

Application of Electronic Land Certificates in Indonesian Digital Legal Perspective

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Abstract

This research on the existence of electronic certificates raises profound questions about legal certainty. One of the main challenges is to ensure that electronic certificates do not have the same legal force as physical certificates, so the problem is how to implement electronic land certificates in the perspective of Indonesian digital law and the challenges of implementing electronic land certificates in the perspective of Indonesian digital law. The aim is to find out and examine the implementation of electronic land certificates in the perspective of Indonesian digital law. The results of the study are that electronic certificates are expected to be effective in national land management, in various aspects. Specifically for the aspect of internet availability for rights holders, it will be ensured that people who live in less internet-friendly locations will be able to be served at the land office using the Land Office's internet infrastructure and some of the challenges are in terms of Data Security factors, Technology Infrastructure, Education and Training, Legal Compliance, Accessibility and Dependence on Technology.

Keywords: *Land Certificate, Electronic, Digital Law.*

Introduction

Soil is a very important basis for life. In this modern era, scientific discoveries continue to show the significant role of soil in life. Land plays a very important role, not only as a medium for production, but also as a location for residence. (Assidiqih, 2023). In a legal context, land refers to the part of the earth's surface that can be owned or controlled by individuals, groups or legal entities and as legal proof of ownership or control of a plot of land, a certificate is required.

The certificate is regulated in Article 1 number 20 of Government Regulation Number 24 of 1997 concerning Land Registration which explains that: "A certificate of proof of rights as intended in Article 19 paragraph (2) letter c UUPA for land rights, waqf land management rights, ownership rights over apartment units and mortgage rights, each of which has been recorded in the relevant land book." A certificate according to Government Regulation Number 10 of 1961 is a Certificate of Proof of Rights consisting of a copy of the Land Book and Measurement Letter, with a cover bound together, the form is determined by the Minister of Agrarian Affairs/Head of the National Land Agency (Chomzah, 2003).

According to Achmad Chomzah, to date there are 3 (three) types of certificates, namely (Chomzah, 2003):

A Certificate of Land Rights is Usually Called A Certificate

Certificates of land rights which, prior to Law Number 4 of 1996 concerning Mortgage Rights, were known as Mortgage Rights Certificates, the names hypoteek certificates and Creditverband certificates are no longer used, they are simply called Mortgage Rights Certificates.

Certificate of Ownership of the Apartment Unit.

Land certificates issued based on the Basic Agrarian Law (UUPA) have significant evidentiary power (as regulated in Article 19 paragraph (2) letter c). This means that the evidentiary power of the certificate is not absolute, but quite strong. As long as the physical data and juridical data match the information contained in the Land Book and Measurement Letter, the data is considered valid, unless it can be proven otherwise

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in court. The impact in Indonesia is that land certificates can still be modified if there are deficiencies in legal or administrative aspects at the time of issuance. This decision was taken to provide legal protection to individuals who acquire or own land with good intentions (Aniscasary and Ramasari 2022).

The most interesting process discussed in the practice of land administration in Indonesia and which is often discussed among the public is "land registration". Land registration is the most important stage (process) and has benefits in various aspects. Economically, land registration has an important meaning for certainty of land ownership, land sales price, and certainty of buying and selling. Then from a legal perspective, land registration means ensuring land rights. Meanwhile, administratively, land registration (both registration for the first time and subsequent registration) is useful as a regulatory effort to achieve orderly land management.

The digital era is an era where every life-supporting activity is facilitated by technology to make it more practical and modern. In Indonesia, developments towards the digital era are no longer unstoppable, indirectly following the needs and desires of the people themselves, who want everything to be more practical and efficient. In the land sector, as part of the modernization of land services, computerized land services have begun to be implemented on documents created in the form of electronic documents. This rule is contained in the Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency (BPN) Number 1 of 2021 concerning Certificates effective from 12 January 2021. Launch of electronic land certificates, which was signed by the Minister of Agrarian Affairs Sofyan Djalil on 12 January 2021. Regulations regarding certificates electronics in Indonesia are regulated by the ATR/BPN Ministerial Regulation.

Electronic certificates can be issued in two schemes, firstly, the processing of this certificate begins at the beginning of registration for land for which a certificate has not previously been issued. The second scheme is the process of replacing old conventional certificates with electronic certificates. Gradually the certificate will be changed from conventional to electronic. This change is not only a change to the certificate but also the land or house book. Electronic Documents themselves are any electronic information created, forwarded, sent, received, or stored in analog, digital, electromagnetic, optical, or similar form, which can be seen, displayed, and/or heard via a computer or Electronic System, including but not limited to writing, sound, images, maps, designs, photos or the like, letters, signs, numbers, access codes, symbols or perforations that have meaning or can be understood by capable people understand it.

