

THE BINDING POWER OF ELECTRONIC SIGNATURES IN CIVIL AGREEMENTS: A COMPARATIVE STUDY OF THE CIVIL CODE AND ELECTRONIC INFORMATION AND TRANSACTIONS LAW

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Abstract

Advances in information technology have brought significant changes in the way people draft and agree to agreements, including through the use of electronic signatures. In the legal context in Indonesia, the existence of electronic signatures has been given legitimacy through the Electronic Information and Transactions Law (UU ITE). However, on the other hand, the conventional civil law system is still based on traditional principles regulated in the Civil Code (KUHPerdara). This study aims to examine the extent of the binding force of electronic signatures in the realm of civil agreements, while at the same time comparing the approach of the Civil Code and the provisions of the ITE Law. The research was conducted using a normative legal method, through a review of laws and comparative legal analysis. The results of the study show that although normatively the ITE Law has provided a legal standing for electronic signatures, the Civil Code has not fully adapted to the dynamics of digital law. This inequality can raise doubts in practice, especially in terms of proof and validity of contracts. For this reason, steps are needed to harmonize classical civil regulations and digital laws and regulations in order to provide legal certainty for the parties in agreements made electronically.

Keywords: *Electronic Signature, Civil Agreement, Civil Code, ITE Law.*

I. INTRODUCTION

The development of digital technology has brought significant changes to various aspects of life, including the practice of contracting. While previously agreements were drafted conventionally, requiring physical presence and wet signatures, these transactions can now be conducted online using electronic signatures. This transformation presents unique challenges within the Indonesian civil law framework, particularly in assessing the validity and binding force of electronic signatures as a manifestation of agreement between the parties.¹

¹ Yunita, Alifah Rahma, et al. "National Civil Law in the Digital Era: Challenges and Opportunities in Personal Data Protection." *Proceeding of Conference on Law and Social Studies*. Vol. 4. No. 1. (2023), p. 1-11

On the one hand, the Civil Code as the foundation of national contract law is still based on the classical paradigm that emphasizes the physical form and mechanism of manual signatures. On the other hand, Law Number 11 of 2008 concerning Electronic Information and Transactions as amended by Law Number 19 of 2016 (the ITE Law) has recognized the validity of electronic signatures as valid legal evidence.² The lack of synchronization between these two legal frameworks can create legal uncertainty, especially when contractual disputes involving digital documents arise and are brought before the courts. This phenomenon aligns with the increasing use of digital platforms, e-signature services, and online contracts, which have virtually eliminated physical documents. Amid these changes, an urgent need arises to understand how the national legal system is responding to the digital transformation in the aspect of contract formation. This is especially important given that Indonesia still uses the Dutch colonial-era Civil Code as the legal basis for contracts, which does not explicitly recognize the concept of digital documents and signatures.

Meanwhile, the Electronic Information and Transactions Law and its derivative regulations, such as Government Regulation No. 71 of 2019, and provisions from the National Cyber and Crypto Agency (BSSN), have more modernized regulations regarding the form and validity of electronic signatures, including the classification of certified and uncertified electronic signatures. However, in practice, not all stakeholders (including judges, notaries, and business actors) have a uniform understanding and application of the evidentiary and binding power of electronic signatures. This gap between normative provisions and practice raises crucial questions: How are electronic signatures regulated in Indonesia's civil law system? Do electronic signatures have the same binding force as conventional signatures under the Civil Code and the Electronic Information and Transactions Law? What are the legal implications of using electronic signatures in civil contract practice?

II. RESEARCH METHOD

This research is a normative legal research that aims to examine the binding force of electronic signatures in civil agreements through a statutory and comparative legal approach. The statutory approach is used to analyze the provisions in the Civil Code and the ITE Law, while the comparative legal approach is carried out to see the suitability and differences in the regulations of the two legal regimes. The types of data used are secondary data in the form of primary legal materials (statutory regulations), secondary legal materials (literature and expert opinions), and tertiary legal materials (dictionaries and legal encyclopedias). Data were collected through library studies and analyzed qualitatively using descriptive-analytical methods.³

² Lopian, Randy. "Regulation of the Use of Electronic Signatures According to Law No. 19 of 2016 Concerning Electronic Information and Transactions." *Journal: Private Law* Vol. 13, No. 1, (2024), p. 1-13

³ Soerjono Soekanto and Sri Mamudji. *Normative Legal Research: A Brief Overview*. Jakarta: Rajawali Press, 2011, p. 35

III. ANALYSIS AND DISCUSSION

Theory of Contract Law in the Context of Electronic Signatures

In Indonesian civil law, the theory of contract law is built on a number of fundamental principles outlined in the Civil Code (KUHPerdata). When discussing the binding force of electronic signatures, it is important to relate them to the fundamental principles of contracts, namely: freedom of contract, consensualism, and good faith. These three principles provide the theoretical basis for assessing whether electronic signatures are legally acceptable in modern contract practice.⁴

1. Fundamentals of Freedom of Contract (*Freedom of Contracting*)

This principle refers to Article 1338 paragraph (1) of the Civil Code, which states that: "All agreements made legally apply as law for those who make them." This means that the parties are free to:

- a. Determining the content and form of the agreement;
- b. Selecting a contract partner;
- c. Determine how to express agreement, including the use of electronic media and electronic signatures.

