

The Role of the Land Deed Officials in the Implementation of Electronic Land Certification in Indonesia

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Abstract. *Land registration is a series of continuous governmental activities, encompassing the collection and maintenance of physical and juridical data, as well as the issuance of proof of land rights and the recording of other rights attached thereto. The purpose of land registration is to provide legal certainty and protection through the issuance of certificates as valid evidence. The Land Deed Official (PPAT) is authorized to draw up land deeds as the basis for the issuance of certificates, thus playing an essential role in ensuring the validity and security of transactions. In order to modernize public services and support national progress in the land sector, the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) has implemented a policy on the issuance of electronic land certificates. Based on this background, the formulation of the problems in this research is as follows: first, how is the role of the Land Deed Official (PPAT) in maintaining the validity of land certificate data within the electronic land service system; and second, what are the authority and responsibilities of the Land Deed Official (PPAT) in the process of electronic land rights services in accordance with the applicable regulations. This research employs a normative legal research method using statutory, conceptual, and historical approaches. The legal materials consist of primary legal materials in the form of laws and regulations related to land certificate registration and Land Deed Officials, secondary legal materials in the form of legal literature and previous research, and tertiary legal materials as supporting sources. The analysis is conducted qualitatively through interpretation and legal construction of statutory regulations and relevant doctrines. The results of this study affirm that the Land Deed Official (PPAT) possesses juridical authority to draw up authentic deeds related to the registration of electronic land certificates. The Land Deed Official (PPAT) ensures the security and transparency of the process, thereby reducing land disputes. The Land Deed Official (PPAT) is responsible for ensuring the validity of data through the integrated system of the Ministry of Agrarian Affairs and Spatial Planning/National*

Land Agency (ATR/BPN) by requiring the submission of electronic documents.

Keywords: *Authentic; Certificate; Electronic; System; Transformation.*

1. Introduction

Land constitutes immovable property that holds a strategic position in civil law due to its high economic value and its significant role in the socio-economic life of society. Land is not merely a living space for individuals and communities, but also serves as an object of investment and collateral for debt as regulated under the Indonesian legal system. Legal certainty over land is a fundamental necessity, as it guarantees ownership rights, regulates legal relationships between parties, and prevents land disputes. Therefore, an orderly and modern land registration system becomes an essential instrument in achieving these objectives.

In the digital era, the Government of Indonesia, through the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN), has introduced electronic land certificates as part of efforts to modernize land services pursuant to Ministerial Regulation of ATR/BPN Number 1 of 2021. These electronic certificates possess the same legal force as physical certificates and function as proof of land ownership as well as part of integrated land records within the BPN's digital system. However, this digital transformation is not merely a change in document format; it also affects administrative procedures, evidentiary legitimacy, and legal protection for right holders. Previous studies indicate that the digitalization of land registration has the potential to enhance transparency, efficiency, and the legality of land ownership. For instance, the implementation of electronic certificates may "transform the negative publication system into a positive publication system," thereby strengthening legal certainty within Indonesia's land registration system (Permadi & Herlindah, 2023).

The role of the Land Deed Official (PPAT) becomes increasingly significant in the digital context, as the PPAT is responsible for drafting land deeds that serve as the legal basis for registration, including within the electronic system. This process requires not only expertise in agrarian law but also adaptation to the use of information technology, particularly in the collection, verification, and input of digital data to ensure the validity of processed information and to prevent potential future disputes. Normative studies further demonstrate that the evidentiary strength of electronic certificates is equated with that of traditional authentic documents. Nevertheless, several challenges remain, including infrastructure readiness, personal data security, and the preparedness of human resources to comprehensively implement land digitalization (Elora, 2024).

As a modern public administrative instrument, electronic certificates are expected to strengthen legal certainty and accelerate land services. Empirical research in

certain regions concludes that electronic land registration can enhance transparency while promoting more inclusive policy implementation. However, both the public and policymakers must still consider issues such as disparities in technological access and varying levels of digital legal literacy across different regions of Indonesia (Saragih et al., 2025).

Accordingly, this study focuses on examining the role of the PPAT in safeguarding the validity of land certificate data within the electronic land service system, as well as analyzing their legal authority and responsibilities under the prevailing laws and regulations in Indonesia. This research is important in contributing to the development of digital land law and in strengthening legal, administrative, and protective aspects for land rights holders within an evolving digital system.

2. Research Methods

Legal research methodology constitutes a set of scientific procedures employed to systematically and structurally discover, examine, and verify legal truths. This study applies a normative juridical method, which focuses on the analysis of written legal norms, principles, and doctrines relevant to the issues under examination. This approach is chosen because the object of the research emphasizes legal regulations governing the implementation of electronic land services, particularly concerning the authority and responsibility of the Land Deed Official (PPAT) within the electronic land certificate system. Normative legal research positions law as written norms embodied in statutory regulations and as a system of rules analyzed conceptually and systematically to formulate prescriptive legal arguments. The normative approach is considered appropriate in examining the digital transformation of land administration, which has implications for changes in administrative authority structures and the responsibilities of public officials within the framework of a modern rule of law state (Cercel, 2021).