However, the existence of electronic certificates raises deep questions regarding legal certainty. One of the main challenges is ensuring that electronic certificates do not have the same legal force as physical certificates. This is important to provide legal protection for land owners and prevent disputes that could arise due to unauthorized transfer of rights.

In Indonesia, regulations regarding electronic certificates are still in the development stage. Despite efforts to accelerate the digitization of land administration, many parties still doubt the validity and security of electronic certificates. The need to create systems that can ensure data integrity, authentication and information accessibility is becoming increasingly urgent. In this context, there needs to be cooperation between the government, stakeholders and the community to create a clear and strong legal framework.

The problems in this research are:

- How do electronic land certificates apply from an Indonesian digital legal perspective?
- What are the challenges of implementing electronic land certificates from an Indonesian digital legal perspective?

The objectives of this research are:

- To find out and study the application of electronic land certificates from an Indonesian digital legal perspective.
- To find out and examine the challenges of implementing electronic land certificates from an Indonesian digital legal perspective.

Library Review

Land Certificate

According to the Big Indonesian Dictionary, a certificate is a written or printed sign or certificate (statement) from an authorized person which can be used as proof of ownership or an event. According to Bachtiar Effendi, a land certificate is: "a copy of the land book and a copy of the measurement letter, both of which are then bound together and given a cover whose shape is determined by the Minister of State" (Effendi, 1993).

Article 32 PP Number 24 of 1997 states that:

A certificate is proof of valid rights, if the physical data and juridical data match the data in the measurement letter and land rights book in question.

In the event that a plot of land has been legally issued a certificate in the name of a person or legal entity who acquired the land in good faith and actually controls it, then other parties who feel they have the right to the land cannot demand the implementation of that right, if within 5 years since the issuance of the certificate, they have submitted a written objection to the holder of the certificate rights and the head of the land office concerned or have not filed a court action regarding the control or issuance of the certificate.

Article 19 paragraph (2) letter c UUPA states that: Registration as stated in paragraph (1) of this article includes the provision of letters of proof of rights which act as strong evidence. A certificate is an absolute piece of evidence in the sense that as long as it cannot be proven otherwise, the physical data and juridical data contained therein must be accepted as true information. As a certificate, as strong evidence, the certificate has the following benefits:

Guarantees legal certainty because it can protect the certificate owner against interference from other parties and avoid disputes with other parties.

Make it easier for businesses to obtain credit with certified land.

With a measurement letter and certificate, the land area is certain, so that the determination of Land and Building Tax (PBB) will be fairer.

Land Registration

Land registration is an important means of realizing legal certainty regarding land rights, which in modern society is a State task carried out by the Government for the benefit of the people, in order to provide guarantees of legal certainty in the land sector. The land registration system in Indonesia, which is categorized as adhering to a mixed system of both, is a negative system with a positive tendency, namely that the State does not guarantee the absolute truth of the data presented in the certificate, but as long as no other person files a lawsuit in court who feels they have more rights, then the data in the certificate is a sign of strong proof of rights. The land registration process is proven and marked by the issuance of a certificate as proof of title in the name of a certain authorized rights holder (Gaol, 2017).

The definition of Land Registration in the general provisions of Article 1 of Government Regulation Number 24 of 1997, namely "Land registration is a series of activities carried out by the government

continuously, continuously and regularly, including the collection, processing, bookkeeping and presentation and maintenance of physical data and juridical data, in form a map and list of land parcels and apartment units, including the provision of certificates as proof of rights for land parcels that already have rights and ownership rights to housing units. Arrange and determine certain rights that burden it."

Land registration according to Boedi Harsono is: "A series of activities carried out by the State/Government continuously and regularly, in the form of collecting certain information or data regarding certain lands in certain areas, processing, storing and presenting them for the benefit of the people, in order to provide guarantees of legal certainty in the land sector, including the issuance of proof of evidence and its maintenance." (Harsono, 2008).

Based on the above understanding, it can be concluded that land registration is a state duty carried out by the Government for the benefit of the people in order to ensure legal certainty in the land sector.

