

Protection Relating to Digital Right of Land Ownership and Evidentiary Power in Court

Agung Aditya¹

¹Faculty of Law, Universitas Pekalongan, Indonesia
agung.manding30@gmail.com

Abstract. Land is an important element in human life and its success in achieving prosperity. Legal land ownership provides legal certainty and prevents disputes between individuals or groups. Along with technological advancements, the Indonesian government implemented the digitization of land administration through electronic certificates, which aims to improve efficiency and reduce the risk of losing physical documents. However, this transformation also faces challenges, especially related to the security of personal data and the authenticity of land certificates in the settlement of legal disputes. To address the potential threat of cybercrime and digital evidence in court, the government has regulated data protection through relevant laws. This research aims to examine the legal guarantee and challenges that are faced in the application of electronic land certificates as legal evidence, as well as the data protection needed to maintain the integrity of digital land system in Indonesia.

Keywords: Agrarian, Certificate, Digital.

1 Introduction

As Land is the source of life and is one of the most important means of production for most people in the world. Its ownership is the source of a person's success in achieving their welfare, both individually and in groups. Humans on this earth are very proud to have legality. Land is the art of sovereignty coveted by all officials in the world. Land is a peaceful and pleasant place. Power over land without legalities can actually lead to disputes between one another.

Existing laws do not escape development, but often the law is behind the times, technological advances and changes in citizenship and global attitudes. This increasingly sophisticated electronic system provides ease of service, allowing customers to access anytime and anywhere. Even the blessings of advances in information technology in this century, not only have an impact on all aspects of life, but also have an impact on the way public services are organized. All countries around the world are accelerating the delivery of public services, including Indonesia, both through conventional transactions directly to internet-based services[1].

In the digital era of the 21st century, everything is required to be completely digital, including the land administration system. The purpose of digitizing land

administration, including land certificates, is to facilitate public services with efficiency, enable faster access, and reduce the risk of losing physical documents. The government will withdraw physical land certificates and replace them with electronic land certificates through the issuance of Minister of Agrarian and Spatial Planning/National Land Agency Regulation No. 1 of 2021 on Electronic Certificates. The Indonesian Government through the Agrarian and Spatial Planning/National Land Agency (ATR/BPN) has initiated a land certificate digitization program as part of efforts to modernize land administration, which is also in line with the mandate of Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE)[2].

The digitization of land certificates aims to improve the effectiveness of public services and provide legal certainty to landowners. The implementation of digital land certificates is faced with a very serious problem, in Article 16 of the Regulation of the Minister of ATR/BPN No. 1/2021, which stipulates that physical certificates such as land registry, measurement letters, and layout drawing are going to be replaced by the electronic versions. Printed certificates will be converted to digital format, so that in the future land certificates will no longer be in the form of books of paper, but electronic certificates in the form of PDF files. This is vulnerable to cybercrime. The risks are threatening the integrity of ownership, falsifying information, or even leaking highly confidential personal data, which will lead to land ownership conflicts in the future.

The government already regulates data security and privacy protection through Law No. 11/2008 on Electronic Information and Transactions (ITE), which was updated with Law No. 19/2016. In addition, Law No. 27 of 2022 on Personal Data Protection (PDP) provides a legal framework to protect citizens' personal data, including land ownership data managed digitally by BPN. However, the bigger problem will be proving digital land ownership because there are no firm rules on liability for dual ownership of electronic land deeds and proving the authenticity of digital land certificates in court.

This study will analyze two problem formulations: (1) What guarantees of personal data security and legal protection that are provided by the government, particularly by the National Land Agency (BPN), in preventing cybercrime against the electronic land certificate system? And (2) What is the settlement of a lawsuit in which the evidence is an electronic land certificate and the challenges of proving is authenticity in a court case?.

2 Method

This research uses a descriptive qualitative method with socio-legal analysis. This analysis is based on social science that focuses on law, legal processes, and legal systems. The focus of this research is to examine the consistency of legal protection of ownership and land rights based on applicable laws and regulations, such as Law No. 11 of 2008 on Electronic Information and Transactions, Law No. 11 of 2020 on Job Creation, and implementing regulations related to land registration. The socio-legal

approach was chosen for its superiority in integrating concepts and theories from various disciplines to understand legal phenomena, so as to reduce the isolation of social, political, economic, and cultural contexts. The data collected includes primary and secondary data; primary data is obtained through interviews, while secondary data is collected through literature studies in the form of scientific papers both printed and electronic.

3 Result and Discussion

3.1 Legal Guarantee on Digital Land Ownership Rights

The In early 2021, the government, through the Ministry of ATR/BPN, issued provisions for the implementation of the Electronic Land Certificate (STE) service as stipulated in the Regulation of Minister of ATR/BPN No. 1 of 2021 on Electronic Certificates. The issuance of Ministerial Regulation No. 1 of 2021 on Electronic Certificates has sparked much debate among the public, both in terms of its advantages and disadvantages. Some people support this step as an effort to modernize land services that are considered to provide security, legal certainty, and protection for land rights owners, in with the objectives of land registration in Indonesia.

However, others rejected the proposal because they considered it too hasty and no accompanied by adequate preparation, which has the potential to pose a risk to the security of land registration data and uncertainty of land ownership rights. The electronic certificate includes seven additional documents as an integral part, which are Measurement Drawing, Layout Drawing, Land Map, Layout Map, Measurement Letter, Plan Drawing, and Space Measurement Letter, as well as a certificate in the form of an electronic document prepared according to the format of the National Land Agency[3].

