

# Legal Review of the Validity of Electronic Deeds in International Business Transactions: An Indonesian Notary's Perspective

**Mega Wulandari**

Universitas Narotama Suarabaya, Indonesia

Email: [megahadiatmoko@gmail.com](mailto:megahadiatmoko@gmail.com)

\*Correspondence

## ABSTRACT

**Keywords:** electronic deed; authentic deed; international business; notary.

The development of digital technology has encouraged the use of Actelectronic in international business transactions. However, the validity of electronic activities is still a legal issue, especially in Indonesia, where regulations are not fully in line with international standards such as the UNCITRAL Model Law on Electronic Commerce. This study aims to analyze the validity of electronic deeds in international business transactions through the perspective of Indonesian notaries to identify existing challenges, as well as provide recommendations for regulatory harmonization. This research uses a normative juridical method with a legal and regulatory approach, a study of legal doctrine, and an analysis of international standards related to electronic transactions. Primary data were obtained from regulatory studies such as the ITE Law and the Notary Position Law, while the data secondary comes from international standards such as UNCITRAL Model Law and eIDAS. The results of the study show that although electronic deeds are recognized by the ITE Law as a valid legal evidence tool, their application in cross-border transactions is constrained by inconformities with the Notary Position Law, which still requires physical presence and manual signatures. In addition, the lack of integration with international standards and inadequate cybersecurity infrastructure are also major obstacles. The discussion highlighted the importance of harmonization of national regulations with international standards.



## Introduction

International business transactions involve various forms of trade and agreements between parties from different countries, including trade in goods and services, investments, business contracts, strategic alliances, and other economic interactions (Ramadani & Nurliyantika, 2022). Factors such as legal, economic, cultural, and political play an important role in determining the success of these transactions. For example, Indonesia actively exports commodities such as palm oil, textiles, and electronics to major countries such as China, the United States, and Japan, while importing goods such as machinery and technology (Utarid, 2023). International transactions also include foreign investment, business cooperation, as well as franchising and licensing, such as the presence of McDonald's global brand in various countries (Wiranata, 2021). However,

there are various challenges in carrying out these transactions, including differences in legal regulations between countries, fluctuations in currency exchange rates, logistical challenges, cultural differences, and political and security risks. The transaction process usually involves negotiation, drafting contracts, payment through instruments such as letters of credit, delivery of goods, and dispute resolution through international arbitration. In addition, other challenges such as protectionist policies, data protection regulations, cybersecurity, and compliance with strict environmental standards in some countries are also major concerns in international business transactions (Supanji & Adjie, 2024).

World trade continues to grow with the global transaction value reaching \$25.3 trillion in 2023, followed by a surge in global e-commerce that reaches \$30 trillion (Wijayanti & Santoso, 2023). Indonesia shows a significant contribution in international trade with exports worth around \$300 billion, especially in the palm oil, coal, and electronics sectors. However, obstacles such as legal system differences, economic-political risks, and the need to meet global standards require solutions in the form of international cooperation and improved digital infrastructure (Sari, Kurniawan, & Haq, 2023). In the context of digitalization, Indonesia has regulated the use of electronic deeds through Law No. 11 of 2008 concerning Electronic Information and Transactions (ITE) and the update of Law No. 19 of 2016, which recognizes electronic signatures as equivalent to conventional signatures if they meet certain conditions (Girsang, Kurniawan, & Haq, 2024). Government Regulation No. 82 of 2012 also provides technical guidelines to ensure that electronic documents have legal force (Aulia, Yuliandri, & Fendri, 2019). However, at the international level, the adoption of regulations such as the UNCITRAL Model Law on Electronic Commerce and Electronic Signatures has not been fully evenly distributed, including in Indonesia, which presents additional challenges in cross-border transactions (Nase & Alfiana, 2021).