Electronic Certificate

The latest regulation regarding electronic certificates is the Regulation 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. This regulation officially revokes the previous regulation, namely Minister of Agrarian Affairs/Head of BPN Regulation No. 1 of 2021 concerning Electronic Certificates.

Minister of Agrarian Affairs/Head of BPN Regulation Number 3 of 2023 states that a Certificate is a letter of proof of rights as intended in Article 19 paragraph (2) letter c UUPA for land rights, management rights, waqf land, ownership rights to apartment units and mortgage rights, respectively. -each has been recorded in the relevant Land Book. Electronic Certificate, hereinafter referred to as el Certificate, is a Certificate issued through an electronic system in the form of an electronic document whose Physical Data and Juridical Data have been stored in BT-e1.

The Electronic System provided by the Ministry of Agrarian Affairs and Spatial Planning of the National Land Agency, hereinafter referred to as the Electronic System, is a series of electronic devices and procedures that function to prepare, collect, process, analyze, store, display, announce, transmit and/or disseminate electronic information in activities Land Registration.

Digital Law

The term "Digital Law" refers to a set of laws and regulations that govern behavior and transactions in the digital world involving information technology, the internet, and all forms of electronic communications. It covers areas of law related to cyber security, data privacy, intellectual property rights, business electronics, and other legal issues related to the digital world (Wibowo, 2023).

Digital Law reflects the reality that many human activities, whether in the context of business, entertainment or communication, are increasingly connected to digital technology and the internet. Therefore, this regulation needs to be cross-border and global to overcome the challenges and problems that arise in the ever-growing digital world. These legal developments and changes may vary depending on the country or region, but there are also efforts to reach global agreements and standards in some aspects.

Digital Law has significant benefits in the context of globalization and the development of digital technology. Its existence helps create a consistent and coordinated legal framework throughout the world to address challenges arising from the use of information technology and the internet. The benefits involve protecting individual rights regarding data privacy and cybersecurity, providing a clear framework for cross-border business and e-commerce, and supporting the enforcement of intellectual property rights globally.

Method

Research Approach

This research uses a problem approach in the form of a normative juridical approach. This approach is an approach that is implemented by collecting data and studying the main basic legal materials by examining legal principles and principles, legal theories, statutory norms and rules, opinions of legal experts and also other literature materials related to this research (Soekanto, 2001). This normative juridical research uses and analyzes legal documents such as various types of positive legal regulations and literature containing theoretical concepts which are then linked to the main issues discussed in this research (Soekanto, 2007). The method used in conducting this research is to examine the application of electronic land certificates from an Indonesian digital legal perspective.

Research Specifications

In this research, descriptive analytical research specifications are used, namely research that describes legal facts carried out in a comprehensive manner, and the study is carried out systematically, so that it not only carries out clarification and exploitation of a social phenomenon but also looks for interrelationships, interactions and causality of all the selected data. that have been collected. Analytical descriptives aim to provide as detailed data as possible by providing an in-depth discussion (Estuti, 2021) regarding the application of electronic land certificates from an Indonesian digital legal perspective.

Data Sources and Types

Data is a series of real information obtained from activities or the results of data collection. The source of information used in this research is secondary data obtained through a literature review.

Data Collection Techniques

Data collection is a crucial step in research. In the context of this research, data was obtained through data collection techniques, namely literature study.

Data Analysis Methods

The data analysis method in this research uses a qualitative descriptive data analysis method, where all research results are described in depth and explained according to the context studied, then arranged in sentences to facilitate understanding for readers.

Results and Discussion

Application of Electronic Land Certificates in the Indonesian Digital Legal Perspective

Land is a gift to mankind on earth that comes from God Almighty. From birth to death, humans need land. Land and humans cannot be separated, humans live and develop and carry out daily activities on the land. Humans depend for the majority of their lives on land, because land is a source of livelihood and income for humans (Fea, 2018).

Land plays a central role in Indonesia's life and economy. The rise of development in various areas of life has caused land to become a commodity that has very high economic value and is difficult to control (Sutedi, 2018). In the past, the history of individual land ownership only relied on memory or witness testimony. Of course, this is definitely not accurate, because it is known that everyone's memory will be blurry and the witnesses who provided the information will not always be alive and can be questioned.