In the context of electronic agreements, freedom of contract provides legal space for the use of electronic signatures, as long as they do not conflict with law, public order, or morality. This principle supports technological flexibility in contractualizing legal relationships between parties, including the use of digital systems, email, and certified electronic signature platforms.

2. The Principle of Consensualism

This principle states that an agreement is considered valid when the parties reach an agreement, without requiring a specific formal form, unless otherwise specified by law. This aligns with Article 1320 of the Civil Code, which stipulates that a valid agreement requires "the consent of those who bind themselves." In the digital context, this agreement can be realized through actions such as:

- a. Click the "agree" button (*clickwrap*);
- b. Fill out the digital form and sign it electronically;
- c. Using an electronic signature verified by the certification organizer.

Thus, electronic signatures can be seen as a modern form of consensus, as long as their validity can be proven and there is no flaw in the will.

3. Good Faith Foundation (*Good Faith*)

This principle is contained in Article 1338 paragraph (3) of the Civil Code, which stipulates that: "Agreements must be carried out in good faith." In the realm of digital contracts, this principle is important for:

⁴ Salim HS. *Contract Law: Theory and Techniques of Contract Drafting*. Jakarta: Sinar Grafika, 2016. p. 27

- a. Evaluating whether the parties intend seriously and honestly in using electronic signatures;
- b. Determining whether the use of electronic signatures is not manipulated or misused to the detriment of other parties.

For example, someone who forges a digital signature or agrees to an agreement without understanding its substance could be considered a breach of the principle of good faith. Therefore, the validity of an electronic signature depends not only on its form, but also on the integrity and will of the parties.

Theory Legal Validity

Theory legal validity explains that a legal action, including an agreement, is considered valid if it fulfills the formal and material requirements determined by positive law.⁵ In the context of civil agreements, the validity of a contract is determined by the fulfillment of the elements in Article 1320 of the Civil Code, namely:

1. Agreement of the parties;
2. Legal capacity to make agreements;
3. A particular object;
4. A legitimate reason.

In the digital realm, this theory raises the question of whether electronic signatures can fulfill the formal requirements as a “sign of agreement.” In Article 11 of the ITE Law, electronic signatures are considered valid and have legal force, as long as they fulfill the elements of authentication, data integrity, and can be verified.⁶ Therefore, from the perspective of *legal validity*, as long as the electronic signature can be identified, not denied, and its truth can be proven, then it fulfills the formal requirements and is valid according to law.

Legal Convergence Theory

The theory of legal convergence explains that in a constantly changing and digitalized society, the legal system must evolve by integrating old legal norms with new legal realities.

This convergence does not necessarily mean total change, but rather adjustment through progressive interpretation, harmonization of regulations, or the creation of new, complementary laws. In the context of this journal, convergence theory is important for understanding:

1. How classical civil law can coexist with the ITE Law without eliminating each other.

⁵ Putra, I. Komang Mahesa, "Application of Article 1320 of the Civil Code to the seller's responsibilities in sales and purchase agreements for goods via the internet." *Journal of Legal Analogy*, Vol. 2, No. 1 (2020), p. 73-77.

⁶ Putri, Wahyu Suwena, and Nyoman Budiana. "The Validity of Electronic Contracts in E-commerce Transactions from the Perspective of Contract Law." *Journal of legal analysis*, Vol. 1, No. 2 (2018), p. 300-309.

2. The importance of establishing doctrine and jurisprudence that is responsive to the use of digital technology.
3. The role of judges, academics, and regulators in creating synchronization between the norms of the Civil Code and the ITE Law, so that they remain relevant to the dynamics of digital contracts.

Under this theory, the use of electronic signatures is not seen as a threat to traditional law, but rather as part of the legal transformation toward a modern, technology-based society. This integration of classical and modern law, including the Civil Code and the Electronic Information and Transactions Law, is essential.

