encryption technology and digital verification systems. However, their successful implementation depends heavily on the availability of adequate technological infrastructure and comprehensive supporting regulations..²⁵

The validity of electronic documents is also strengthened in Law Number 11 of 2008 concerning Electronic Information and Transactions as amended by Law Number 19 of 2016, which recognizes electronic documents as valid legal evidence..²⁶

²³I Kadek Dewi Sasih Adnyani, Ratna Artha Windari, and Muhamad Jodi Setianto. 2025. "The Importance of Electronic Land Certificates in the Digital Era as Proof of Land Ownership Rights." *Yustisia Community Journal* 7(2): 121–29.

²⁴Maria SW Sumardjono, *Land in the Perspective of Economic, Social, and Cultural Rights* (Yogyakarta: Gadjah Mada University Press, 2018), 115.

²⁵Budi Harsono, *Indonesian Agrarian Law* (Jakarta: Djambatan, 2003), 224.

²⁶Law Number 11 of 2008 concerning Electronic Information and Transactions as amended by Law Number 19 of 2016, Article 5 paragraph (1) and paragraph (2).

Based on the results of an interview with Mrs. Cilvia, A.Ptnh., MH, as Head of the Rights Determination and Registration Section at the Karawang Regency BPN Office. Efforts to increase public trust in electronic land certificates are carried out through various strategies, including:²⁷:

- a. Socialization to the public about the electronic land certificate policy, which aims to explain how to issue electronic certificates and utilize digital systems.
- b. Organizing land counseling, providing information media, public service activities, and collaboration with the government.
- c. Providing direct understanding to service users who come to the Karawang Regency Land Office.
- d. The Karawang Regency BPN Office is striving to provide faster services in the land registration process, it is hoped that the public can feel the direct benefits of implementing the electronic system.
- e. Providing digital access to land information for the public. The public can obtain land data and land certificate status through electronic services from the Ministry of ATR/BPN, such as the Sentuh Tanahku application.

These efforts demonstrate that the Karawang Regency BPN Office has taken a comprehensive approach to building public trust, through education, services, and the use of digital technology.

The government's outreach efforts aim to increase public understanding and foster trust in the advantages of electronic certificates over physical ones, such as enhanced security, more efficient processes, and reduced data misuse by external parties. This outreach is also aimed at encouraging the public to gradually begin utilizing digital certificate services. In its implementation, socialization activities also need to address public perceptions regarding risks and help them clearly understand the real benefits of the innovation..²⁸

Based on the research results, it is clear that the Karawang Regency National Land Agency (BPN) Office has undertaken various efforts to increase public trust in electronic land certificates. These efforts include outreach activities, land education, improving service quality, and providing access to digital land information. However, ongoing efforts are needed to increase public understanding regarding the security and legal validity of electronic land certificates as proof of ownership.

Electronic certificates are still a relatively new innovation in land services. In their implementation, one of the obstacles that often arises is technical system constraints, such as disruptions or maintenance at the data center (Pusdatin), which can disrupt the smooth operation of the service. This situation certainly presents a challenge for stakeholders and

²⁷The results of the interview with Mrs. Cilvia, A.Ptnh. MH as Head of Rights Determination and Registration Section, at the Karawang Regency BPN Office on March 27, 2026

²⁸Aji Permana, Bayu, Abdul Halim, and Ali Uraidi. 2024. "Legal Power of Electronic Certificate Evidence in Civil Cases According to Regulation of the Minister of ATR/Head of BPN No. 3 of 2023 Concerning the Issuance of Electronic Certificates in Land Registration Activities." AKSES Scientific Journal 2(1): 61–75.

related parties in carrying out the procedures for issuing electronic certificates, including the ownership process, whether originating from an initial application or resulting from a transfer of rights.

Electronic certificates are considered more secure than conventional/analog certificates because electronic certificates have a special code on each certificate form that can only be viewed through the Sentuh Tanahku Application. If an error occurs in the system/data on the electronic certificate, the data correction process will be carried out by registering it through a non-PNBP (Non-Tax State Revenue) file so that the incorrect certificate will be reissued according to the registration procedure, and if there is a disruption to the system/application, the BPN will immediately consult and ask for direction from the data center of the Ministry of ATR/BPN.

This conclusion shows that efforts to increase public trust by The Karawang Regency National Land Agency (BPN) Office has been quite successful in increasing public trust, but it requires strengthening aspects of digital literacy, system stability, and service consistency so that public trust can increase optimally.

CONCLUSION

1. The implementation of electronic land certificates at the Karawang Regency National Land Agency (BPN) Office is in accordance with Minister of ATR/BPN Regulation Number 3 of 2023, following structured stages, from application submission to issuance of electronic documents. This system has had a positive impact on the community, improving service efficiency, data security, and facilitating access to land information. However, its implementation has not been fully optimized due to challenges such as low public understanding of digital technology, concerns about data security, and technical glitches in the electronic system.
2. The Karawang Regency National Land Agency (BPN) Office's efforts to increase public trust in electronic land certificates are carried out through outreach, land education, improving service quality, and providing access to digital information. While these efforts have shown positive results, increasing public trust still requires ongoing efforts, particularly in terms of digital education, strengthening system security, and synchronizing infrastructure between the regional and central governments to minimize technical system constraints and ensure uninterrupted service.

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