The applicable provisions remain the same process and sequence consisting of the process of registering land for the first time must be carried out in accordance with established provisions and procedures. This step is the beginning of the land data collection in accordance with the regulations on land registration, as stipulated in Article 12 of PP 24/1997 on Land Registration, which includes the following procedures[4]:

1. Collecting and processing the physical data;
2. Proof of rights and its recording;
3. Certificate issuance;
4. Provisions of physical and juridical data;
5. Maintaining public registers and documents.

After carrying out the land registration procedure, the analog certificate document is printed on holographic paper with BPN logo, while the electronic certificate is in the form of PDF file sent via e-mail. In this electronic certificate, the name of the agency and the logo of the Ministry of ATR/BPN are placed on the upper left side, in line with the Garuda symbol in the upper center. The certificate also has a red writing pattern on the left side of the document indicating that it was issued by the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency, and features a wavy

fine lined background to reinforce its authenticity and prevent forgery. The information contained in the copy of the land registry and measurement letter as a certificate of property rights must be recognized as accurate, both in the context of disputes and non-disputes, unless proven otherwise, so that electronic certificates can serve as strong evidence. Electronic certificates also use encryption technology security systems, such as cryptography, developed by the National Cyber and Crypto Agency (BSSN)[5]. The integrity of the data on the electronic certificate is guaranteed, meaning that the information of the land rights holder will always be intact, unchanged, and for confidentiality it has been protected by using coding technology from BSSN.

In particular, the legal protection of land rights owners' data security is regulated in Article 26 of Law No. 11/2008 on Electronic Information and Transactions and Law No. 27.2022 on Personal Data Protection. These rules include prohibitions on the use of personal data and criminal sanctions stipulated in Article 65 to Article 69 for unlawful acts, such as misuse or leakage of personal data, which are contrary to statutory provisions[6].

3.2 The Validity of Land Ownership Certificates as Evidence in Court Lawsuits

Technology has significantly changed the way people live, as part of the advancement of information technology that needs to be balanced with the development of regulations that apply in society. This has a direct impact on the emergence of various new legal action in society. Because technological advances can increase the risk of violations of civil norms, such as default, law violation, or illegal acts, the rules related to the submission of evidence as evidence in court are also adjusted to meet legal needs and technological advances.

Some countries, for example Malaysia and in some parts of Australia, have used Secure Paper, even though they have stored documents in electronic form. The purpose of Secure Paper is to Double Secure the Authentic Deed which later has problems can be used as an authentic evidence in court. Today, electronic evidence is no longer limited in civil disputes by the narrowly types of evidence in the legislation. Printed documents, digital data, and digital documents as referred to in paragraph (1) of Article 5 paragraph (2) of Law Number 2 of 2024 on Electronic Information and Transactions, are all recognized as valid evidence under Indonesian law. Therefore, since the recognition of electronic evidence through Law Number 1 of 2024 on Electronic Information and Transactions, this evidence can be accepted and used in court in civil law. As additional evidence that is accepted, this electronic document provides the validity of digital data and documents, recognized as reliable evidence, thus providing legal certainty for system administrators and electronic transactions, especially in proof and legal activities carried out electronically[7].

Formally, there are no provisions that specifically regulate evidentiary procedures using electronic certificates or other electronic documents in Indonesia. Currently, some material legal bases that recognize and regulate the use of electronic evidence include Government Regulation of the Republic of Indonesia Number 82 of 2012 concerning the Implementation of Electronic Systems and Transactions, Law Number

30 of 2014 concerning Government administration, and Law Number 11 of 2008 as amended by Law Number 19 Of 2016 concerning Electronic Information and Transactions Law Number 1 of 2024 concerning Electronic Information and Transactions[8]. Electronic certificates contain an electronic signature and the identity of the signing party. As evidence in civil cases, electronic certificates are a modern form of distinguishing identity in electronic form from conventional physical documents[9].

Electronic certificate providers are recognized as trusted services according to Article 1 paragraph (10) of the ITE Law, responsible for the issuance and supervision of electronic certificates. The National Cyber and Crypto Agency (BSSN) supplies digital certificates, which include the owner's signature and identity, to government and non-government institutions[10]. The Ministry of Communication and Information Technology is developing regulations for this service standard. BSSN, which is under the president, was formed through the merger of previous information security agencies as per Presidential Decrees No. 53/2017 and No. 133/2017[11]. This official electronic certificate is important to ensure the strength and integrity of electronic evidence, as it contains a digital signature and the identity of the relevant legal subject[4].

4 Conclusion

The digitization of land certificates in Indonesia, mandated through Ministerial Regulation No. 1 of 2021, represents a major leap in modernizing land administration and improving public service efficiency. While it offers increased accessibility and aligns with broader e-government initiatives, it also presents significant legal and security challenges. Chief among these are data protection vulnerabilities, risks of cybercrime, and evidentiary complexities in legal proceedings involving electronic documents. Although legal frameworks such as the ITE Law and the Personal Data Protection Law provide foundational safeguards, gaps remain in the regulation and enforcement of digital certificate validity, especially in courts. Therefore, to ensure legal certainty and public trust, comprehensive regulatory refinement, strong cybersecurity infrastructure, and clear procedural standards for the use of electronic certificates in judicial processes are urgently needed.

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