Regulation of Electronic Signatures in the Indonesian Civil Law System

Indonesian civil law does not explicitly regulate electronic signatures. The Civil Code, a product of colonial law that remains the primary reference in contract law, establishes a contractual framework based on classical principles such as consensualism and the physical formality of documents. In this context, the presence of a signature is conventionally viewed as the primary means of demonstrating a valid agreement between parties. No article in the Civil Code directly mentions or accommodates electronic or digital signatures.⁷

However, the needs of an increasingly digitalized society have pushed the state to establish a more responsive legal framework. This was then addressed through regulations in Law Number 11 of 2008 as amended by Law Number 19 of 2016 concerning Electronic Information and Transactions (ITE Law). Article 11 of the ITE Law explicitly states that electronic signatures have legal force and valid legal consequences, as long as they meet the requirements as stipulated in Article 11 paragraph (2), such as the ability to identify the signatory, the linkage of the signature to the signed data, and the guarantee of information integrity.

Furthermore, strengthening technical regulations regarding electronic signatures is also regulated in Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and Transactions, as well as the National Cyber and Crypto Agency (BSSN) regulations governing the implementation of electronic certification. In this regulation, two types of electronic signatures are recognized, namely:⁸

1. Certified electronic signature, which uses the digital certificate infrastructure of an authorized provider;

⁷ Wahyuni, Eka, Sufirman Rahman, and Andi Risma. "The Validity of Digital Signatures/Electronic Signatures Reviewed from the Perspective of Civil Law and the ITE Law." *Journal of Lex Generalis (JLG)*, Vol. 3, No. 5 (2022), p. 1082-1098.

⁸ Falaq, Muhammad Rava Imam, and Muhammad Tanzil Multazam. "The Importance of Electronic Signature Certification in Online Loans." *Journal Customary Law* Vol. 1. No. 3 (2024), p. 1-9.

2. Uncertified electronic signatures, which while valid, have more limited evidentiary power.

Normatively, the Electronic Information and Transactions Law (ITE Law) and its derivative regulations have recognized electronic signatures as part of Indonesia's positive legal system.⁹ However, systematically, there has not been direct integration between this provision and the Civil Code, especially in the aspects of proof and the application of the principles of agreements.

In practice, some online agreements (such as *clickwrap agreement*, digital signature in PDF, or application *fintech*) are still implemented and recognized by the parties, but this recognition often lacks the guarantee of evidentiary force in court, especially if an official electronic certification system is not used. This creates potential legal uncertainty in practice, particularly when electronic contracts are brought to court.

Thus, the emergence of electronic signatures as part of the development of digital law should be viewed not merely as a technological innovation, but also as a challenge to reconstruct the civil legal system to be more responsive and adaptive. Harmonization between the Civil Code and the Electronic Transactions and Transactions Law is a strategic step to ensure that fundamental principles of contract law remain relevant and can be effectively implemented in the digital era, while guaranteeing equal legal protection for parties in electronic contracts.

Equality of Binding Power of Electronic Signatures with Conventional Signatures according to the Civil Code and the ITE Law

Within the framework of Indonesian civil law, a signature serves primarily as proof of agreement between the parties to an agreement. The Civil Code, specifically Articles 1320 and 1338, does not explicitly specify a signature as a requirement for a valid agreement. However, conventionally, a wet signature is understood as a concrete and valid form of agreement according to customary civil law.

Problems arise when legal practice and technology expand beyond the text of the law. In the digital age, many agreements are made online, and agreements are conveyed through electronic signatures, whether certified or not. The Civil Code does not actually prohibit electronic signatures, because the principle of consensualism in contract law allows agreements to occur without special formalities, unless required by law. This means that as long as the parties agree and the legal requirements of the agreement are met, any form of agreement (including those expressed electronically)

⁹ Dahlan. "The Valid Conditions for Online Sales and Purchase Agreements Made by Minors According to the Civil Code." *Malahayati Law Journal* Vol. 4, No. 1 (2023), p. 1-13.

can be considered valid and binding.¹⁰

Furthermore, the ITE Law expressly recognizes electronic signatures. Article 11 paragraph (1) states that electronic signatures have legal force and valid legal consequences. This recognition is reinforced by Article 11 paragraph (2), which provides technical and legal criteria, such as identification of the signatory, information integrity, and the relationship between the signature and the signed document. In practice, certified electronic signatures are considered to be legally stronger because they involve a third party that guarantees the validity of the parties' digital identities (namely the Electronic Certification Provider). Meanwhile, uncertified electronic signatures, although valid, have lower evidentiary power when compared to wet or certified signatures.¹¹

Although the Civil Code does not explicitly regulate the form of electronic signatures, the principles of consensualism and freedom of contract within the civil law system allow for non-conventional forms of agreement, including those executed digitally. Therefore, legally, electronic signatures have the same binding force as conventional signatures, as long as they fulfill the requirements for a valid agreement and can be proven valid.

Legal implications of the use of electronic signatures in civil agreement practice

The development of information technology and the digitalization of transactions have brought significant changes to the way society creates and enters into agreements. One crucial aspect of this transformation is the use of electronic signatures as a form of authentication and validation in civil contracts. Normatively, the use of electronic signatures has been legally recognized through Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE), which states that electronic signatures have valid legal force and consequences.