In Indonesian civil law, electronic deeds that meet formal requirements have the same legal force as conventional notary deeds (Iriantoro, 2022). However, in international transactions, the recognition of electronic deeds faces challenges due to differences in legal systems between countries (Widyastuti, 2021). Developed countries such as the European Union and the United States have adopted stricter regulations, such as Regulation (EU) No. 910/2014 (eIDAS Regulation) in the European Union, which provides a legal basis for the use of electronic signatures in cross-border transactions (Kurniawan, Dewi, & Wisnuwardhani, 2023). On the other hand, Indonesia still faces challenges in aligning its domestic regulations with international standards, such as the UNCITRAL Model Law, especially related to the validity of electronic deeds in international transactions (Bungdiana & Lukman, 2023). Although electronic signatures have been recognized domestically, further harmonization with global regulations is needed to improve the recognition and efficiency of cross-border transactions.

This study aims to analyze the validity of electronic deeds in international business transactions based on laws and regulations in Indonesia, especially in the context of civil and international trade law. The study also identifies the challenges faced by notaries in

legalizing electronic deeds as legal documents, including regulatory, technical, and implementation constraints. In addition, this study explores efforts to harmonize Indonesian legal regulations with international standards to support the recognition and use of electronic deeds across borders in international business transactions (Damaiyanti & Roisah, 2024).

## **Method**

This research is a normative or doctrinal legal research that focuses on the study of laws and regulations, legal principles, and doctrines related to electronic deeds and their validity in Indonesian law, especially from the perspective of notaries (Fernando, Teeraphan, Barkhuizen, & Agusalm, 2023). The approach used includes a legal approach to review regulations such as the ITE Law, the Notary Office Law, the Civil Code, and international guidelines such as the UNCITRAL Model Law on Electronic Commerce, to assess whether the regulations are sufficient to accommodate the needs of international business transactions based on electronic deeds. A philosophical approach is also carried out to examine the concept of the validity of documents and digital signatures in the legal context. This research uses primary legal materials such as the ITE Law and related regulations, as well as secondary legal materials that include international literature and guidelines. The analysis of legal materials is carried out conceptually to dissect the differences between authentic and electronic deeds, as well as normatively to evaluate the conformity of existing regulations with the needs of international transactions, including the evidentiary power of electronic deeds in court and the challenge of their acceptance as valid evidence.

## **Results and Discussion**

### **Validity of Electronic Deeds in International Business Transactions According to Laws and Regulations in Indonesia**

The legal basis for the recognition of electronic deeds in Indonesia is regulated in Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE) which has been updated with Law Number 19 of 2016. Article 5 paragraph (1) states that electronic information and documents are recognized as valid evidence if they meet the requirements of integrity and authenticity, while Article 11 regulates the validity of electronic signatures using certificates from recognized electronic certification providers (Sirait, Nugraha, Serah, & Marpaung, 2024). Although electronic deeds are legally recognized, their implementation in international business transactions still faces obstacles, including regulatory limitations such as the Notary Office Law (UUJN) which requires authentic deeds to be made in front of a physical notary.

In an international context, electronic deeds must comply with global standards such as the UNCITRAL Model Law on Electronic Commerce that promotes cross-jurisdictional recognition and the principle of equality with physical documents. In civil law, an electronic deed is considered valid if it meets the elements of contract validity according to Article 1320 of the Civil Code (Karina, Sukarmi, & Kawuryan, 2020).

However, technical challenges such as cybersecurity infrastructure, legal awareness, and cooperation between countries are still obstacles to the adoption of electronic deeds. Therefore, for use in international trade, electronic deeds require additional steps, such as legalization or cross-jurisdictional recognition, to guarantee their validity.

Electronic deeds are recognized as legal documents in Indonesia based on Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE), which requires the integrity and authenticity of documents, as well as certified electronic signatures. On the other hand, conventional notary deeds are regulated by Law Number 2 of 2014 concerning Notary Positions (UUJN), which requires the physical presence of the parties and wet signatures, providing perfect proof in court by Article 1870 of the Civil Code (Makarim, 2015). Electronic deeds are more flexible for cross-border transactions because they can be made remotely through digital platforms, but do not yet have a legal status equivalent to a notary deed.