In Indonesia, land has existed since ancient times in the sense of the relationship between land and humans, but because it is not written down or registered, it is only verbally known to whom the land belongs and its boundaries or at least one plot of land is generally known to be someone's property or inheritance. From someone to their heirs (Parlindungan, 1990). Therefore, the world of law in Indonesia is faced with a challenge to be able to create a legal framework in order to form the legal instruments needed for the "takeoff of future development". The demand for legal instruments that can meet the needs of the Indonesian people who are moving towards the threshold of modernization needs to receive the attention of all parties. Legal rules originate from the past and are no longer responsive to current legal needs, so that in a relatively short time it is necessary to update the legal system and build new laws in order to meet the demands of the times.

In an effort to realize legal certainty and certainty of rights regarding land rights for land rights holders throughout Indonesia, which is one of the main objectives of the UUPA, the law instructs the Government to carry out land registration.

Land registration in Article 1 of Government Regulation Number 24 of 1997 is a series of activities carried out by the government continuously, continuously and regularly, including collecting, processing, bookkeeping and presenting and maintaining physical data and juridical data in the form of maps and lists regarding land plots. and apartment units, including the provision of certificates as proof of rights to parcels of land to which there are already existing rights and ownership rights to apartment units as well as certain rights encumbering them.

The issuance of the certificate represents the government's support for citizens' rights to obtain legal certainty and protection. The provisions for issuing land ownership certificates are clearly regulated in Government Regulation Number 10 of 1961, especially in Article 13 Paragraph (3) that the certificate is valid proof of land rights. A land certificate is a document proving ownership rights to land as the final product of the land registration process. The land registration institution itself in Indonesia only existed in 1960 when Government Regulation Number 10 of 1961 was implemented which regulates Land Registration. This institution was born because of an order from UUPA, that one of the objectives of issuing UUPA (Law Number 5 of 1960 concerning Basic Agrarian Principles Regulations) is to provide a guarantee of legal certainty for the land rights of the Indonesian people. Article 19 of the UUPA mandates that the guarantee of legal certainty will be realized by implementing land registration throughout Indonesia (Silviana, 2021).

In an effort to strengthen legal certainty in the land sector, the Government continues to be committed to renewing and improving land administration, especially in adapting to the era of globalization. Currently, the development of information technology and electronic transactions has become a key factor in globalization which influences various aspects of life throughout the world. Rapid technological change brings transformation to the organizational structure and social dynamics of society, where the integration of information technology, media and telecommunications plays an important role (Sugianto, 2019). As time advances and technology becomes increasingly sophisticated, all aspects of life have adopted more efficient and modern technology. This includes the land registration system, which is now switching to electronic methods. This progress has changed the land system in Indonesia from a traditional and manual, paper-based one, to a digital system with the introduction of electronic land certificates, known as E-Certificates.

In Indonesia, the implementation of electronic land registration has been formalized through Minister of Agrarian Affairs/Head of BPN Regulation No. 1 of 2021 concerning Electronic Certificates which was then revoked and replaced with Minister of Agrarian Affairs/Head of BPN Regulation Number 3 of 2023. Electronic Certificates, hereinafter referred to as e-Certificates, are Certificates issued through an electronic system in the form of electronic documents whose Physical Data and Juridical Data have been stored in BT-e1.

The electronic certificate contains all documents and is stored in the National Land Agency office database. The government announced a program where land certificates will be issued digitally, with property rights holder data integrated into the land system, rather than on paper or books.

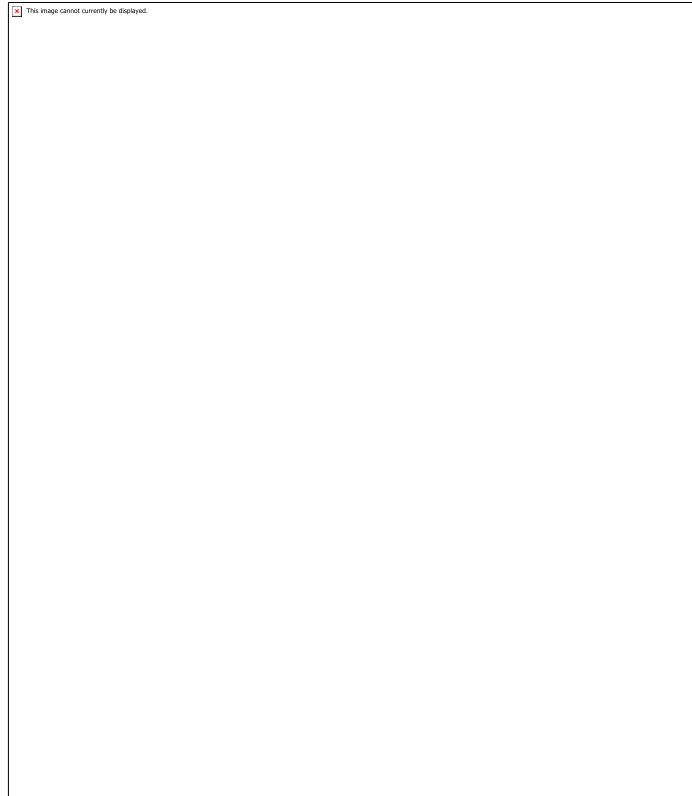
The current certificate is not withdrawn, because it remains valid. Certificate replacement is only carried out at the data maintenance service. This is why there is no mechanism or fee prepared for the public to apply for their own replacement of the certificate to be electronic. Analog certificates are stored at the Land Office as documents, if a data maintenance transaction is carried out where the output is an electronic certificate.