This research employs several approaches, namely the statute approach, the conceptual approach, and the historical approach. The statute approach is conducted by examining various regulations related to agrarian law, the office of PPAT, and electronic certificate policies in order to identify normative consistency and the legal basis of authority within the digital land service system. The conceptual approach is used to analyze legal doctrines and theories such as legal certainty, legal protection, public official liability, and the theory of authority, thereby constructing systematic legal arguments. Meanwhile, the historical approach is utilized to understand the development of land regulations from a conventional document-based system to an electronic system, as well as to assess the rationale behind digitalization policies from the perspective of public administrative reform.

The sources of legal materials in this study consist of primary, secondary, and tertiary legal materials. Primary legal materials include statutory regulations governing land law and the position of PPAT, such as the Basic Agrarian Law, the Civil Code, Government Regulations on Land Registration, Regulations concerning the Office of PPAT, the Law on Electronic Information and Transactions, and the Regulation of the Minister of ATR/BPN concerning Electronic Certificates. Secondary legal materials are derived from scholarly literature, indexed journal articles, previous research findings, theses, dissertations, and expert legal opinions relevant to the digitalization of land administration. Tertiary legal materials include legal dictionaries, encyclopedias, and official sources from state institutions that support the interpretation of primary and secondary materials.

The techniques for collecting legal materials are conducted through library research and documentary research. Library research involves tracing, identifying, and examining scholarly literature and legal journals relevant to the research theme, particularly those addressing the digitalization of land registration and its legal implications. Documentary research involves inventorying and interpreting official documents possessing authoritative legal force, including regulations and administrative policies on electronic land services. The analysis of legal materials is carried out qualitatively through systematic, grammatical, and teleological interpretation of applicable legal norms, which are then structured into logical and prescriptive legal arguments to address the research problems. This normative qualitative analysis aims to construct a comprehensive legal framework regarding the role and responsibility of PPAT within the electronic land service system as part of the broader digital reform of public administration.

3. Results and Discussion

3.1. The Role of the Land Deed Official (PPAT) in Safeguarding the Validity of Land Certificate Data within the Electronic Land Service System

a. The Role of PPAT in the Electronic Certificate Issuance Process

The Land Deed Official (PPAT) plays a central role in safeguarding the validity of land certificate data through close coordination with the Badan Pertanahan Nasional (BPN). The PPAT is responsible for collecting, verifying, and validating both juridical and physical data prior to submission into the electronic system. Such data include the identities of the parties, proof of ownership, deeds of transfer of rights, and evidence of tax payment. Within the electronic system, the PPAT not only drafts authentic deeds as the legal basis for certificate issuance but also ensures that all submitted data comply with applicable legal provisions to prevent administrative errors and potential disputes in the future. International research by Stubkjær & Çağdaş, (2021) in Land Use Policy emphasizes that digital land administration requires authoritative officials to act as “gatekeepers of legal

validity” to ensure data integrity before integration into a national electronic system.

b. Requirements, and Mechanisms of Land Certification

The issuance of land certificates involves administrative stages at the land office, including application submission, land measurement, payment of Land and Building Rights Acquisition Duty (BPHTB), and certificate issuance. Required documents include identification documents, tax evidence, sale and purchase deeds, and other supporting documents. In electronic services, the PPAT facilitates submission of documents, ensures amendments to land records (buku tanah), and monitors the issuance process digitally. Research by Lee & Walker, (2022) in Land indicates that electronically simplified procedures enhance transparency, reduce service time, and minimize maladministration within digital land systems.

c. Legal Basis of Electronic Certificates

The implementation of electronic land certificates is grounded in a hierarchical regulatory framework, including the Law on Electronic Information and Transactions and Ministerial Regulation of ATR/BPN Number 1 of 2021 concerning Electronic Certificates. Internationally, Baeck & Claeys, (2021) in Computer Law & Security Review argue that successful digital public service transformation requires harmonization between electronic regulations and personal data protection frameworks to prevent normative conflicts.

d. Elektronik Digital Transformation and System Implementation

Digital transformation in land administration is realized through the implementation of electronic certificates and the utilization of the Sentuh Tanahku application. The PPAT plays a role in converting physical certificates into electronic form by conducting physical examination and manual verification prior to digital system input. Globally, research by Bartolini et al., (2021) in Land Use Policy stresses that digital cadastre systems require strong institutional integration between deed officials and land authorities to maintain data accuracy and reliability.