**Table 1**  
**Differences between Electronic Deeds and Authentic Deeds**  
**(processed, 2024)**

| Aspects                   | Electronic Deeds  | Authentic Deeds   |
|---------------------------|---|---|
| Legal Recognition         | As recognized in the ITE Law (Articles 5 and 6), validity depends on electronic signatures. | Regulated in the Law on Notary Positions (UUJN), mandatory<br>Physical presence |
| Strength Prove            | Considered as additional evidence   | Has the power<br>Perfect proof in court   |
| Flexibility               | Can be used remotely with digital signatures  | Requires face-to-face, limited to a physical location                           |
| Security                  | Vulnerable to cyber threats, requires strong encryption                                     | Safer because of verification   |
| Regulations and Standards | It is not fully harmonized with international standards (UNCITRAL, eIDAS)                   | Based on national rules, recognized through legalization/apostille              |

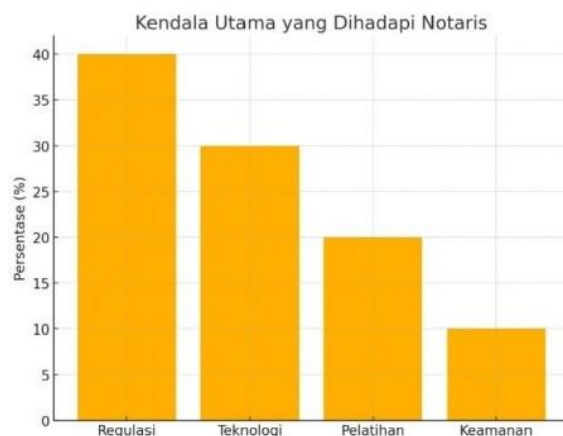
In the international context, electronic deeds require harmonization with global standards such as the UNCITRAL Model Law on Electronic Commerce to be recognized across jurisdictions, while conventional notary deeds have more established recognition through legalization mechanisms or appropriate apostilles.

The 1961 Hague Convention (Sihombing, 2020). Although electronic deeds offer efficiency for international transactions, their legal status is still weak compared to notary deeds, so it is necessary to strengthen regulations and harmonize with global standards to ensure their validity and acceptance in international business transactions.

**Challenges Faced by Indonesian Notaries in Legalizing or Recognizing Electronic Deeds as Legal Documents in International Business Transactions**

Notaries in Indonesia face regulatory obstacles in legalizing electronic deeds due to inconsistencies between national laws and global technological developments. Law Number 2 of 2014 concerning Notary Positions (UUJN) requires the physical presence of the parties for the preparation of notary deeds, which is contrary to the practice of electronic deeds that can be legalized remotely using electronic signatures and digital certification, as stipulated in Law Number 11 of 2008 concerning Electronic Information and Transactions (UU ITE) (Taufan & Salim, 2021). Although the ITE Law recognizes electronic deeds as legal documents, the UUJN has not yet accommodated its use in the context of authentic notary deeds. In addition, other challenges arise in efforts to harmonize domestic regulations with international standards such as the UNCITRAL Model Law on Electronic Commerce, which encourages cross-border recognition of electronic deeds. Differences in legal treatment between countries towards electronic deeds cause uncertainty in international transactions (Misty, 2024). In the field, the implementation of electronic signatures and digital certification is still constrained by the readiness of technological infrastructure and security systems that are not optimal, even though regulations such as the ITE Law and its amendments have provided a strong legal basis. This shows that despite progress in regulations, the implementation of electronic deeds in international business transactions still needs improvement.