However, the application of electronic signatures in civil law practice gives rise to a number of legal implications that need to be considered, both from the aspects of validity, evidentiary power, and legal certainty.

- a. First, in terms of the validity of the agreement, the use of electronic signatures remains subject to the provisions of Article 1320 of the Civil Code concerning the requirements for a valid agreement. As long as the parties have legal capacity, provide consent, and the contents of the agreement do not conflict with the law, then the form of the signature, whether electronic or conventional, does not pose

¹⁰ Daffa, Muh Faraz, Sufirman Rahman, and Abdul Qahar. "The Probative Strength of Electronic Signatures as a Tool of Evidence in Civil Matters." *Journal of Lex Philosophy (JLP)* Vol. 4, No. 1, (2023), p. 205-221.

¹¹ Syakbani, Baehaki. "The Evidential Power of Electronic Documents with Electronic Signatures in Civil Court Proceedings." *Valid Journal*, Vol. 10, No. 4, (2013), p. 63-69.

a legal obstacle. Therefore, electronic signatures can be used legally in civil agreements, as long as they are not excluded by law or do not require a specific form of authentication, such as a notarial deed.

- b. Second, from a legal evidentiary perspective, electronic signatures present unique challenges. Although the ITE Law stipulates the validity requirements for electronic signatures in Article 11 paragraph (2), their evidentiary strength still depends on the type of signature used. Certified electronic signatures, supported by official certification infrastructure, have stronger evidentiary value because they can be verified by a trusted third party (an electronic certification provider/PSrE). Conversely, uncertified electronic signatures have a weaker standing in court because they do not optimally guarantee identity and data integrity.
- c. Third, in terms of legal certainty and legal protection, the use of electronic signatures implies the need for technical standardization and unified regulations. The persistent gap between the provisions of the Civil Code and the Electronic Transactions and Transactions Law creates ambiguity in legal interpretation, particularly when disputes are brought to court. Not all judges or law enforcement officials have a uniform understanding of electronic evidence, which can influence the assessment of the binding force of a digital contract.
- d. Fourth, in practical terms, the use of electronic signatures expands access to contractual obligations across time and space. This provides a solution for the efficiency of modern civil law. However, weaknesses in personal data protection, the potential for digital forgery, and reliance on third-party service providers create new potential legal risks that must be anticipated.

Taking all these aspects into consideration, it is clear that the use of electronic signatures has broad legal implications, both in expanding the flexibility of contract formation and in demanding a more adaptive legal system for the digital era. Therefore, harmonization between classical civil law (the Civil Code) and the digital legal regime (the Electronic Information and Transactions Law and its derivatives) is an urgent need to ensure legal certainty and equal protection for parties in electronic contracts.

IV. CONCLUSION

The regulation of electronic signatures in the Indonesian legal system demonstrates a shift from a conventional civil law system to a model more adaptable to technological developments. Although the Civil Code does not explicitly regulate electronic signatures, the principles of consensualism and freedom of contract in civil law allow for the acceptance of electronic forms of agreement, as long as the legal requirements of the agreement are met.

The Electronic Information and Transactions Law (ITE Law) and its derivative regulations expressly recognize that electronic signatures have legal force and legal consequences. This recognition makes electronic signatures, especially certified ones, legally binding and equivalent to conventional signatures. Although challenges remain in the practice of providing evidence in court, particularly in terms of technical aspects, the understanding of law enforcement officials, and the readiness of electronic evidence systems.

The legal implications of using electronic signatures indicate that this form of digital authentication has become a reality in modern civil contracts. However, the resulting complexities, such as potential disputes over the validity of signatures, identity authentication, and evidentiary weight, require stronger legal harmonization between the classical civil law system and digital regulations.

Based on the conclusions that have been outlined, several suggestions can be given as an effort for improvement and future development:

- a. Harmonization of Regulations: The government and lawmakers need to harmonize the provisions of the Civil Code and the ITE Law, so that regulations regarding the validity and proof of electronic signatures are more integrated and do not give rise to legal dualism.
- b. Improving Digital Legal Literacy: There needs to be training and education for law enforcement officers, notaries, advocates, and parties involved in civil dispute resolution, so that they understand the legal position of electronic signatures and the procedures for proving them.
- c. Strengthening Electronic Certification Infrastructure: The government, through BSSN and related institutions, needs to ensure the existence and reliability of Electronic Certification Providers (PSrE) that guarantee the integrity and authentication of electronic signatures in Indonesia.
- d. Implementation of the Principle of Prudence in Practice: Parties involved in digital contracts should ensure the use of certified electronic signatures and maintain adequate digital footprints to avoid legal issues in the future.

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