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## Legal Issues Transformation Certificate Electronic Based on Land Registration Policy Electronic Based

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**Abstract:** A land rights certificate is proof of ownership of land rights for the holder of the land rights in question. The impact resulting from current advances and technological developments can create new legal acts. Initially, electronic certificates were not in line with the considerations of the Ministerial Regulation because a policy emerged among the public which reaped many objections. This study aims to identify legal issues related to the electronic issuance of certificates based on the land registration policy, as stipulated in the Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency of the Republic of Indonesia Number 1 of 2021 on Electronic Certificates. This study employs normative legal research, relying on both primary and secondary legal sources. Data was gathered through a thorough review of relevant literature. The research utilizes a statutory approach, focusing on the analysis of legal regulations. The research results show that First data security and privacy side, second lack of legal certainty over land, and third Land problems are land disputes that still occur frequently. The policy of launching electronic certificates based on the Regulation of the Minister of Agrarian Affairs/Head of the National Land Agency Number 1 of 2021 has the potential to cause legal problems in the land law enforcement process.

**Keyword:** Legal Issues, Certificate Electronics, Land Registry.

### INTRODUCTION

As a state of law, Indonesia upholds clear and just rules to ensure order and prosperity for society. The principle of legal certainty ensures that there are reliable rules, justice ensures that the law is applied fairly to all parties, and legal expediency leads to the achievement of public welfare. In the aspect of natural resource management, Article 33 Paragraph 3 emphasizes that the state has full control over land, water and other natural resources. However, this control does not mean that the state has the right to exploit freely, but must ensure that the management is carried out wisely for the prosperity of the people, not just benefiting a few parties. To achieve development in the field of national land administration, the government first issued land-related regulations, especially the UUPA, which regulates the most crucial parts to guarantee the framework for population arrival (Prasetya & Afif Mahfud, 2023).

Initially, public policy which resulted in many protests meant that electronic certificates were not in line with the principles of the Ministerial Regulation. Since the enactment of the Ministerial Regulation on Electronic Certificates on January 12, 2021, its implementation is still not running effectively. In fact, based on “Article 22 of the Regulation of the Minister of ATR/BPN Number 1 of 2021, it is stated that this regulation comes into force from the date of promulgation”. Since the regulation has been promulgated by the Directorate General of Legislation of the Ministry of Law and Human Rights and announced in the State Gazette of the Republic of Indonesia (BNRI) in 2021, legally this regulation should have been implemented.

Individuals or legal entities who have jurisdiction over land are given land rights. In Indonesia's agrarian system, the state has the authority to regulate and grant land rights to citizens and legal entities. Article 4 Paragraph (1) of the UUPA emphasizes that holders of land rights can use them in accordance with their interests, as long as they continue to follow the applicable regulations.

Land title certificates, as stipulated in Article 31 Paragraph (1) of Government Regulation No. 24/1997, have an important role in ensuring legal certainty and protection for the owner or right holder. These certificates are issued by the National Land Agency (BPN) after going through a land registration process that includes legal measurement, recording and validation. With the certificate, the right holder has authentic evidence that can be used in various transactions. In addition, land certificates also serve to prevent ownership disputes with other parties and ensure that land rights granted by the state can be utilized in accordance with applicable regulations. Then, the physical data in the certificate includes the area, boundaries and location of the land, while the juridical data includes the ownership status and rights attached to the land. If there are differences between the data in the certificate and other official records, corrections or further proof can be made.

As land registration provides legal certainty over land rights, it is an important element in Indonesia's land system. The government, through the National Land Agency (BPN), has adopted an electronic land registration system or e-registration as a response to technological developments. With the implementation of an electronic land registration system, the administrative process becomes faster, reduces the potential for manual errors, and minimizes maladministration practices such as document forgery or overlapping ownership. In addition, this digitalization also has an impact on regulatory changes, such as adjustments to legal procedures in land transactions and the need for stricter data security systems.