Indonesian notaries already have access to electronic certification platforms managed by government-accredited organizers, but their technological infrastructure is still limited and not yet fully integrated across the region. Some notaries, especially in the regions, face limited access to adequate hardware, software, and training, hindering the adoption of digital technology for the creation and legalization of electronic deeds. In terms of security, although the Electronic Certification Body (BSrE) has regulated the electronic certification system, the main challenge lies in strengthening data protection and preventing the leakage of sensitive information in electronic deeds. Cybersecurity systems, such as data encryption and protection from hacking threats, need to be constantly updated to meet international standards. Overall, although technological infrastructure and cybersecurity continue to evolve, improved accessibility, training, and strengthening of data protection systems are still urgently needed for Indonesian notaries to be able to manage electronic deeds effectively, especially in international transactions.



**Figure 2**  
**Main Obstacles Faced by Notaries**  
 (processed, 2024)

The main challenge in international recognition of electronic deeds legalized by Indonesian notaries lies in the differences in regulations between countries. Although Indonesia recognizes the validity of electronic deeds through the ITE Law, other countries may require additional attestation such as legalization or apostille for the document to be recognized. International standards such as the UNCITRAL Model Law on Electronic Commerce have not been implemented consistently in all countries, with some countries enacting stricter regulations regarding electronic signatures and data protection. In addition, data security issues, including encryption and protection against hacking, are a major concern, especially for countries with higher data protection standards such as the European Union with GDPR.

The apostille procedure based on the 1961 Hague Convention is also an obstacle because it usually only applies to physical documents, while electronic deeds legalized in Indonesia have not fully met this requirement (Pelapu, Frederik, & Mamengko, 2024). This obstacle creates uncertainty in the international recognition of Indonesia's electronic deeds, especially in cross-border transactions. Therefore, the recognition of legal electronic deeds in Indonesia is often hampered by regulatory inconformities, technological infrastructure, as well as the need to meet additional security and legalization requirements at the international level. To ensure cross-border recognition of electronic deeds, Indonesian regulations need to be adjusted to international standards such as the UNCITRAL Model Law on Electronic Commerce, which regulates the parity of electronic documents with physical documents if they meet the requirements of data integrity and authenticity. Although the ITE Law has recognized the validity of electronic deeds and legal electronic signatures, harmonization with international provisions is still needed, including wider recognition of electronic signatures according to global criteria and the application of definitions consistent with the UNCITRAL Model Law.

**Harmonization between Indonesian legal regulations and international standards in the recognition and use of electronic deeds for cross-border transactions**

Indonesia needs to strengthen the electronic certification system regulated by the ITE Law to be more compatible with global systems such as eIDAS in the European Union, which ensures the authenticity and integrity of cross-border electronic signatures.

In addition, strengthening the security and storage of electronic data, by global standards such as GDPR in the European Union, must be a priority, considering that countries with strict regulations may not recognize electronic deeds from Indonesia if their data protection standards have not been met. By adopting stronger encryption mechanisms and ensuring an adequate data security system, Indonesia can increase international recognition of electronic deeds in cross-border transactions.



**Figure 3**  
**Efforts to Harmonize with International Standards**  
**(processed, 2024)**

Most countries use legalization or apostille systems to ensure the validity of international documents, but Indonesia needs to develop more flexible mechanisms for electronic deed recognition, such as a cross-border digital verification system. This will make it easier to recognize electronic deeds legalized by Indonesian notaries without going through traditional time-consuming legalization procedures. Cooperation with other countries to introduce an automatic recognition system for electronic deeds is also an important step. The main challenge is the uncertainty of whether electronic deeds from Indonesia are recognized by other countries, so the development of a digital authentication system based on blockchain technology or a decentralized platform becomes a solution that can provide high security, reduce the risk of counterfeiting, and facilitate international recognition.

In addition, Indonesia needs to update national regulations by international standards such as the UNCITRAL Model Law to ensure the recognition of electronic signatures, data security, and efficient attestation of electronic documents in international trade. Although the ITE Law already recognizes electronic signatures, this regulation has not fully adopted international standards, so improvements are needed to overcome the

differences in standards with other countries that have more advanced legal systems. These measures will increase international trust in electronic deeds from Indonesia and encourage ease of cross-border transactions.