e. Implementasi Challenges and Implementation Constraints

The implementation of electronic certificates faces several challenges, including certificates not yet registered with a Land Identification Number (NIB), system disruptions, limited internet connectivity, and the coexistence of physical and electronic systems.

f. System Monitoring and Evaluation

Routine monitoring and evaluation between PPAT and BPN are necessary to maintain system effectiveness. Such evaluation strengthens institutional synergy

and ensures that electronic certificate implementation remains transparent and accountable

3.2. Authority and Responsibility of PPAT in Electronic Land Rights Services

a. Legal Basis and Position of PPAT

The position of PPAT as a public official is regulated under Government Regulation Number 37 of 1998, granting authority to draft authentic deeds concerning the transfer of land rights. PPAT also supports land registration implementation pursuant to Government Regulation Number 24 of 1997. Within the electronic system, PPAT continues to exercise authenticating functions as the legal basis for recording changes of rights at the land office.

According to Setiawan et al., (2021) in Jurnal Notarius, the evidentiary strength of PPAT's authentic deeds remains legally perfect despite the administrative shift to electronic systems, as the substantive authority derives from statutory law. Internationally, Vasco et al., (2021) in Land Use Policy affirm that in digital cadastre systems, deed officials remain crucial as legal authorities who ensure transactional validity prior to electronic registration.

b. Duties, Functions, and Types of Deeds

PPAT is authorized to draft various authentic deeds, including sale and purchase, grants, exchanges, capital contribution (inbreng), division of joint rights, granting of Building Use Rights (HGB) or Right of Use (Hak Pakai), and mortgage rights (Hak Tanggungan). In electronic services, PPAT must submit deeds to the land office for digital registration and recording. The PPAT must ensure conformity between legal subjects and objects, verify tax compliance, and guarantee synchronization between legal transaction data and the electronic system. International research by Provost et al., (2022) in World Development demonstrates that digital land registration systems require strong integration between deed drafters and land authorities to avoid mismatches between legal transactions and electronic records.

c. Prinsip Tanggung Jawab dan Asas Umum Pemerintahan yang Baik

Dalam menjalankan tugasnya, PPAT wajib mematuhi asas persamaan, kepercayaan, kepastian hukum, kecermatan, pemberian alasan, serta larangan penyalahgunaan wewenang. Prinsip-prinsip ini menjadi pedoman etik dan hukum agar setiap akta yang dibuat memiliki integritas, akurasi, dan legitimasi. Dengan menjunjung asas tersebut, PPAT dapat mencegah sengketa dan menjaga kepercayaan publik terhadap sistem pertanahan

d. Verification Obligations and the Use of the MITRA System

Within the electronic framework, PPAT must be registered and verified in the MITRA ATR/BPN application to obtain access to digital services. A verified account constitutes the official electronic identity of the PPAT within the system. PPATs are required to update their data periodically; failure to comply may result in service access suspension.

This obligation underscores the importance of identity validity and system security in supporting digital land services. The transformation of land administration into an electronic system does not diminish the status of the Land Deed Official (PPAT) as a public official; rather, it reaffirms the PPAT's central role in ensuring the legal validity of land-related legal acts. Although administrative processes are digital, the authentic deed retains perfect evidentiary value and remains the primary basis for recording rights within the national land system. Moreover, the implementation of General Principles of Good Governance serves as the foundation of legitimacy in electronic services. Legal certainty, accuracy, accountability, and the prohibition of abuse of authority must remain upheld in every digital process. Digital authentication systems such as MITRA ATR/BPN function as essential legal safeguards by ensuring that all access and data modifications are conducted by authorized, verified, and accountable parties. Thus, the integration of PPAT's legal authority, good governance principles, and digital security systems forms a unified framework that guarantees legal certainty and reinforces public trust in Indonesia's electronic land services.

4. Conclusion

The conclusion of this study affirms that within the electronic-based land service system, the Land Deed Official (PPAT) continues to hold a strategic role as the guardian of the integrity and validity of land certificate data through the attribution of authority inherently vested in the office. The novelty of this discussion lies in strengthening the function of the PPAT not only as a drafter of authentic deeds but also as a digital validator responsible for ensuring the material truth and synchronization of data before its integration into the Kementerian Agraria dan Tata Ruang/Badan Pertanahan Nasional (ATR/BPN) system. Through electronic verification, online certificate checking, the use of digital signatures, and the obligation to upload documents along with statements of accountability, the PPAT serves as the primary filter determining the validity of electronic certificates while simultaneously minimizing the risks of disputes and data misuse. Accordingly, the digital transformation of land administration does not diminish the authority of the PPAT; rather, it expands the scope of legal responsibility in ensuring legal certainty, system security, and the protection of land rights in accordance with the prevailing regulatory framework.

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