Land registration can now be done progressively online thanks to the issuance of “Regulation of the Minister of ATR/BPN Number 1 of 2021 concerning Electronic Certificates”. In the digital age, electronic documents are becoming an important part of modern information systems. Unlike physical documents printed on paper, electronic documents can be stored in various formats, such as PDF, JPEG, MP3, or code-based files. The ability to access these documents via electronic devices allows for efficiency in information sharing and speeds up communication and administration processes. In addition, electronic documents have an advantage in terms of security, as they can be equipped with encryption features or digital signatures to guarantee their authenticity and integrity. This understanding was changed by Law Number 19 of 2016 (Prasetya & Afif Mahfud, 2023). For the first time, assets or goods belonging to the government and private sector were targeted for adoption of electronic land certificates rather than land owned by the community. That way, the public can watch and be prepared for the process of converting traditional certificate documents to electronic ones

Currently there are 72,315,659 registered land certificates with a total area of 30,960,765 Ha, according to ATR/BPN statistical data. These certificates were distributed as follows: 66,011,341 ownership rights, 15,770 certificates for cultivation rights, 5,320,176 building use rights, 800,246 use rights, 5,767 human rights certificates, and 162,338 waqf land certificates. This data shows the effectiveness of several government initiatives aimed at

accelerating national land registration, including the PTSL program and periodic land registration. Although land title certificates which are the result of various government initiatives cannot be rejected, they indicate gaps in legal certainty that can be detrimental to society.

Research from (Tetama, 2023b) which examines, from a regulatory perspective, the legal politics of the computerized land registration system after the passing of the Job Creation Law. Based on research findings, one of the objectives of the Job Creation Law is to reduce disputes over overlapping norms and regulations. This goal was not achieved, and even became an obstacle in its implementation. Synchronization of regulations is necessary if there are inconsistencies between regulations governing electronic land registration. Judging from the area and boundaries of the land, the electronic certificate which is the final result of land registration has strong, valid and undoubted evidence as a guarantee of certainty and protection for the land. It can even be used as valid evidence in court. The effectiveness of electronic land registration, which offers benefits including efficiency, cheaper land services, accountability, and accessibility, depends on the availability of high-quality land data.

Research from (Putranto & Mansyur, 2023) which emphasizes the importance, challenges and proper implementation of electronic certificates. The findings of this study show that the use of electronic land certificates can save money and time, reduce corruption by BPN employees, and help countries adapt to digitalization in today's globalized world. The lack of existing supporting facilities, lack of technical assistance for BPN officers, and low quality of resources for BPN officers are the main challenges in issuing electronic land certificates. Improved security in government electronic systems, increased outreach to the public and legal practitioners, and technical guidance for ATR/BPN officers are all necessary for the successful implementation of electronic land titles. This will make the process more organized and focused.

Research from (Rizkiana & Handoko, 2023) with special emphasis on the use of electronic certificates in the Ciptaker Law for electronic legal certainty and the existence of these certificates in accordance with the law. The findings of this study show how important electronic certification is in realizing legal certainty in the Ciptaker Law

New laws may be created as a result of recent technological advances (Tetama, 2023a). Regulation of the Minister of Agrarian Affairs and Spatial Planning of the National Land Agency Number 1 of 2021 concerning Electronic Certificates was issued with the aim of reducing and suppressing the frequent occurrence of land disputes and falsification, such as double or overlapping certificates, measurement letters that do not correspond to their original location, and so on. Electronic certificates are stored in the database of the national land agency office and converted into a database along with all the documents. In the future, land certificates will be issued digitally, with information about the holder of the property rights associated with the certificate in the land system, rather than in paper or book form, in accordance with the program announced by the government. The absence of regulations that specifically regulate data security on electronic certificates is a problem in this ATR/BPN ministerial regulation. Therefore, those who have electronic land title certificates need strong legal protection.

This research aims to find out legal problems or issue transformation certificates electronically based on land registration policies as is arranged in Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the Land Agency of the Republic of Indonesia Number 1 of 2021 concerning Electronic Certificates. Based on the description above, the author is interested in conducting research with the title Legal Issues Transformation Certificate Electronic Based on the Electronic Based Land Registration Policy.