Countries with strict regulations such as the European Union, through GDPR and eIDAS, set high requirements for the recognition of electronic signatures and the protection of personal data, including the use of internationally recognized certificate-based signatures. Indonesia, even though it already has an electronic certification provider

regulated by the BSR, has not yet fully adopted international standards such as eIDAS in its policies. Indonesia's electronic deed authentication infrastructure faces challenges related to data security and integrity, including secure storage, encryption, and protection from cyber threats. In addition, the protection of personal data is also a significant challenge in the international recognition of electronic deeds. Although Indonesia has regulated the protection of personal data through the PDP Law of 2022, this regulation is still in the implementation stage and is not yet equivalent to regulations such as GDPR which have more detailed obligations related to supervision and sanctions. To increase international recognition, Indonesia needs to strengthen its technological infrastructure, ensure system security, and align national regulations with global standards so that electronic transactions can be recognized internationally and trusted by countries with stricter regulations.

The implementation of the PDP Law in Indonesia still faces challenges in the establishment of supervisory institutions, the implementation of strict sanctions, and integration with global standards related to the storage and management of personal data. This uncertainty risks hindering the recognition of cross-border transactions using electronic deeds containing personal data, especially from countries with stricter data protection standards. The recognition of Indonesian electronic deeds is also constrained by differences in the mechanism for certifying electronic documents across countries, where Indonesia's national electronic certification system has not been integrated with the international system.

In addition, the legalization of international documents is a challenge, because countries that implement the Hague Convention require physical documents to go through the apostille procedure, while electronic deeds from Indonesia have not received automatic recognition in this system. Although Indonesia recognizes electronic signatures with verified certificates, international standards such as eIDAS in the European Union distinguish electronic signatures into three categories: simple, verified, and qualified. Indonesia has not adopted this equivalent category, which creates uncertainty in the recognition of Indonesian electronic signatures at the international level. Efforts to harmonize regulations and strengthen the electronic certification system are needed to overcome this obstacle.

## **Conclusion**

The validity of electronic deeds in international business transactions in Indonesia is regulated by the ITE Law, which recognizes electronic documents as valid legal



evidence if they meet the requirements of integrity, authenticity, and accessibility. However, authentic deeds made by notaries still require the physical presence of the parties by the Law on Notary Positions (UUJN), so electronic deeds are not yet equivalent to notary deeds. In the context of international trade, the recognition of electronic deeds depends on conformity with international standards such as the UNCITRAL Model Law on Electronic Commerce, which encourages cross-border recognition. The main challenges faced by Indonesian notaries include the limitations of UUJN regulations, the lack of technological infrastructure that supports certified electronic signatures, and the lack of harmonization of national laws with international standards. In addition, cybersecurity constraints and the risk of electronic document validity if they do not meet strict technical and legal requirements are the main obstacles. To overcome this challenge, Indonesia needs to adjust the ITE Law and the UUJN to be in line with the principles of the UNCITRAL Model

law, strengthen cybersecurity, and provide a legal framework for cross-border interoperability. International cooperation is also needed to ensure equal legal recognition and technical standards so that electronic deeds can be recognized as valid in cross-border transactions.

The government needs to update regulations, especially the Notary Office Law (UUJN), to accommodate electronic deeds in international transactions and align them with international standards such as UNCITRAL. Notaries must also improve their understanding and skills in digital technologies, including the use of certified electronic signatures and cybersecurity. In addition, educating the public about the legality of electronic deeds and the importance of using competent notary services is an important step. Law enforcement must ensure adequate legal protection of electronic deeds, including the prevention of cybercrime, to increase trust in international business transactions.