The main difference between an analog certificate and an electronic certificate is the physical form, type of information and method of security. Physically, the differences are; Analog certificates are handed over to the rights holder in book form, while electronic certificates are handed over in electronic/file form. For the type of information, the main addition to the electronic certificate is information about *Restriction And Responsibility*. Meanwhile, for security methods, electronic certificates use Hash Code, QR Code and TTE. These things are added value that will provide many benefits for electronic certificate holders, including minimizing counterfeiting or even minimizing illegal land transactions that are usually carried out by the land mafia. In the context of land services, it is also possible for electronic certificate holders to obtain certain land services without having to come to the land office.

The conversion of land certificates to electronic land certificates is due to:

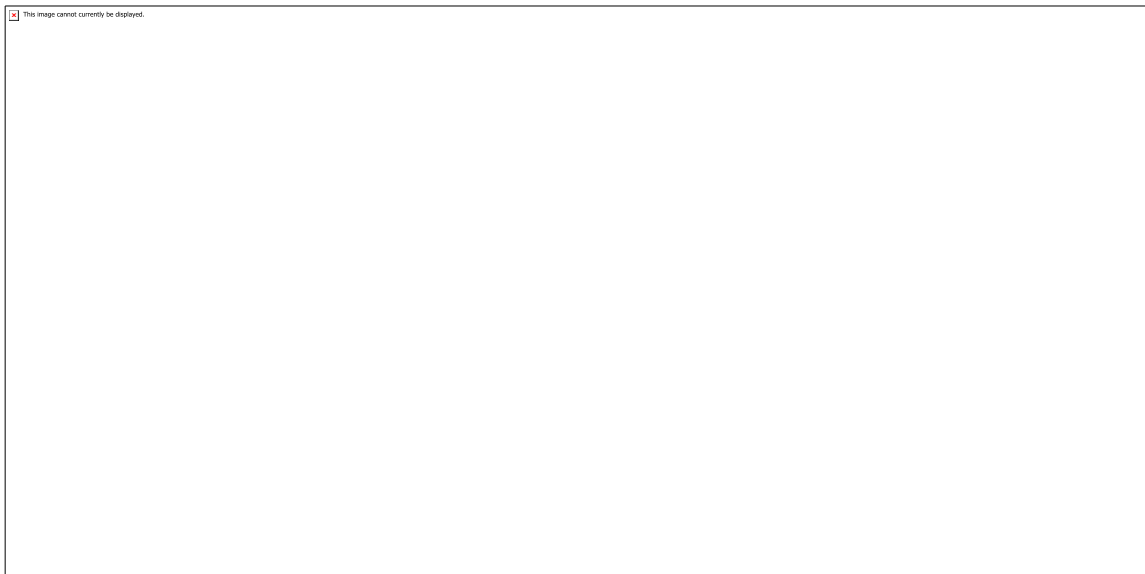
- The efficiency and transparency of land registration needs to be improved.
- Management of land records and documents will be more secure.
- The intensity of derivative services will increase, directly proportional to the increase in the number of land registered through PTSL (Complete Systematic Land Registration).
- Modernization trends and demands of the economic, social and cultural ecosystem towards industry 4.0.
- Increased natural disasters such as floods, landslides and earthquakes.
- It has been proven successful in other government agencies (Coordinating Minister with OSS, Ministry of Finance with Financial Applications, Kumham with electronic fiduciary) and the private sector in modernizing services.
- Increase the value of Registering Property in order to improve Indonesia's Ease of Doing Business ranking.
- Reducing the public's obligation to come to the land office by up to 80%.
- Public perception that land services are managed traditionally
- One thing that differentiates electronic land certificates is digital signatures.