## **METHOD**

Normative legal research is the research method used. Research that uses secondary data sources or information obtained from library sources is called normative research (Fajar &

Achmad, 2010). Primary and secondary legal materials are used. PP Number 24 of 1997 concerning Land Registration, PP Number 18 of 2021, Minister of ATR/BPN Regulation Number 1 of 2021 concerning Electronic Certificates, UUPA, UU ITE, and UUD 1945 are among the primary legal materials. Everything related to law, such as books, dictionaries and journals as secondary legal literature. A literature review is used for technique data collection. This research uses a legislative approach which is carried out by looking at the laws and regulations relating to these legal issues. So that the problem can be studied and studied as a whole, the analysis technique is carried out descriptively, that is, it is explained with an interpretation (interpretation) that describes, illustrates and explains article by article and matters according to the facts of the problem.

## RESULTS AND DISCUSSION

With the use of information and communication technology, registration systems throughout the world have been modernized. Land registration systems are shifting from paper-based to electronic procedures as a result of technological advances. The most important step for landowners is land registration, which allows quick and cheap publication (Syamsur et al., 2023). For UUPA and PP 24 of 1997, land ownership is guaranteed legal protection and certainty. This is related to the initiative to provide legal clarity to the community regarding their property rights, namely land ownership by individuals and legal entities (Azhar & Dharsana, 2024).

According to the philosophy of land registration, there are two types of land registration, namely the rights system and the deed system. Positive publication systems and negative publication systems are two categories of publication systems. In essence, the deed registration method is always used for land registration using a negative publication system, and the state does not provide guarantees regarding the correctness of the information contained in the register (Afif & Mahfud, 2023).

The ATR/BPN Ministry can improve the accuracy, efficiency and transparency of land management and services through digital transformation. As a result, productivity and service quality will increase, accelerating growth and improving people's welfare. Therefore, the digital transformation of the Ministry of ATR/BPN is important and requires continuous improvement. Digitizing land title certificates or what is often called electronic certificates is one of the main objectives. What is meant by "certificate" is a document resulting from land registration (Hutasoit & Habeahan, 2025). Evidence or certificates belong to someone according to what is stated on the certificate (Sari, 2024). Digital transformation in the land system aims to improve efficiency, transparency and accuracy in land registration and titling. With electronic certification, processes that previously took a long time and involved many physical documents can now be completed more quickly online. This reduces the potential for administrative errors, minimizes the risk of land disputes, and improves service accessibility for the community. In addition, this modernization also enables integration with various other systems, such as ownership records, land tax, and financial services, thus creating a more structured and secure land ecosystem.

In reality, there is not much difference between paper certificates and electronic certificates in terms of their ability to serve as legal land ownership documentation. However, there will be slight variations in structure and writing style. For example, electronic certificates will be digital and will further use hash codes, QR codes, electronic signatures, and single identities for field identification numbers. The vulnerability and susceptibility to tampering of paper, in contrast to the greater security of electronic certificates, is another factor driving this regulatory shift from paper documentation to electronic documentation.

The Korean Land Information System Agency, which is responsible for consistent and redundant land data, has implemented electronic land titles in South Korea since 1998. With the introduction of various land applications including e-Land, e-Kadaster, and My GeoName

In 2018, Malaysia began the process of digitizing land data. It could be said that Indonesia is lagging behind in terms of electronic land certificates, as Singapore and the Philippines have also adopted this system to demonstrate land ownership rights. It is true that technology has made it easier to deliver services in a timely, convenient and useful manner. In fact, BPN has offered land services in four electronic-based land service areas during the COVID-19 pandemic: Land Value Zone (ZNT) information, Electronic Mortgage Rights services, land certificate verification, and making land registration certificates (SKPT) which are valid in all areas of the Indonesian Land Office. However, due to public objections to the advantages and disadvantages of the electronic land certificate service, its implementation had to be postponed (Silviana, 2021).