## Bibliography

- Aulia, Putri Annisa, Yuliandri, Yuliandri, & Fendri, Azmi. (2019). Law Enforcement by the Notary Supervisory Board for Violations Toward Law on Notary Position (in Padang City). *International Journal of Multicultural and Multireligious Understanding*, 6(3), 698–708.
- Bungdiana, Desy, & Lukman, Arsin. (2023). Efektivitas Penerapan Cyber Notary Dengan Meningkatkan Kualitas Pelayanan Notaris Pada Era Digital. *JISIP (Jurnal Ilmu Sosial Dan Pendidikan)*, 7(1), 309–318.
- Damaiyanti, Alifia, & Roisah, Kholis. (2024). Peran Notaris dalam Perlindungan Hak Kekayaan Intelektual: Studi Komparatif Praktik Hukum Indonesia dan Standar Internasional. *UNES Law Review*, 6(4), 11624–11632.
- Fernando, Zico Junius, Teeraphan, Papontee, Barkhuizen, Jaco, & Agusalim, Agusalim. (2023). Revenge Porn: Digital Crimes and Implications for Victims. *Kosmik Hukum*, 23(2), 157–171.
- Girsang, Wanda Fabiola Emerald, Kurniawan, Kurniawan, & Haq, Lalu Muhammad Hayyanul. (2024). Legal Validity of Notarial Deeds Signed With Electronic Signature:(Comparative Study between Indonesian Law and Australian Law). *POLICY, LAW, NOTARY AND REGULATORY ISSUES*, 3(1), 156–172.
- Iriantoro, Agung. (2022). Position, Tenure and Responsibility of the Notary in Carrying Out the Position of Notary. *Protection: Journal Of Land And Environmental Law*, 1(2), 97–105.
- Kurniawan, Steven, Dewi, Amelia Sri Kusuma, & Wisnuwardhani, Diah Aju. (2023). Analysis of Legal Certainty in Determining the Position, Duties, and Responsibilities of Temporary Notary Officials. *International Journal of Business, Law, and Education*, 4(2), 1384–1393.
- Misty, Mousume Akter. (2024). *The Function of A Notary Position in The Legal Contract in Bangladeshi Industry*. Universitas Islam Sultan Agung Semarang.
- Nase, Fredi Yermi, & Alfiana, Rita. (2021). Tinjauan Hukum Atas Kebutuhan Notaris Jarak Jauh (Remote Notary) Dimasa Pandemi Covid-19. *JCA of Law*, 2(1).
- Ramadani, Tamara Mutiara, & Nurliyantika, Rizka. (2022). Tanda Tangan Elektronik Dalam Kontrak Bisnis Internasional. *Sol Justicia*, 5(1), 87–96.
- Sari, Endry Maya, Kurniawan, Kurniawan, & Haq, Lalu Muhammad Hayyanul. (2023). Notary's Responsibility in Certification of Electronic Signatures for Discrepancies in Verification of Personal Data of the Owner of the Electronic Signature: Comparative Study between Indonesia and the United States of America. *Path of Science*, 9(4), 5009–5015.

- Supanji, Supanji, & Adjie, Habib. (2024). The Position of Digital Signatures in Notarial Practice According to The Principle of *Tabelionis Officium Fideliter Exercebo*. *UNES Law Review*, 6(3), 8824–8834.
- Taufan, Bramantyo Ahmadi, & Salim, H. S. (2021). The Role of Land Deed Officials on Electronic Mortgage Registration Systems. *JL Pol'y & Globalization*, 107, 40.
- Utarid, Wa Ode Rahmi. (2023). Legal Consequence Towards An Authentic Act That Was Not Ready By Notary And Not Signed Jointly By The Parties Based On Law Of Notary. *International Journal of Latin Notary*, 4(1).
- Wijayanti, Fika Arum, & Santoso, Budi. (2023). The Analysis Of The Notary's Responsibilities For The Storage Of Electronic Deed Minuta. *Jurnal Hukum Volkgeist*, 8(1), 85–91.
- Wiranata, I. Ketut Adi. (2021). *Pengaruh Digital Marketing, Quality Product dan Brand Image terhadap Keputusan Pembelian Roti di Holland Bakery BatuBulan*. Universitas Mahasaraswati Denpasar.