Figure 1. Digital Signature on Certificate of Ownership



Source: Ministry of ATR/BPN

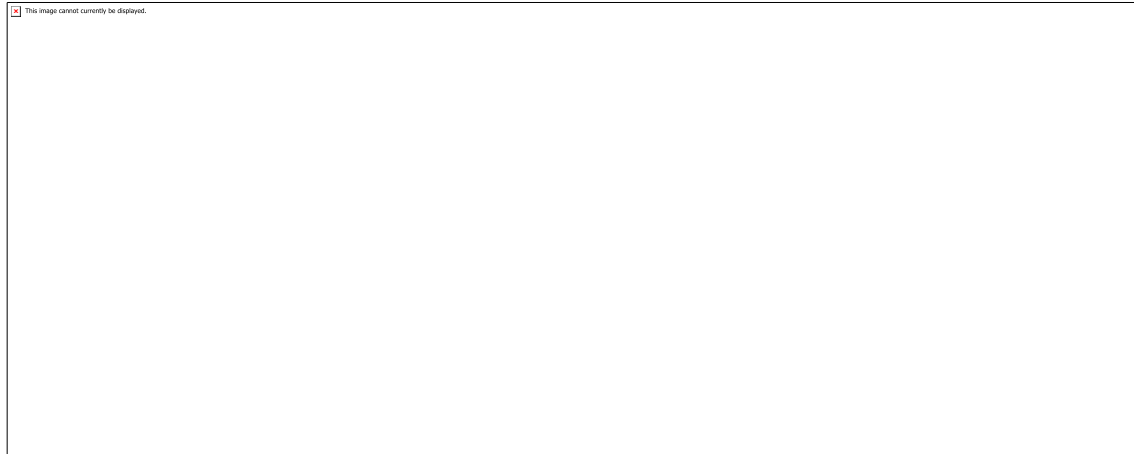
Figure 2. Security With Electronic Signatures



Source: Ministry of ATR/BPN

From the two images above, the electronic certificate has security in the form of a digital signature with a QR Code to directly access the electronic certificate and electronic signature certified by BSRe.

Figure 3. Certificate Forms in Other Countries



Source: Ministry of ATR/BPN

In figure 3 above, Malaysia and parts of Australia use Secure Paper, even though they have stored electronic documents. Indonesia and the Philippines use Electronic Documents.

The application of electronic land certificates from an Indonesian digital legal perspective is based on the Regulation of the Minister of Agrarian Affairs and Spatial Planning of the Head of the National Land Agency Number 3 of 2023 concerning the Issuance of Electronic Documents in Land Registration Activities in Article 2 which explains that:

Land Registration is carried out by the Ministry.

Land registration as intended in paragraph (1) can apply information and communication technology.

The application of information and communication technology in Land Registration activities as intended in paragraph (2) is carried out through an Electronic System.

Article 3 explains that:

The Ministry operates the Electronic System as intended in Article 2 paragraph (3) reliably and safely and is responsible for the proper operation of the Electronic System.

The Electronic System as intended in paragraph (1) is applied for activities: a. Land registration for the first time;

maintenance of Land Registry Data;

recording changes to data and information; And

transfer media.

The implementation of the Electronic System as intended in paragraph (2) is carried out in stages by considering:

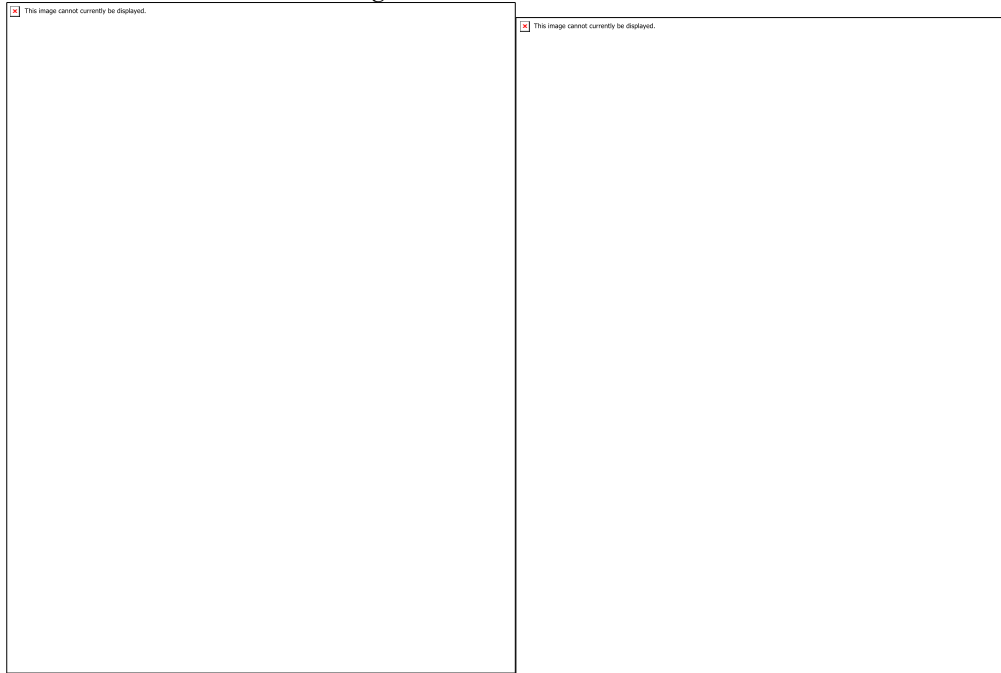
readiness of infrastructure and human resources at each Land Office;

maturity level of information technology implementation for each Land Office; and/or

service user maturity level.

The gradual implementation of the Electronic System as intended in paragraph (3) is determined by the Minister.

Figure 4. Electronic Certificate Format



Source: Ministry of ATR/BPN Number 3 of 2023

The application of electronic certificates has been discussed, with the main consideration being public readiness. Socialization regarding electronic certificates will be carried out thoroughly, before the implementation stage begins. The socialization will emphasize the main differences between analog and electronic certificates, namely physical, type of information and security methods, one of which aims to minimize duplication of certificates, as well as replacement methods, where this replacement will be carried out in completing data maintenance transactions. It will also be conveyed that there are no special changes in the land service process, except for the product output, which is all analog certificates, becoming electronic certificates as the output.

It is hoped that electronic certificates will be effective in national land management, in various aspects. Specifically for the aspect of internet availability for rights holders, it will be ensured that people who live in less internet-friendly locations will be able to be served at the land office using the Land Office's internet infrastructure.

Challenges of Implementing Electronic Land Certificates from an Indonesian Digital Legal Perspective

Technological developments have a lot of influence on daily life, causing dependence on technology itself. The technological developments that are present ultimately require both individuals and organizations to carry out transformation, one of which is digital transformation. Digital transformation can be defined as a process that aims to improve an organization by bringing about significant changes in its characteristics through the introduction of information, computer, communication and connectivity technology (Putri, 2021).

Digital transformation is generally defined as changes that affect digital technology used in all aspects of human life. Digital transformation is also a form of strategy carried out by an organization in order to survive amidst threats and challenges due to changes caused by increasingly developing technological developments. Digital transformation is the radical use of digital technology to improve company performance (Westerman, 2015). The government, in this case public service providers, must participate in the Digital Transformation trend. The Public Sector, in this case government services, cannot be inferior to the private sector.

Public sector digital transformation is a process of developing and implementing information and communication technology which aims to increase the efficiency and effectiveness of public services and increase community participation in the development process. Government digital transformation has several advantages, including (Adinegoro, 2023):

Increase the efficiency and effectiveness of public services. Public services should be accessible online so that the service process becomes faster and more efficient. For example, the process of submitting requests for documents such as Land Certificates, KTPs, SIMs, or passports can be done online without having to come to a public service office. This will save time, costs and energy for the community and increase the efficiency and effectiveness of public services.

Increase government transparency and accountability. Public information and data can be accessed online and transparently. This allows the public to supervise and monitor government performance and ensure that the government is responsible for the policies and decisions taken.

Increase community participation in the development process. Digital transformation of the public sector allows the community to participate in the development process through available applications and platforms. For example, the public can provide input and suggestions through applications provided by the government or via social media.

Increasing the country's competitiveness The government's digital transformation can also increase the country's competitiveness in the era of globalization. Countries that are able to apply information and communication technology in public services and development processes will be more efficient and effective so that they can increase the country's competitiveness at the global level.