Every regulation issued must have a strong legal basis in order to be implemented effectively. In this case, "Regulation of the Minister of ATR/BPN Number 1 of 2021 on Electronic Certification" does not stand alone, but is based on higher regulations, namely the UUPA and its derivative regulations governing land registration. In addition, because land certification in electronic form utilizes digital technology, legal aspects related to electronic transactions are also a basis for consideration, as regulated in the ITE Law. The Job Creation Law is also a reference, as it aims to simplify regulations and improve efficiency in land administration. Thus, this Ministerial Regulation is part of the efforts to modernize the land system that remains based on applicable laws in Indonesia. In practice, the minister acts as an assistant to the president and has the authority to carry out government functions in certain fields. The Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN), which is responsible for land and spatial management, is part of the government referred to in this context. Therefore, "Regulation of the Minister of ATR/BPN Number 1 of 2021 on Electronic Certificates" is included in legally recognized legislation and has binding properties, provided that it meets two main conditions, namely that it is issued based on the authority possessed by the minister and/or ordered by higher laws and regulations (Prasetya & Afif Mahfud, 2023).

In order to realize the vision and strategy of the Government of the Republic of Indonesia, the Ministry of ATR/BPN which is tasked with carrying out government operations in the agrarian/land and spatial planning sector is not standing still. In response to this, the Ministry of ATR/BPN released a digital transformation strategy. It is important to remember that the Ministry of ATR/BPN has been committed to switching to digital even before the concept, since 2001. The Ministry of ATR/BPN started working on a computerized land office application in 2001. The Ministry of ATR/BPN has a Computerized Land Services Application (KKP), namely an e-Government application that digitizes the land service process flow which was previously still carried out manually. Examples include assigning specific numbers, such as building master numbers, measurement letter numbers, title numbers, and so on, as well as tracking files.

Electronic certificates are the final product of digitalization or media transfer (synchronization) of legal and physical data. Measurement drawings, land plot maps or room maps, measuring letters, apartment unit plans, or room measuring letters are examples of physical data in the form of electronic documents. Meanwhile, research minutes, minutes and decisions relating to juridical data are examples of juridical data. PPAT deeds which can be made in the form of electronic documents, certificates and proof of rights are all included. Before becoming an electronic certificate for registered land, the electronic certificate must be issued for the first time, not registered, or placed manually. An electronic document which is also proof of land ownership is called a land certificate. BPN is now implementing Computerized Land Activities (KKP) to transfer media/digitize physical data and juridical data in the electronic land registration system because electronic documents must go through an electronic system.



Does the judiciary recognize electronic land certificates as admissible evidence in court in the event of a land dispute, from a legal perspective? Because there are currently no formal restrictions regarding electronic documents, multiple interpretations can occur. Considering that expert testimony is still needed to explain electronic documents as evidence, how should this evidence be presented in court? However, current law enforcement has limited technological capabilities so special rules must be established regarding electronic documents. Based on PMK Number 1 of 2016, electronic documents in printed form cannot be accepted as evidence in court, even though electronic deeds have perfect and complete evidentiary power.

Based on ATR/BPN Ministerial Regulation Number 1 of 2021 concerning Electronic Certificates, Electronic Certificates have great legal force. Electronic certificates, as a form of legal evidence, facilitate access to land information for land rights holders and provide clear evidence of land ownership and the type of rights held. An encouraging step towards the digital era and the implementation of electronic government in Indonesia is the use of electronic certificates. PP Number 18 of 2021 Article 84 states that registration must be done electronically.

The possibility of disputes arising due to duplicate certificates and attempts at counterfeiting can be reduced by using digital land certificates. By implementing this technique, the danger of certificate forgery or duplication can be reduced while increasing data security and validity. This can help reduce the number of property ownership disputes and increase rights holders' trust in electronic certificates (Hakim, 2021). Through a system connected to many IT platforms belonging to the National Land Agency, the first electronic land registration has been completed. In fact, the public only needs to access the portal to submit a registration application, upload related papers, and comply with the established protocols.

In the transformation of electronic certificates, three problems arise, namely as follows:  
**Security and Data Privacy**

The first problem is, in the current era of increasingly digitalization, data security and privacy are very sensitive topics. Likewise, physical land certificates will eventually be replaced by electronic certificates. As more and more literacy in Indonesian society regarding technology, public attention and concerns regarding the security system have raised many questions. The Minister of ATR/BPN emphasized that the system that will be used is guaranteed to be competent in terms of security. However, because Indonesia is still facing a data leakage emergency, there are a number of community groups who feel safe by digitizing electronic certificates with the e-KTP case going viral due to the problem of personal data leakage. In terms of data security, it is found that electronic networks are increasingly being used for data leaks. The material purportedly being disseminated is becoming more and more objectionable by the day, starting with copies of ID cards and personal information, and most recently, the recent disclosure of selfies of citizens and their nationalities. This data leak needs special attention. The solution must be thorough down to the roots. It is unimaginable that electronic land certificates that are important and tend to be kept secret are leaked. It is even worse if there is a change in location, boundaries and extent of information. This is of course also not expected by the Government. Therefore, this delay is not in the common interest and broad interests.

### **Lack of Legal Certainty**

The second problem is that the lack of legal certainty over land always gives rise to disputes in every region of Indonesia. Disputes occur at various levels of society, even between agencies and the community and between one agency and another agency. This implies that legal proof of land ownership in the form of a land certificate is very important. The existing land certificates are not commensurate with the land area of Indonesia, this indicates that there are still lands that have certificates or are not registered. Land registration should provide subjective legal certainty, namely regarding legal entities and individuals who have rights to

land, as well as aspects of objective legal certainty, such as territorial boundaries, size, location and area of land owned (Sholiha, 2024).

Regarding the certainty of unequal rights, we realize that there are still many people in Indonesia who do not have legal proof of ownership, namely land certificates. Those who do not yet have a certificate have sometimes occupied the land for more than 30 (thirty) years in good faith (rights processing). Those who live and inhabit land without ever being given information regarding certainty of rights in the form of a certificate, are parties who are vulnerable to becoming victims of substantial injustice. The government must first concentrate on the process of resolving the issue of guaranteeing rights. The aim of this attention is to prevent future losses for the community due to the electronic land certificate policy. For Cicero, avoiding harm to others is a fundamental aspect of justice that must be understood. Because harming others is a principle of justice (*fundamentum iustitiae primum est ne cui noceatur*).

### **Land Issues Related to Land Disputes**

The third problem is related to land disputes which are still a major concern in Indonesia. According to data from the National Land Agency, there are 126 million existing lands. This matter should be taken care of first by the government in determining the size of the land, because in the field there are many discrepancies with the certificate, either the size does not match, or there are still disputes. Based on 2020 data, there are 82 million lands that have been registered, or only 30% have not been registered and do not have a certificate, and many of these lands have double certificates. There are land problems in 520 villages, consisting of 665 thousand hectares of land spread across 20 regions of Indonesia, and many more are being sued in court (Hasima et al., 2023).

PT Salve Veritate's lawsuit in June 2021 is among the latest cases filed by state land officials. The Head of the DKI Jakarta BPN Regional Office and ten other people, including the Head of the East Jakarta Land Office, were among the land officers involved in this settlement case after being recruited. They were all immediately subject to heavy sanctions and dismissed from their positions (disrespectful dismissal). The ATR/BPN Ministry promised to continue to resolve existing problems and not protect its employees regarding land conservation issues. The occurrence of this land case shows that land management in Indonesia is still lacking, as is the legal certainty of land rights. This shows how land has not been able to improve or provide welfare for the community.

It needs to be emphasized that the concept of *lex posterior derogat legi priori*, which states that new laws are exceptions to existing laws (old laws), will inevitably regulate all new policies. The introduction of a Minister of Agrarian Regulation regulating electronic land certificates has the potential to change the way analog (traditional) certificates are viewed. This modification also relates to court evidence. Since 2018, the ATR Ministry has documented 242 cases related to the land mafia. Other data shows that the Ministry of ATR/BPN recorded that as of October 2020 there were 9,000 cases in court related to land. Accelerating the resolution of the conflicts above should be prioritized over the electronic land certificate policy. By resolving the above conflict, it makes it easier for the government to collect data and provide electronic certificates to the entitled parties.