Digital transformation is also an effort to change the land management and service system digitally or electronically. This digital transformation includes data processing, land registration, tax object assessment, certification, and data storage in digital form. With digital transformation, the ATR/BPN Ministry can increase efficiency, transparency and accuracy in land management and services. This will increase productivity and service quality so that it can speed up the development process and improve community welfare. Therefore, the digital transformation of the Ministry of ATR/BPN is very important and needs to continue to be improved. One of the focuses is digitizing land rights certificates under the name electronic certificates. The Ministry of ATR/BPN has developed electronic certification to speed up the land registration and certification process. This electronic certification allows the land registration and certification process to be carried out online and more efficiently. Land registration systems throughout the world have undergone a modernization process through the use of information and communication technology. Land title certificates which were previously issued conventionally have now been transformed electronically. An important achievement in modernizing the land registration system demonstrated by ensuring public access to online land registration and implementing infrastructure for the electronic registration process.

Electronic land certificates are issued through the National Land Agency Administration System operated by the Ministry of ATR/BPN. Electronic land certificates have the advantage that they can be accessed online and can be easily reprinted. To obtain an electronic land certificate, the land owner must submit an application to the local Land Office and fulfill the requirements set by the Ministry of ATR/BPN. The transition from conventional certificates to electronic land certificates is intended to reduce the number of property disputes, disputes and lawsuits regarding land (Syah, 2019). Although electronic land certificates

have many advantages, there are still some concerns regarding the security and authenticity of electronic documents. Therefore, the Ministry of ATR/BPN has strengthened the security system and protected electronic land certificates from counterfeiting.

In its application, electronic land certificates have several challenges that need to be overcome, including:

Data Security

Data stored in electronic land certificates needs to be kept safe from hacking attempts and unauthorized data collection. Therefore, electronic land certificates must be equipped with adequate security features such as data encryption, authentication technology and privacy protection.

Infrastructure Technology

To use electronic land certificates, adequate technological infrastructure is required, such as a stable internet connection, compatible hardware and software, and an adequate security system. This infrastructure must be available throughout the region, especially in rural and remote areas.

Education and Training

The use of electronic land certificates requires special knowledge and skills for officers responsible for managing and accessing electronic land certificates. Therefore, there needs to be an adequate training and education program to ensure that all parties involved understand the use of electronic land certificates. The human resources of the Ministry of ATR/BPN, the digital literacy that exists within them are in diverse and unbalanced conditions. The two facilities at the Land Office are good in terms of quality and quantity of facilities, infrastructure, such as electricity and internet to support performance. This special cause and effect relationship must be anticipated, giving rise to legal consequences regarding the validity of the digital certificate issued.

Legal Compliance

Electronic land certificates must meet applicable legal requirements. Apart from that, it is necessary to clearly regulate the authority and responsibilities of officers responsible for managing and accessing electronic land certificates.

Accessibility

Electronic land certificates must be easily accessible to the general public to ensure transparency and accountability in the management of land certificates.

Dependence on Technology

The use of electronic land certificates requires reliance on technology that can experience damage or system failure. Therefore, it is necessary to adopt adequate preventive and recovery measures to avoid losses due to system failure.

Conclusion

Based on the results and discussion, the conclusions are:

- The implementation of electronic land certificates from an Indonesian digital legal perspective will be carried out thoroughly, before the implementation stage begins. The socialization will emphasize the main differences between analog and electronic certificates, namely physical, type of information and security methods, one of which aims to minimize duplication of certificates, as well as replacement methods, where this replacement will be carried out in completing data

maintenance transactions. It is hoped that electronic certificates will be effective in national land management, in various aspects. Specifically for the aspect of internet availability for rights holders, it will be ensured that people who live in less internet-friendly locations will be able to be served at the land office using the Land Office's internet infrastructure.

- Challenges in implementing electronic land certificates from an Indonesian digital legal perspective. The digital transformation of the Ministry of ATR/BPN is very important and needs to continue to be improved. One of the focuses is digitizing land rights certificates under the name electronic certificates. The Ministry of ATR/BPN has developed electronic certification to speed up the land registration and certification process. This electronic certification allows the land registration and certification process to be carried out online and more efficiently. However, apart from the advantages, there are also several challenges, namely in terms of Data Security, Technology Infrastructure, Education and Training, Legal Compliance, Accessibility and Dependence on Technology.

Suggestion

From the conclusion above, the suggestions are:

- It is recommended that the government comprehensively disseminate electronic land certificates to all stakeholders.
- It is recommended that the government establish a cyber security agency specifically for electronic land certificates.

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