The obstacles in implementing electronic certificates include:

1. Electronic certificates depend on accurate land parcel map data to be effectively implemented. Without comprehensive mapping, there is a risk of data discrepancies, which could lead to overlapping ownership or land disputes. Therefore, the government through the Ministry of Agrarian Affairs and Spatial Planning must ensure that all land parcels are identified, measured and digitally recorded. In Indonesia, every land parcel has been mapped and verified to support the implementation of this system. With the availability of valid land maps, the process of land registration and certification can be carried out faster,

- more transparently, and more safely, supporting the modernization of the land system in Indonesia.
2. The implementation of electronic certificates requires an integrated and valid data system across various government agencies. Population data plays an important role in determining the legal landowner, while tax data is related to the landowner's financial obligations to the state. If data from various institutions is not updated or is inaccurate, there can be discrepancies that could potentially lead to ownership disputes or errors in tax calculations. Therefore, the government needs to make improvements in the population registration system and taxation before implementing digital land certification. Data integration between institutions also requires standardization and good coordination so that the electronic certificate system can run effectively and efficiently without causing administrative problems in the future.
  3. Because certificates are legally binding proof of ownership, legal norms regarding electronic certificates still require improvement. Legislation must be re-synchronized and harmonized to prevent the emergence of new problems in the registration and data processing processes.
  4. In the application of electronic certificates, aspects of legality and legal protection are the main concerns for the Legislative Body. Data security, the validity of electronic documents in the legal system, and the potential risk of misuse or forgery are factors that must be studied in depth. In addition, the distribution of electronic certificates that have not fully met the standards raises concerns regarding their effectiveness and acceptance in the community. Therefore, before giving full approval, the Legislative Body needs to ensure that regulations, infrastructure, and security systems are ready to guarantee the validity and legal protection of electronic land certificate holders.
  5. The transition to digital systems in land administration faces the challenge of a technology gap between urban and rural areas. Many people in urban areas are accustomed to using digital services, while in rural areas there are still obstacles such as limited internet access, lack of technological devices, and low public understanding of digital systems. If electronic certificates are implemented without taking into account infrastructure readiness and digital literacy, it has the potential to create a gap in access to land services. Therefore, the government needs to ensure adequate education and technological infrastructure development before implementing this system widely.

The security and reliability of information technology systems in land administration is a major concern, especially if the bureaucracy is not yet fully organized. Experience in population administration systems, such as electronic ID cards, shows the potential for data loss, information leakage, or misuse of data by irresponsible parties. If electronic land certificates are implemented without a strict security and supervision system, similar risks could occur in the management of land ownership data. Therefore, before implementing comprehensive digitization, the government needs to ensure a strong cybersecurity system, transparency in data management, and a clear legal protection mechanism to prevent misuse of land data.

## CONCLUSION

Based on the description above, it can be drawn from the conclusion that there are three legal problems of transformation certificate electronic, that is First data security and privacy side, second lack of legal certainty over land, and third Land problems are land disputes that still occur frequently. Due to problems with the governance system and neglect of previous land authorities, the agrarian problem has become an eternal problem that has never been resolved. This also applies today, as new problems emerge in the land sector and old problems cannot be resolved completely. The policy of launching electronic certificates based on the Minister of Agrarian Affairs/Head of National Land Agency Regulation Number 1 of 2021 has the potential to cause legal problems in the land law enforcement process, because the current level of



electronic data security in Indonesia is still very low. The advice that the author can convey is that there needs to be increased supervision of the security system used in the electronic land registration process and confirmation that electronic certificates have an equal position with physical certificates in land law, and there is a need for clear regulations related to sanctions for parties proven to have committed violations in the management of electronic land certificates.

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